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ARTICLE I.

KOREA IN ITS RELATIONS WITH CHINA.

BY WILLIAM W. ROCKHILL,

SECRETARY OF LEGATION OF THE UNITED STATES AT PEKING.

Presented to the Society December, 1887.

THE nature of Korea's relations with China has for the last thirty years been a puzzle for western nations. Were they—with the ambiguous utterance of the Chinese government before them that "Korea, though a vassal and tributary state of China, was entirely independent so far as her government, religion and intercourse with foreign states were concerned"—to consider it as an integral part of the Chinese empire, or should they treat it as a sovereign state enjoying absolute international rights?

The problem was practically solved by the conclusion of the treaty between Japan, and later on the United States, and Korea, but this has not materially altered the nature of the relations existing for the last four centuries at least between China and its so-called vassal. That China has, however, derived profit from the opening of Korea to the commerce of nations, there can be no doubt, for she too, being at liberty to conclude treaties with Korea and open this new market to her merchants, has done so, like other nations, though she has chosen to call her treaty by the euphonious name of "Commercial and trade regulations for the subjects of China and Korea," and her diplomatic representative in Söul, "Minister Resident for political and commercial affairs."

What China's relations with Korea were prior to the opening of the latter kingdom by the treaty of 1883, I propose to show in the following pages, taking as my authorities official Chinese publications and writings of men in official position.

What does the investiture by China of the kings of Siam, Burmah, Annam, Korea, etc., amount to? To nothing more than the recognition of a weak sovereign by the most powerful state in Asia.* Take for example Burmah: we know as a matter of fact that the Chinese invasion of that country in 1769 was successfully repelled, and that the Chinese generals were forced to sue for peace. In the convention signed by them and the Burmese commissioners on December 13, 1769, it was agreed among other things that "letters of friendship were to be sent every ten years from one sovereign to another."† Let us turn now to the "Institutes of the Ta ch'ing dynasty," and we find it mentioned, for example, that in 1790 the king of Burmah sent an envoy to the Emperor with presents and a humble statement or *piao* (表), and asked him to confer on him a patent of investiture or *feng* (封). Such is the Chinese method of embellishing history!

In 1800 the same work tells us that the king of Burmah sent the Emperor a *piao* on gold leaf with the *regulation tribute!*

The Burmese "tribute" to China has been considered of such a purely ceremonial nature that the British government showed no hesitation, when concluding the recent Burmah convention with China by which the latter power agrees to the occupation of Upper Burmah by Great Britain, to guarantee the continuance of the decennial tribute mission to Peking. The tribute sent to Peking by all the "vassal states," and also by the Tibetans, and the Aboriginal tribes of Western China, is solely a *quid pro quo* for the privilege of trading with the Chinese under extraordinarily favorable conditions, the merchants and merchandise being brought to the market and returned home free of all charges.

Stress has been laid on the expression, used alike by Chinese and Koreans in official documents, which speaks of Korea as a *shu kuo* (屬國), generally translated in English by "vassal kingdom, fief," etc., but these expressions are misleading, for the character *shu* carries with it the idea of relationship, which is the key-note to the whole system of Korean dependency.

The reason why for so many generations Korea was closed to the outer world cannot be better given than in the communication which the king of Korea (or rather the T'ai-Wen Kum) addressed to the Board of Rites in Peking in 1871, from which I take the following passage: "I know that this is a petty state, a mere handful of earth lying on the remotest bound of the eastern sea, whose productions, revenue, soldiers, and arms are not to be compared to those of other nations; but

* See p. 18. † See Sir Arthur P. Phayre, *History of Burma*, p. 202.

still our commonwealth is well ordered, and it depends on its own resources, which indeed is owing to the vast kindness of His Sacred Majesty's protection, reaching in its wide influence far off to us in these eastern seas. Its educated men observe and practice the teachings of Confucius and of King Wen; its common people cultivate pulse and millet, and get their wealth in silk and hemp; and thus studying frugality, in its poverty the country preserves its supplies, and its government reposes in safety on its own basis.

"Suppose that one day our people should have their eyes dazzled with the rare and novel things which should be brought here, or be deluded and vitiated by strange doctrines poured into their ears, they would then reject the old ways, change their usages and daily become more thriftless and unproductive; the waste of their means and misuse of their substance would continually approach utter exhaustion, till at last the best interests of people and government would be involved. Oh! what imminent danger!"

The translation which I have given of the Songpha inscription may be of interest. It is to be noted how closely the *Sheng-wu-chi's* version of the Manchu invasion of Korea is reproduced in the inscription; one might suppose that the same author had drawn up both accounts of these events.

The maps of Söul and the neighborhood of the capital are copies—better in execution than the originals, I must admit—of the official Korean map of those sections of the country.

For all Korean proper names I have given the Korean pronunciation of the Chinese characters used; other names are given with the Chinese northern mandarin pronunciation.

I.

In 1392 the Ministers of State of Korea reported to the Emperor T'ai-tsu of the Ming dynasty as follows: "Our much lamented sovereign having died without leaving issue, the powerful minister Ni In-in gave the sovereign rule to U the son of Sin-chun,* but he showed himself both stupid and fond

* The *Ming shih*, ch. 320, p. 3, gives another account of these events derived presumably from an independent source. It says that in 1370 Ni In-in killed Chyen, king of Korea, and put on the throne the king's adopted son U, the child of his favorite Sin-chun. In 1388 King U killed the son of Ni Söng-ké, who commanded at Pyöng-yang, whereat Ni attacked the capital and took the king prisoner. The king abdicated in favor of his son Ch'ang, but the Emperor of China would not recognize him. Söng-ké deposed him and put on the throne (or rather made regent) Wang Yo. Shortly after Söng-ké assumed the sovereign power himself, and sent Yo to live at Wön-ju in Kang-wön do, and with him ended the sovereignty of the Wang family, which had been on the throne of Korea ever since the epoch of the Five Dynasties in China.

of shedding blood. It happened that he wanted to send a military expedition to the border, but General Ni Söng-ké, disapproving of it, marched the troops back. U saw his error and, filled with terror, he abdicated in favor of his son Ch'ang. The people were opposed to this, and besought the queen of our lamented sovereign, who belonged to the An family, to select her relative Yo to manage the affairs of the state. After four years he also showed himself stupid and wicked, and, believing in calumnies, he grievously wounded the son of an officer of long established merit; now his son Syek being also a silly man without any ability, the people of the kingdom said 'Yo is unable to rule the gods of the land and grain,' and they caused the queen, belonging to the An family, to restore Yo to private life; and the Wang dynasty (lit. family) having no able representative, was at an end.

"The people both within and without the capital are devoted to Söng-ké, so the Ministers and the elders of the people have requested him to become their sovereign, and the Emperor's approval is asked."

"The Emperor said: 'Kao-li is a small region in the far east, and is not under the rule of the Middle Kingdom (非中國所治).^{*} Let the Board of Rites inform it that as long as its rule is in conformity with the will of Heaven and in harmony with the hearts of men and as long as it creates no strife on our borders, so long will its people be allowed to go and come and the kingdom will enjoy happiness; but we have no investigation to make in the matter (of the change of dynasty).'"

In the winter of the same year Söng-ké sent letters of condolence to the Emperor upon the death of the heir to the throne, and asked to change the name of the dynasty. The Emperor ordered that it should reassume its old name of *Chao-hsien*, "The calm of dawn."

The above is the official account of the founding of the dynasty which still rules Korea, as found in the "Annals of the Ming dynasty," book 320, p. 4 *et seq.*, and of the attitude taken by the ruler of China in regard to the revolution. The tacit recognition by China of the new dynasty in Korea was, however, a most important event, and fully justified its new ruler in continuing the relations previously existing with the Empire, and showing its ruler the dutifulness due from a son to a father. But besides getting from Korea simple marks of deference, the Emperors of the Ming derived profit from the valuable tribute

* China does not appear ever to have appreciated the full importance of such statements, and the inference which foreign nations must draw from it that Korea was an independent state. China has never, until recently, overstepped the bounds which this admission of Korea's right to self-government carried with it, and interfered in the management of the country.

which they exacted from the king in exchange for their friendship.

In 1393, Ch'ong-ké sent the Emperor 9800 and odd horses, 19,700 and odd pieces of hempen, linen and cotton stuffs. The same year he sent a second mission with presents of horses and requested that a new gold seal be given him.

In 1407, 3000 head of horses were sent to China; but on reaching Liao-tung, and at the request of the Board of Revenue, there were sent instead 15,000 pieces of cotton lustring.

In 1423, Ni-to sent the Emperor 10,000 head of horses, on asking for the recognition of his son as heir to his throne.

In 1450, Korea sent the Emperor 500 horses, and made apologies for not sending the 20,000 or 30,000 asked for by the Emperor.

Many other examples might be given to show the valuable nature of the gifts made by Korea to its powerful neighbor, but the above will amply suffice.

Of the commercial relations which existed between the two countries during the Ming dynasty (1368-1628), the books at my disposal hardly enable me to judge. We know, however, that the annual missions to China did the bulk of the trading, and that the rest was done at the periodical fairs at Wi-ju on the Yalu river. No trade by sea between China and Korea was allowed by the latter state, and all Chinese shipwrecked on its coasts were sent to China by the land route.

The help in men and money which China gave Korea during the Japanese invasion,* the cannon and powder with which it had supplied it as early as 1461, may be cited among the proofs of its recognition of Korea's devotion to it. But naturally the weaker power had, in the earlier days of its existence at least, to give much more than it received.

II.

(Extract from the "Military History" of the present dynasty.)†

A decree of the 45th year of K'ang-hsi (1706) says: "Chao-hsien is among the outer barbarians the country which approximates the closest to China in its literature and customs. When the Emperor T'ai-tsung-wen conquered in person that country, there was no spot throughout its eight provinces and its many islands where his troops did not penetrate. The kingdom was

* It must be admitted, however, that it is more than likely that China would never have helped Korea at this critical period, had it not feared that the Japanese, having subdued Korea, would overrun China. This is borne out by the account in the "Annals of the Ming dynasty."

† *Sheng wu chi*, (聖武記,) Book 6, p. 10 *et seq.* C. Imbault Huart published a translation of the greater part of this extract in the *Journal Asiatique* for 1879.

destroyed and brought to life again (through his bounty), and so the people of the country erected a commemorative tablet in stone at a place where the Emperor's headquarters had been, and his virtue is extolled to the present day.*

"They (the Koreans) are very deserving of praise. During the Ming period they never wavered in their allegiance, and from first to last they have never shown duplicity."

Great are these words of the Sovereign and how they should stimulate foreign nations to perpetual loyalty!

Chao-hsien is (the same as) Ching chou beyond the sea (mentioned in) the *Yü Kung*.† Shun divided it off as Ying chou, and during the Chou dynasty it was given as a fief to Chi-tzu. It was originally Chinese territory, and separated from Sheng-ching by the Yalu river.

In the 4th year of T'ien-ming, the Emperor T'ai-tsu-kao (1619), 200,000 of the Ming troops invaded (Manchuria) by four roads, and Korea sent General Kang Hong-ip with troops to assist the Hai and Kai divisions of the Ming army.‡ But while the two corps were encamped together at Pu-kö chal-pang,§ the winds suddenly shifted and sent down a deluge of rain which rendered the fire-arms of the Ming army useless, so that our troops overcame them, and captured Kang Hong-ip and 5000 men.

The Emperor sent General Kang and ten others back to the king of Korea, Ni-hu, with a letter in which he said: "Formerly the Ming assisted you with troops (in your troubles with the Japanese), so it was only natural that you should assist the Ming with your soldiers, but it is not out of equity for us. Now I send your general and your officers back to you for the sake of you, the king, and you may decide for yourself whether you shall rally to our cause or not."

The king having made up his mind, Korea did not offer any thanks (for this kindness).

The Korean troops repeatedly crossed their frontiers and opposed our troops engaged in Warka,|| and were constantly fighting with our Beileh of Wula Puchantai.

When the Emperor T'ai-tsu died, Korea sent no messages of condolence.

* This refers to the Songpha inscription at Sam-jön do, of which a translation is given further on.

† See Legge's *Shu King (Sacred Books of the East, Vol. III.)*, p. 65.

‡ 海盖軍, which is explained to me as the Hai-chou and Kai-chou divisions of the army.

§ The text has 富察, which I have taken as an abbreviation for 富居察訪 in Ham-gyöng do.

|| Warka is N. of the Yalu river and S. of Mukden at the foot of the Chang-pai shan. It is conterminous with Korea. (Note in the *Sheng wu chi*).

The Ming general, Mao Wen-lung, got together several tens of thousands of refugees from Liao-tung in Pi-do, which is also called Tong-gang, and is situated at the mouth of the Yalu river at 80 *li* from Korea and from our eastern border.* From there he made repeated forays on the sea-board towns and cantonments, causing us great annoyance, forming with Korea as it were a pair of horns (between which we were caught).

Having procured the services of two Korean deserters, Han Yun and Chang Mai, who had escaped to our country, to act as guides, war was declared against Korea in the 1st year T'ien tsung of the Emperor T'ai-tsung (1627), the 7th year T'ien-chi of the Ming, the 3d year of the reign of Ni-Sung of Korea.† In the 1st month, the Beileh Amin and others were ordered to take command of the troops and enter Korea. After fording the Yalu river, and defeating Mao Wen-lung's troops at Chhöl-san,‡ which fled back to Pi-do, the towns of Wi-ju, Jöng-ju and the fortress of Han-san were occupied, and many myriads of soldiers and people killed and over 100,000 measures of grain destroyed.

The same month, the army, having crossed the Chhông-chhön gang,§ took An-ju, which place bore the name of An-si, when it was besieged by the first emperor of the T'ang dynasty. The troops then occupied Phyöng-yang,|| from which place the officials and people had fled at their approach. After this they crossed the Ta-tong river and occupied Chung-hwa.¶

In the 2d month Hwang-ju** was captured and consternation spread to the heart of the country. Succor was asked of the Ming, and numerous envoys were sent to try and arrange matters with us. The Ming governor of Liao-tung, Yüan Ch'ung-huan by name, sent a fleet to relieve Pi-do, and 9000 picked troops took up a position on the San-ch'a ho,†† to close the road to our army (i. e. cut off its retreat). The Emperor, fearing the consequences of the stationing by the Ming of this corps of observation, went in person to defend the frontier and animate his troops, and the banks of the Liao were put in a state of defense.

* I do not find this place on any of the maps at my disposal.

† In 1623 the people of Korea deposed Ni-hu and put on the throne his nephew, the Prince of Ling-yang (綾陽君) Ni-Sung.—See *Ming shih*, B. 320, p. 27.

‡ A 2d class prefecture town in Pyöng-an do. The towns of Wi-ju, Jöng-ju, are also situated in the same province.

§ The Ching-ch'uan chiang of modern maps. It empties into the sea S. W. of An-ju.

|| A 2d class prefecture in Pyöng-an do, and a little west of the Ta-tong river.

¶ Also in Pyöng-an do, near the border of Hwang-hai do.

** In Hwang-hai do, on the Ta-tong river; it is a 1st class prefecture.

†† The San-ch'a ho flows into Liao ho a little above New-chwang.

At the same time the expeditionary forces to Korea were closing around Söul, so Ni-sung took his wife and son and fled to the island of Kang-hwa, sending repeatedly messengers to meet the army and confess his errors. Now the island of Kang-hwa is south of Kai-ju and in the sea, so our army, being without any boats, could not cross over to it, but an envoy was sent to the island to communicate the Emperor's orders. In the meanwhile the troops stopped at Phyöng-san.†

Ni-sung sent a relative of his called Ni-gak, Prince of Wön-ch'ang, and others, with presents, consisting of 100 horses, 100 tiger-skins and 100 panther-skins, 100 pieces of pongee and hemp cloth, and 15,000 pieces of cotton cloth (as peace-offerings to the Emperor). After this envoys were sent to Kang-hwa island to make a treaty, and on the day *keng wu* of the third month, a white horse and a black ox ‡ having been slaughtered, (both parties) took an oath by heaven and earth when the negotiations were completed. The treaty was as concluded between kingdoms of elder and younger brothers. It had first been sought for by Korea; and the Beileh, in view of the danger of their two enemies, the Ming and the Mongols, cutting them off, and of the impossibility therefore of remaining long (in Korea), and being, moreover, well satisfied with the success of their operations, were willing to conclude a treaty. The Beileh Amin had, however, been so much pleased with the site of Söul and the beauty of its palaces, that he was unwilling to have the army evacuate the country. So the Beileh Chi-erh-ha-lang and Yüeh-t'o-shuo-t'o, having secretly discussed the subject, ordered Amin to go to Phyöng-san, and while he was away they concluded the treaty. When the matter was finished they told Amin. Amin replied that he had made no treaty, so he ravaged the whole country. Later on, however, Ni-gak made a treaty with him at the town of Phyöng-yang. The Emperor (in the meanwhile) sent a courier to Amin with orders to commit no further ravages whatsoever, and to leave a detachment of 3000 men to garrison Wi-ju on his march back.

In the fourth month Ni-gak came to court with the (returning) troops, and in the autumn of the same year Ni-sung requested the recall of the Wi-ju garrison, pledging himself to redeem all the people who had been made captives. The amount of the presents to be sent alternately in spring and autumn to the

* I suppose Kai-söng is meant. It is a 2d class prefecture in Kyöng ki do, N. E. of Kang-hwa island.

† A large town in Hwang-hai do on the main road to Söul. It is a 2d class prefecture.

‡ It may be of interest to note that the black oxen used in Korea for royal sacrifices are exclusively supplied by Quelpart island. They are sent in pairs, and always kept in readiness at all the towns on the road from Quelpart to Söul, being forwarded to the capital as required.

Emperor was agreed upon, as also the question of the fair for the peoples of both countries at Chung-gang* (or Wi-ju).

The same year the Ming commander-in-chief, Yüan Ch'ung-huan, killed Mao Wen-lung at Shuang-tao,† and the troops of the islands were without a chief.

In the 3d year (1629) our army routed the Ming, and their general Yüan Ch'ung-huan was put to death for his former misdeeds.

In the 5th year (1631), the islands (off the Korean coast) having been occupied, thanks to their unprotected condition, ships of war were sent to Korea, and an envoy arrived at Söul. He was received in audience the third day after his arrival, when Ni-sung said to him: "The Ming dynasty is as a father; how can I be expected to help to destroy my father!" From this time on the treaty (of 1627) was gradually more and more disregarded.

In the 7th year (1633), the Emperor wrote to Ni-sung charging him with cutting down the annual gifts, harboring refugees from our country, stealing our ginseng and cattle. He also charged him with designs of ceasing to send envoys, and of closing the (Wi-ju) market to our people.

In the summer (of the same year), the brigadier-general under Mao Wen-lung, Kung Yo-tê by name, and also Keng Chung-ming and Shang K'o-lisi and others, deserted the Ming, and with a fleet and 20,000 men set to sea from Teng-chou, and came and made their submission (to the Manchus).

A mission was sent to Korea to levy tribute-grain with these words: "Your country looks upon the Ming as a father, and many times you have sent them tribute-rice. Now we are your elder brother, can you not give it us once?" But Ni-sung would not agree to it. Wait (he said) until Kung Yo-tê has left Shen-yang (Sheng-ching), and we will send of ourselves officers on ships and forward rice as a subsidy.‡ As to the question of the Hui-ning refugees and the Pu-chan-tai people, it has been the subject of frequent communications. He hereon pushed the building of twelve walled cities in the provinces of Kyong-kwi do, Hwang-hai do, and Phyong-an do.

The Emperor's letter charged Ni-sung with breaking the Wi-ju market treaty, (in that he had) stopped our satins and linens and depreciated the value of our ginseng.§ As to the

* See p. 21.

† There is an island by this name off Shan-tung province, but I do not know if this is the place meant.

‡ My translation of this passage is subject to correction.

§ Formerly the value of an ounce of (our) ginseng had been Tls. 16.0.0, but Korea only gave Tls. 9.0 (for it). When first Wu Han-cha went to Ninguta, he cooked half a catty of ginseng and ate it; on going back he had diarrhoea. So cheap was ginseng in the early days. (Note of the *Sheng wu chi*.)

Warka people, they were of a Nü-chen tribe, and not to be compared with the Pu-chan-tai Mongols, for they are said to be of the same stock as ourselves (i. e., Manchus), as may be seen by referring to the Liao and Chin dynastic histories.

In the spring of the 8th year (1634), the Emperor, being desirous of concluding a treaty with the Ming, ordered Ni-sung to inform them of the fact; but Ni-sung wrote to the general at Pi-do in such terms that no treaty was made.

That winter an envoy of Ni-sung came rejecting the demand for the (Hui-ning) refugees and for that about the (Wi-ju) market. He used most arrogant language, and wished to take precedence over our high ministers. The Emperor was angered at this, refused the gifts, and would have nothing more to do with the King's envoy.

When first Korean envoys came to our Court, they exchanged frequent courtesies (with our high officers). We on our part sent envoys to Korea to condole at the death of the King's father, mother, or consort. The King's letters (to the Emperor) were called *feng shu* (奉書) and his tribute *sui pi* (歲幣). The expression *kuei kuo* (貴國) was reciprocally used, and instead of *pi kuo* (敵國) the expression *pu ku* (不穀) was used, in accordance with usages prevailing between neighboring countries which are on a footing of equality.

At this time the Manchu troops had subdued the Ch'ahar tribes of Lingdan Khan and possessed themselves of the dynastic seal of the Yüan.* In view of this the Beileh Pa-ho-shuo and forty-nine Beileh of the outer barbarians and Mongols petitioned the Emperor to take an additional title.† The Emperor replied, "Korea is a younger brother country, with whom it is also necessary to discuss the question." So the inner and outer Beileh wrote letters and sent messengers, requesting Korea to join with them in requesting the Emperor to add to his titles. Not only did the Koreans disagree to the proposal, but they set a guard of soldiers over the envoy. At this the envoy Ying-ohr-tai and his suite seized horses and rushed out of the city. Ni-sung sent a messenger bearing a letter after him, and also wrote to the high officer at the frontier to keep a strict watch.

This was a breach of the peace terms of the *ting mao* year (1627); now therefore it was necessary to interrupt all communications; so the envoy continued his flight, and reported the occurrence to the Emperor.

* See Howorth, *History of the Mongols*, I., p. 379. The Ming had never held this seal. It was held by the Ch'ahar prince lineally representing the Mongol dynasty. See also *China Review*, vol. xv., p. 323.

† This is a literal rendering of the text; it might be better translated, however, by "petitioned the Emperor to take the title of Emperor of China."

In the 10th year T'ien-tsung, the 8th year of Ming Ch'ung-cheng, the 4th month of the 1st year Tsung-tê (1636), the Korean envoy Ni Kek and others came to Court to congratulate the Emperor; but they did not make obeisance. The Emperor sent the King a letter ordering him to send hostages. To this no reply was made.

At this time the Emperor with the tributary Mongols had utterly routed the Ming army, and the country was in security. So it was that in the 11th month, after having sacrificed to heaven and earth and made sacrifice to the god of war at T'ai miao and T'ang-tzu, the Emperor started on an expedition to punish Korea for having broken the treaty.

In the 12th month (1637), the Mongols having concentrated their forces, the Emperor ordered the Cheng Chiu-wang Chiehr-hia-lang to see to the defense of the country. The Wu-ying Chün-wang A-chi-ko and the To-lo jao-yu Beileh Apat'ai he ordered to hold the Liao river and the coast ports, so as to cover the country from an attack by the Ming fleet. He ordered the Jui Chin-wang To-ehr-kua and the Beileh Hao-ko to take the left wing of the Manchu-Mongol forces, and from K'uan-tien to enter (Korea) by the Ch'ang-shan pass. He commanded the Yü Chin-wang To-to and others to take 1500 men of the vanguard and capture Söul by a *coup de main*, the Beileh Yüeh-t'o and others with 3000 men supporting him.

The Emperor with the Li Chin-wang* Tai-shan and others entered Korea with the main army amounting to 100,000 men. They having crossed the Chin-gang and camped at Kwak-san, † Jöng-ju and An-ju surrendered. The army then marched to the Im-jin gang. This river is a hundred and odd *li* N. of the capital of the kingdom, and Söul is between it and Han-gang which is S. of the capital. ‡ At this time of the year the ice was not solid over the whole river; but just as the army carts arrived on its banks, the ice suddenly closed, and the whole army was able to cross over on it.

Three hundred cavalymen under Ma-fu-t'a, belonging to Yü Chin-wang's van-guard, stole up to Söul and routed several thousand picked troops. Ni-sung in dismay sent messengers to welcome (our troops) and to wait on them outside the city, treating the soldiers with great courtesy. In the meanwhile he sent his wife and son to Kang hwa island, while he with his best troops crossed the river and shut himself up in Nam Han-san,

* The Prince of Li gained for himself by his bravery in this campaign the popular title of Prince of Korea (*Kao-li Wang yeh*), which the head of the family still bears.

† A third-class prefecture on the high road from Wi-ju to Pyöng-yang and Söul.

‡ The Im-jin gang has a general direction from N. E. to S. W. and flows into the Han gang a little S. E. of the town of Ni-tök.

the strongest place in his kingdom.* Our troops entered the capital, and Yü Ch'in-wang and the Beileh Yüeh-to who had captured Phyöng-yang arrived there also. The whole force then crossed the river and invested Nam Han-san. They defeated three bodies of troops sent to relieve the place and also the forces in the fortress. At this time the 300 and odd families from Warka who had formerly fled to Korea all came and asked to return to their native land.

The Emperor arrived, and, having divided the police service of Söul among the troops, crossed the river with the army and defeated the relieving forces from Chöl-la do and Chhung-chhông do. Then he sent a letter (to the King) censuring the conduct of his high ministers of state.

In the 1st month of the following year (February, 1637), the army crossed to the north bank of the river, where it camped 20 *li* to the east of Söul. Jui Ch'in-wang, entering (Korea) by the Ch'ang-shan pass, had taken Ch'ang-ju,† and having defeated 15,000 men composing the relieving forces of An-ju, Hwang-ju, Yöng-ju and neighboring places, he made his junction (with the main forces). When the Beileh To-to was sending his artillery (towards Söul), on it reaching the Im-jin gang the ice which was thawing froze tight again (so that it was taken across on it).

Prior to this the King of Korea, Ni-sung, had sent a message to the Ming Emperor informing him of the grave events occurring, and had also sent warning to all the provinces of his kingdom. The prudent King was anxious to keep on the defensive until the auxiliary forces arrived, but the Empire of the Ming was reduced to extremities, the land was everywhere covered with plundering bands and so it was not in a position to help its neighbor. The (Ming) general of Teng-lai,‡ Ch'en Hung-fan, set to sea with a fleet (to help Korea), but contrary winds prevented his crossing the sea.

The troops from the eastern and southern provinces of Korea had all been successively routed and dispersed. The western and northern forces were hidden among the mountains, and dared not advance. In Söul provisions were nearly exhausted, and our army had gone over all the provinces like roaring thunder or the fiery blast.

* The Han gang is also called the Ung-jin gang, and is a most important defense of Söul. All government money and tribute-rice is brought by it. (Note of *Sheng-wu-chi*.) This fortress is generally called the Kwang-ju fortress and is about 11 miles from Söul. Mr. Foulk gives its height above sea level as 1350 feet. He says that on the occasion spoken of in these pages it was defended against the Chinese army by its villagers and 120 soldiers. See *U. S. Foreign Relations, 1885*, p. 326.

† A strongly fortified place on the Yalu river above Wi-ju.

‡ The Teng-Lai Ch'ing circuit in Shantung.

Ni-sung having again written to the Emperor begging for peace, he replied throwing the responsibility of the war on him, and ordered him to come out of the fortress into his presence, and to deliver up those who had been his counsellors in breaking the treaty. Ni-sung then wrote to the Emperor saying: "Your servant (臣) begs that he may not have to come out of the fortress."

In the meanwhile the queen and the crown prince, together with the families of the high ministers of state, were on Kang-hwa island. Jui Ch'in-wang put to sea in some barges, and having sunk with his cannon thirty large boats of the Koreans, crossed over to Kang-hwa, where he defeated the garrison of over 1000 men and entered the island fortress. He captured the queen, the crown prince, and their household, seventy-six persons in all, and 166 persons belonging to the families of the high ministers of state. These were, however, all treated like guests and assigned separate apartments. Then the Emperor issued a proclamation saying: "Ni-sung's island of Kang-hwa has been taken, but his family has been subjected to no hardship; let him at once, as previously directed, leave the citadel and come into our presence."

Ni-sung sent to the Emperor's headquarters those who had advised him to break the treaty: Eun-ki, a *kyo-ri** of the Hong-mun Kuan, Wo Tal-ché, the Compiler of the Academy, and Hong I-han, chief councillor of state.

The Emperor then ordered the King to give him the patent of investiture and the seal which he had received from the Ming, to offer his allegiance, to give him two of his sons as hostages, to adopt the (Manchu) new year,† and to send each year tribute (貢) with a congratulatory address (表). In case of war he would have to raise an auxiliary force and furnish supplies to the army. He was not to erect fortresses (or walled cities) at his pleasure, or give refuge to fugitives. On these conditions the boundaries of the fief (封) which his ancestors had held for the last three hundred years would be assured to him and suffer no changes.

Ni-sung with bowed head received the Imperial commands.

In the second month (the King) came out of the fortress

* Dr. H. N. Allen, Foreign Secretary of the Korean Legation, Washington, writes to me: "*Kyo-ri* or Secretary or the Hong-mun office, which is a library of historical matters, the officials of which are very near to the King and keep him posted in matters of history by answering his questions and looking up disputed points. The Secretary alluded to also hears the King read a passage of history every three days and corrects him if he makes mistakes."

† That is to say, adopt the Chinese calendar, which is, according to Chinese customs, a proof of recognition of Chinese suzerainty. The almanac is given each year in the 10th month (latter part of November) to a special Korean envoy who comes to Peking to receive it.

with several tens of horsemen and built on the (south) east bank of the Han gang at Sam-jon do* an altar, and erected a yellow tent. Then the Emperor with an escort, having crossed the river, ascended to the altar to the sound of music while his officers in armor lined the way. Ni-sung escorted by his ministers left Nam Han san, and when five *li* (from the altar) proceeded the rest of the way on foot. Our Emperor sent a messenger to welcome him when he was a *li* off, and to inform him of the ceremonies to be performed. The Emperor having descended to receive Ni-sung, both of them together with the King's sons and his ministers worshiped heaven.

This ceremony being ended, the Emperor took up his former position, and Ni-sung and his suite fell to the ground and acknowledged their transgressions, which the Emperor pardoned. Then once more Ni-sung and his sons and ministers respectfully bowed their heads nine times in thanks. The Emperor then told the King to take a seat at the foot of the altar on the left hand side facing the west, taking precedence of all the princes (王). The ceremonies being ended, the Prince (君), his ministers, and their families returned to Söul.

In the second month all the troops in the provinces were ordered to concentrate (at Söul) and to march westward. Ni-sung and his sons and ministers escorted (the Emperor) ten *li* outside the city, and kneeling down bade him good-bye.

The Emperor issued a decree stating that, in view of the sufferings of Korea through the recent military operations, he remitted the tribute for the years *ting chou* (1637) and *wu yin* (1638), and that the first tribute would be that of the autumn of the year *chi mao* (1639). In case Korea had not the power at any time to meet its obligations, the Emperor would devise means of arranging matters.

The Korean ministers of state and the people erected a monument at the foot of the altar at San-jön do to commemorate the Emperor's goodness.†

In the 4th month, Ni-sung's hostage-sons Wang and Ho arrived (at Mukden).

In the 5th month, the Ming troops on Pi-do were attacked, General Kung Yo-tê and others who had deserted the Ming acting as guides, and Korean war vessels being made use of. Several myriad persons were captured on the island; after which (our troops) returned, nor did the Ming thereafter occupy the island.

In the 3rd year of Ch'ung-tê (1638), the Emperor, being

* Sam-jon do is a post station S. of Söul and between that town and the prefectural city of Kuang-ju. See p. 26 Mr. Foulk's remarks on this place.

† See p. 27 *et seq.* the text and translation of this inscription.

desirous of crushing the Ming, ordered the Korean troops to coöperate with his, but they were so dilatory that he had to address reproaches to the King. The Emperor then ordered him to send a fleet to reduce those Kurka of the eastern border who, having rebelled, had fled to Ung do; this he did, capturing the rebel leader, who was brought to the Emperor.

In the 6th year (1641), our army having attacked the Ming troops at Chin-chou,* a Korean fleet with 5000 men was ordered to convey 10,000 piculs of tribute rice. After a while Ni-sung reported that the 32 war vessels and grain junks with all their crews and rice had been lost at sea. The Emperor, seeing that tribute rice fleets had ere that been exposed to severe weather but that the whole fleet had never thus been lost, reprimanded the King, who hastened to send a second time the 10,000 piculs of rice. This fleet was composed of 115 ships, which started out from the mouths of the Ta-ling and Siao-ling rivers. When off San-shan-tao, over 50 ships were wrecked, and others were captured by the Ming fleet. 52 ships reached Kai-chou in safety, but they could advance no further, so they requested to complete the transportation by land, but the Emperor refused to allow them to do so. Three of the Korean vessels (he said) had sailed into Ming waters and delivered letters. Furthermore, when falling in with Ming war vessels they had not acted with them as with enemies, and now they had stopped on the way: "We do not want this grain, you can throw it on the road or take it back to your country just as you please."

The Korean Minister Ni Kyöng-ep, alarmed at this, requested to be permitted to brave the dangers of transporting the grain, and the Emperor allowed him to take the overland route and he would retain in his service a thousand Koreans as matchlock men and 500 as camp followers, all the others to return home. But neither the tribute rice nor the soldiers arriving, the Emperor sent an envoy to Korea to complain of the conduct of the Ministers of State. The envoy proved that the President Kim Syeng-heuk-ni and the Minister of the Council Shin Teuk-yöng had caused the delay, and reported the facts to the Throne.

In the 7th year took place the great defeat of Chin-chou, after which the Ming sent envoys to make peace. This the Emperor was willing to do, but all his generals were anxious to carry on the war. The Emperor wrote to Ni-sung asking his advice. Ni-sung replied, "Not to kill but to give peace to the people is to act in conformity with the will of heaven."

* Chin chou-Fu on the Hsiao-ling ho in the Feng-Chin-Shan-hai circuit of Sheng-ching.

Later on it was discovered that two ships of the Ming had come to Korea. The Emperor had strict inquiries made, after which the Minister of the Council Soi Myeng-ki, General Im Kyöng-ep and others were arrested for having secretly kept up communication with the Ming, and were punished after trial.

In the 9th month of the 8th year (November 1643), the Emperor Shih-tsu-chang ascended the Throne, and one-third of the Korean tribute for the year was remitted in conformity with the Emperor T'ai-tsung's dying commands.

In the first year of Shun-chih (1644),* on the re-establishment of peace, the Korean hostages were sent home and one-half of the year's tribute was remitted. Furthermore a general pardon was granted (by the King) to all Korean criminals condemned to death.

During the three reigns of K'ang-hsi, Yung-cheng, and Ch'ien-lung the tribute was frequently remitted, only one-tenth being kept; and notwithstanding the fact that Korea belonged to the outer barbarian nations, it was assimilated to the Chinese.

From the time of K'ang-hsi, whenever there has been a famine in Korea, grain has been sent there by junks to relieve it; and whenever there has been a rebellion in the land, troops and myriads of taels as subsidy have been given to assist in its repression.

III.

The extract from the *Sheng-wu-chi* given in the preceding chapter offers us a general account of the relations between Korea and the Ta ch'ing dynasty of China. We will now examine, with the help of the Dynastic Institutes of the Ta ch'ing (*Ta ch'ing hui-tien*), the nature of the relations which have obtained between the two countries since the invasion of 1637.

The treaty signed in 1637 provided that Korea should send yearly tribute-bearing missions to the Manchu Court. The tribute originally demanded comprised 100 ounces of gold, 1000 ounces of silver, 200 pieces of grass cloth, 200 pieces of a mixed silk and cotton stuff, 4400 pieces of cotton stuffs of various colors, 2 mats with dragon patterns, 20 mats with flower patterns, 100 deer skins, 400 otter skins, 142 leopard skins, 300 blue rat skins,† 10 girdle knives, 5000 rolls of large and small paper, and 100 piculs of rice.

The amount of tribute was gradually decreased, and in 1723 the Emperor issued a decree stating that "Chao-hsien has from

* From this date commences the Manchu rule over the Chinese Empire.

† The text has 青黍; the latter character is probably an error for 鼠. This error occurs in several passages of the *Hui tien*.

early days been obedient to our dynasty, and has been sedulously vigilant as a neighboring country; and on many occasions when brought to Court in obedience to the Imperial will, articles of tribute have, as a special act of grace, been remitted. Let now the Board of Rites inquire what among the tribute that is still due can henceforth be remitted.

"The Board of Rites reported that during the Ming period the Korean tribute comprised gold and silver utensils, ginseng, horses, and 10 different varieties of grass cloth, mixed cotton and silk fabrics, etc. In 1637, one-half of the tribute due the Emperor was remitted. In 1640, 9000 bags of tribute rice were remitted. In the Shun chih-reign (1644-1662), all the gold and silver utensils, the ginseng, and the horses were permanently remitted.

"In 1693, Korea was dispensed from sending the 100 ounces of gold and 100 of silver, the blue and red dye, and 600 pieces of cotton stuff.

"In 1712, the whole 1000 ounces of silver and the 142 leopard skins were remitted, the tribute being thus reduced to less than half what it was in the Ming period.

"The following articles can now be done away with: 300 blue rat skins, 100 otter skins, 800 pieces of cotton piece goods, and 2000 rolls of white cotton-made paper; the balance of the tribute remaining as heretofore." (*Hwi tien*, Ch. 393.)

Besides sending the annual tribute mission, the King of Korea sent representatives to the Chinese Court to congratulate the Emperor on New Year's Day and also on special occasions of rejoicing—as in 1763, when the Empress celebrated her 80th birth-day, or in 1785, on the Emperor Ch'ien-lung's jubilee. It was also customary, when the Emperor went to Manchuria to visit his ancestral tombs, for the King of Korea to send him congratulatory messages and presents. Thus in 1682, when the Emperor K'ang-hsi visited his ancestral tombs, the King of Korea sent an envoy and the following presents: leopard, deer, otter, and blue rat skins, Japanese swords, haliotis shells, various kinds of fish, edible sea-weed, red shells, chili pepper, white honey, pine nuts, apricot seeds, yellow chestnuts (?), and dried persimmons. Down to 1715 it was also customary for the King of Korea to send missions to return thanks to the Emperor for any favor which he had bestowed on him; but from that date the Emperor requested them to be discontinued.

The fact was that the Koreans sought by every means to increase the number of these missions to China, for they traveled at the expense of the Chinese government, and, being allowed to bring goods for sale duty free, they constituted a source of great profit to the King and his officers.

We have seen that Ni Söng-Ke, the founder of the Chao-hsien dynasty, continuing the traditions of the Kao-li dynasty, had asked the Emperor of China to recognize his title to the throne. The policy of this proceeding cannot be doubted, for by it alone could he hope to establish firmly his rule, and enter into relations with his powerful neighbor. Moreover, China has always been for Korea like the head of the family; the Ming dynasty was "a father to Korea" and the Manchu dynasty an "elder brother." Not only do we find expression given to this feeling in official papers, but it is one which I have found existing everywhere among the Korean people of to-day. The Korean looks at China's ruler not as the suzerain of his king, but as the head of the great family to which he belongs; and to my mind the particular relations existing between the reigning families of the two countries are based on the sacred relations of father to son, and of elder brother to younger brother. The so-called investiture of the King of Korea by the Emperor of China is nothing else than the approval of the younger brother's action by the head of the family. If this explanation does not apply to all the *shu kuo*, it appears justified in the special case of Korea. Even the Emperor himself, as late as 1882, speaks of Korea as his "near kindred." (See *Peking Gazette*, Sept. 23, 1882.) As to the custom of submitting to the Emperor the choice made by the king of an heir to the throne, or of a consort, or informing him of the death of his mother, of his wife, etc., we can look at them as only strictly ceremonial relations, bearing with them no idea of subordination. As well as I can learn, there has been no case in which the Emperor of China has disapproved of the choice the king of Korea has made of his successor or his queen. In 1699, the king had his son by a concubine recognized as his heir, the queen having no children. In 1722 and in 1724, he asked for the recognition of his younger brother as his heir. In 1763, the grandson of the then reigning king is recognized as heir to the throne, the Peking Board of Rites quoting the *Li Ki* (*T'ao kung*, 1.) to show that a grandson is the natural heir to the throne, if the son dies during his father's lifetime.

In 1691, the King of Korea asked the Emperor's approval of his again taking as his consort a person whom he had previously put away in favor of a concubine, and of reducing the latter to her former rank.* All these requests, and every other one recorded, were granted.†

* A correspondent in the *North China Daily News* writing from Mukden under date April 5, 1887, says that this request was made in 1694. The *Hui tien* says, in the 30th year of K'ang-hsi (1691).

† Twice at least during the Ming dynasty the people of Korea chose their sovereign without consulting China, and the latter power only

Besides the presents which the Emperors sent the Kings of Korea by their envoys on their return home, special envoys have always been sent to carry the Emperor's letters to the king, approving of his acts or condoling with him for deaths in his family. A narrative of the ceremonies observed on the arrival at Söul of such missions will be found in the translation given further on of an extract from the diary of Po Chün, who was sent on a special mission to Korea in 1843.

China, moreover, in all times of internal warfare or discord in Korea, has observed a strict neutrality and has always closed her frontiers on all fugitives from Korea, as for example in 1729, when the Emperor Yung-cheng had at the request of the King of Korea given him 10,000 taels to assist in suppressing a revolt in his kingdom. A decree was issued at the same time by the Emperor ordering the officers at the frontier passes and elsewhere to seize any fugitives who might present themselves and forward them to the capital, "for it is the policy of our dynasty to endeavor to have such men punished." In case any Chinese subjects should secrete such rebel fugitives, they were to be severely punished. See *Hui tien*, Ch. 399.

In 1777, the Emperor Ch'ien-lung issued the following decree: "The King of Chao-hsien has written to us that in the matter of the conspiracy of Hong In-han and others the chief culprits had been put to death. He fears, however, that there are many persons implicated in the plot, and that possibly some have escaped and are in concealment, and he requests that the officers at the barriers may be instructed to look out for such criminals and apprehend any they may find. The rulers of Chao-hsien have long been devoted to us, and have ever shown due reverence; now as the king is apprehensive lest any of the rebels escape, we have informed him that we would adopt measures for preventing any of them entering China surreptitiously. Let this be communicated to the Tartar general at Mukden, and to the Governor of Shan-tung, so that officers along the Korean frontier and on the coast roads may be instructed by them to use great diligence in this matter. . . . Any Korean arrested will be handed over to the authorities of his country to be dealt with. . . ." (*Hui tien*, Ch. 399.)

Among the different questions which have arisen between the governments of Peking and Söul, the following may be mentioned:

In 1731, the Tartar general at Mukden asked the Emperor to

entered a mild protest. In 1591, the King of Korea, Kung, dying, the Prince of Kuang-hai Hu made himself regent. The Emperor Wan-li ordered the ministers of State and the people of Korea to decide who should be their ruler, and Hu, having been chosen, received investiture. In 1623, the people of Korea deposed this king and put on the throne his nephew, Ni-sung. See *Ming shih*, B. 320, pp. 25 and 27.

authorize the erection of a military station at Mang-neu-shao, at the confluence of the Ts'ao ho with the Ai ho.* The Emperor approved of the suggestion, but stated that, the place mentioned being on the Korean frontier, the Board of Rites must address the King and ask his approval and consent.

The King of Korea replied, begging that the old order of things might be adhered to, and the Emperor issued a decree accordingly.

In 1746, this question was brought up again as was also that of opening up to settlers the "no man's land" between the barrier of stakes and the Korean frontier. The King of Korea wrote to the Emperor opposing both measures. The Emperor replied as follows: "We have the greatest consideration for Korea, and have heretofore bestowed many favors upon it. Now as to this question of erecting a watch station at Mang-neu-shao, it has been carefully looked into. It is situated on the Korean frontier, and the proposed measure cannot cause trouble or disturb the peace. Moreover, it is to the equal advantage of both countries. Notwithstanding this, the King tells us that it is inexpedient, and earnestly requests that the project be abandoned. As we cannot possibly know the exact character of this section of country, let it therefore be examined into and a report made to us. If the locality is really within the frontier of China, then the establishment of a military guard-house to prevent brigandage, establish order, and guard the frontier is a necessary measure.

"As to the King of Korea's request that the post be not established because the locality in question is debatable land, it is impossible not to have doubtful places, as his frontier is intricately intermixed with ours, so we cannot countermand our orders as the King requests.

"As to the question of opening to agriculture land outside the barrier of stakes, a subject which has in former times been under deliberation, the King of Korea asks that there be left as heretofore a hundred and odd *li* of uninhabited land outside the barrier of stakes of Feng-huang-ch'eng, as an obstacle to intercourse between the two countries and as a means of preventing a congregating of people on the frontier which would create all kinds of trouble. This request is approved of; so the prohibition concerning settling on the land outside the barrier of Feng-huang-ch'eng will remain in vigor as heretofore."† (*Hui tien*, Ch. 399:)

* The Ts'ao ho flows into the Ai ho a short distance E. of the Feng-huang barrier of stakes. The Ai ho flows into the Yalu a little above Wi-ju.

† In 1875, this neutral strip between China and Korea was incorporated into the Chinese domain, on the proposition of Li Hung-chang. See *Griffis, Corea*, p. 182.

In all cases where Koreans passed onto Chinese territory and there committed crimes for which they were seized by the Chinese authorities, or in cases where the crimes were committed on Korean territory by Chinese subjects, the culprits were handed over to the authorities of their respective countries to be dealt with. See for example decree of 1704 (*Hui tien*, Ch. 399), also *Peking Gazette*, May 14, 1877, Oct. 8, 1876, etc.

The commercial relations existing between the two countries now demand our consideration.

The regular trade between Korea and China was transacted (1) twice a year at Wi-ju on the Yalu river, and (2) by the Korean missions to Peking.

The fair at Wi-ju was held twice a year in the 2d and the 8th months, and the trading was done on the part of the Chinese by the military stationed in the Feng-huang and Feng-t'ien fu (Mukden) districts.

In 1736, Ch'ien-lung issued a decree stating that "heretofore the officers and troops of the banner corps stationed at the frontier posts have gone each year in the 2d month with merchandise to Chung-chiang, to trade there with the Koreans. We consider that these bannermen's sole duty is to watch and patrol, and that they have no time for trading, and moreover they know nothing about mercantile operations. It is also to be feared that this trading prevents a proper surveillance of people arriving on the frontier. This system has, therefore, many inconveniences. Hereafter (the trade will be open to all and) the custom officer at Chung-chiang will carefully watch all Chinese who are trading with Koreans, so that trade may be carried on without partiality, extortion, or brawls." (*Hui tien*, B. 398.)

The following year, however, the King of Korea wrote to the Emperor requesting that the old order of things be put again in force, and his request was acceded to.

A small trade was carried on between Kirin and Ninguta and Korea, but the most valuable articles from those localities, such as sable, sea otter, river otter, lynx skins, etc., were not allowed to be exported. (See *Hui tien*, B. 399, 44th Ch'ien-lung.)*

The number of persons who might accompany the Korean missions to Peking for purposes of trade, and the quantity of

* I may here remark that questions have frequently arisen between the Chinese and Korean authorities caused by hunters of the latter nationality crossing over into Chinese territory to hunt fur-bearing animals. See for example the case which occurred in 1763. *Hui tien*, B. 399, 28th Ch'ien-lung. So likewise the Chinese government has had to complain of Koreans hunting for mountain ginseng on Chinese territory.

goods they might bring with them, do not appear to have been determined by regulation. Not so, however, the road which they might follow, which was that by Feng-huang-ch'eng and Shan-hai kuan.

In 1748 the Board of Rites issued the following notification : "When Koreans enter Shan-hai kuan with merchandise of Korean origin, the superintendent of customs must examine whether they agree in quantity and description with those reported to him by the official at Feng huang ch'eng.

"Koreans going out by Shan-hai kuan with merchandise will pay no duties if the goods they have agree with the list forwarded by the Board of Rites. Goods not mentioned in the list and not of Korean origin will pay regular duties. As to the trick of travelers smuggling goods concealed on their persons, they must be examined to see that they carry no prohibited goods, and in case they do, the superintendent must report to the Board of Rites for the punishment of the offender."

On arriving in Peking, the number of Korean traders was reported to the throne and permission given them to trade, but there were many articles which they were not allowed to purchase, such as arms, munitions of war, the dynastic histories of China,* horn for making bows, etc. These restrictions were not against Koreans alone, but applied to all foreigners trading in China. Special restrictions against Korean trade seem to have been directed against the exportation of silver and metals.† Thus, in 1793, the King of Korea asked that the goods which he had sent to Peking might be exchanged for money to be taken back for use in his kingdom. The request was refused.

In 1807, an imperial decree threatened the officials on the Korean frontier with degradation if they allowed cash or copper or iron to be exported to Korea.‡

The only restriction concerning the export trade from Korea relates to ginseng, which is a royal monopoly. In 1759 the King of Korea wrote stating : "In the matter of the trade in ginseng, which is a natural product of our kingdom, though the crop is accidentally short this year, it is not usually rare (and therefore constitutes an important article of trade). The King requests that the regulations of 1653 governing the matter, and

* In 1691, one of the members of the Korean mission bought a full set of the dynastic histories. The culprit was degraded by the King of Korea and sent to military servitude on the frontier, and the chief of the mission received the imperial censure. See *Hui tien*, B. 399, 30th K'ang-hsi.

† I note, however, in the *Hui tien*, B. 399, that in 1729 the Siamese envoys had to obtain special permission to purchase ten loads of copper wire.

‡ See also *Hui tien*, B. 399, 14th Chia-Ch'ing, the case of Kung Feng-lai et al.

which prohibit buying it as an (ordinary) medicinal substance, be put in force again. He does not request that it be forbidden to buy ginseng, but that the trade be no longer carried on according to the existing regulations." (*Hui tien*, B. 398.)

No direct trade by sea has ever been allowed between China and Korea prior to the treaties with western nations.

As early as 1637, the Manchus issued orders to the effect that all Chinese merchants coming to Korea by sea must be sent back to their country.

In 1717, the Board of Rites issued the following notification: "Hereafter, when Chinese reach Korea through stress of weather, if they have passports and no business to transact, they shall be sent home according to established rules. If they have no passports and have surreptitiously crossed the river frontier for purposes of business, the King of Korea will have them seized, judged, and punished according to the laws of the kingdom: the Korean authorities reporting to the Board of Rites what they have done in the case." (*Hui tien*, B. 399.)

The right to fish on the Korean coasts was not conceded to China by Korea, most probably so as to prevent smuggling. In 1712, the Emperor K'ang-hsi issued a decree stating: "In former times fishing boats were strictly forbidden to frequent the Korean coast, but at present boats go on the coasts of Korea and fish. This is an act of piracy. Henceforth the Koreans may pursue and capture such persons. If captured alive, they must at once be sent back to China."

The rules issued to prevent smuggling over the land frontier were no less stringent on the part of China. In 1715 the Emperor states to the Board of Rites: ". . . As regards persons surreptitiously crossing the Yalu river, a communication will be addressed to the Tartar General at Mukden, the Prefect of Feng-t'ien fu, and the different governors general that they instruct the naval authorities along the coast to capture and punish all persons caught in the attempt. Moreover, the King of Korea has been written to (咨文) with a request that he give stringent orders to his troops stationed along the seaboard to be continually on the lookout for persons crossing the frontier without permission, to apprehend them and send them back to China."

We know by the accounts given us by the French missionaries when they attempted to enter Korea how well these orders were executed down to the signing of the treaties.

It should have been stated that all questions which had to be submitted by Korea to the Chinese government were addressed by it to the Peking Board of Rites, the same board with which all foreign nations dealt until the Tsungli Yamen was created in 1861. From 1764 until a few years ago, all questions of

minor importance, such as those concerning the return of shipwrecked seamen, of violation of the frontier, etc., were addressed to the officer at Feng-huang ch'eng, who forwarded them to the Board of Rites at Mukden, to be by it passed on to the Peking Board of Rites; by this means the Koreans had not to send special envoys for unimportant matters.

IV.

(Translation.)*

On the 21st of the 2d month, (Po Chün) having passed through a narrow defile came to a stone archway called the Ying-en men or the Mu-hua kuan. After he had been resting here awhile under an awning, the King (of Korea) came to welcome the Imperial letter, after which he preceded the embassy to the city.† Then mounting their horses, preceded by the Imperial letter borne under a canopy and accompanied by a great armed retinue, the embassy entered Söul by the Ch'ung-li men, the main southern gate.‡ Advancing along a wide market street some three or four *li*, they entered the Tun-hua men (which is believed to lead into the forbidden city). To prevent staring into the park, screens of cotton had been put up all along the way. Going around to the east by the Chin-shan men, they passed by the Jen-chang men and entered the Su-chang men. Following a circuitous route they then came to the Ming-cheng men, where they alighted from their horses. The masters of ceremonies introduced the envoys into the King's presence, the chief envoy bearing in both hands the Imperial letter, which he placed on the eastern table in the Ming-chen tien. Then, while they stood to one side, the King went through the usual ceremonies standing at the foot of the steps.

When this was done, the masters of ceremonies requested the envoys to leave the hall and to enter a small pavilion, where they removed their long black sheepskin gowns. After

* Extract from Po Chün's (柏俊) Diary of his mission to Korea in 1843 (奉使朝鮮驛程日記).

† The envoy and the King did not meet. (Note of Chinese author). The envoys of the Emperor of China to Korea are called in the latter country Ch'ik-sa or Imperial envoys.

‡ See map of Söul annexed. The following figures, taken from the Dynastic Institutes of Korea (*Tai jon hoi t'ong*) B. 6, may not be devoid of interest: "The walls of Söul are 14,935 *pu* in circumference, or 89,610 feet (*chih*), the foot of the Chou dynasty being used." I do not know whether the Korean pace (*pu*) corresponds with that now in use in China, but assuming the two measures to be of the same length, viz. 5.26 English feet, we find that the length of the walls of Söul is about 4½ *li*, or nearly 13½ English miles.

a good while, when the King had put on mourning clothes,* they were requested to come to a hall, and going around to the east they came to the Hall of the Manes. The two envoys each in turn made an offering and poured out a libation. When this was finished, they took their place facing the north, and the King stood facing south on the top of the northern steps. Then the King and all his family in mourning fell on their faces while they listened to the contents of the Imperial letter. When this was over, the masters of ceremonies told all present to cry (the host and guests alike). When this was finished, (the King) raised the Imperial letter (to his head) and incense having been burnt, the ceremonies were at an end.

Walking to the right and left, the envoys then went to the back of the hall, where they and the King saluted each other and separated. They then went to the pavilion where they had changed their clothes, and took off their riding jackets. After waiting awhile, they were invited into the Meng-cheng tien to perform the tea ceremony. While the two envoys stood facing the west, the King, who wore his ordinary clothes and was standing facing south, intimated his desire to salute them in turn. Thrice they refused, and finally they exchanged salutations. The King then asked about the Emperor's and Empress's health, to which suitable replies were made. After this they all sat down, and the King asked if our princes and *beileh* were in good health. He then asked the envoys if they had had a prosperous journey, and whether it had been warm or cold. Tea and fruit were then brought, and the King, taking a pair of silver chopsticks in his hand, invited them to eat. Having partaken of one or two things, the King ordered the attendants to go and take tea, and with this the ceremony ended.

The envoys then prepared to leave, and having exchanged salutations with the King, they walked out by the east and west.† When they had got outside the door of the Ming-cheng tien, they exchanged salutations; then, going down the steps, the envoys got on their horses, when the King saluted them from the doorway and went away.

The envoys then went to the Nam-pyöl Kung, where they abode.

The following day the King returned the envoys' visit, and Po describes it as follows: "The King came to pay a visit. The great hall of the Nam-pyöl Kung was fixed up with folding screens. The envoys received the King at the foot of

* The mission was sent to Korea to offer the Emperor's condolences at the death of the King's father.

† That is to say, the chief envoy and the King walked side by side, the King walking on the east side, the envoy on the west.

the eastern steps, and having exchanged salutations they walked forward together (i. e. side by side). When they reached the hall, they bowed to each other. The King having inquired of them if they had reached home safely the day before, they sat down, and had tea and an entertainment similar to that which they had had the day before. The King, in reply to an inquiry, said that he was eighteen years old.

"The following day, which had been fixed for the departure of the embassy, happened to be an unlucky one,* on which it was impossible to leave, so the King insisted with much earnestness that they should defer their departure, to which the envoys finally consented. They then rose, and having bowed to each other, they went to the foot of the eastern steps. The King would not consent to their seeing him take his leave, so after talking a little, the two envoys stood in the open road until he had left; after which the King sent a person with his card to thank them."

V.

THE SONG P'A INSCRIPTION.†

The inscription of which I offer a translation in this chapter was kindly communicated to me by Lieut. Geo. C. Foulk, U. S. N., formerly Chargé d'Affaires *ad interim* of the United States in Korea. Mr. Foulk had after much difficulty obtained a rubbing of it in the three languages in which it was written, Chinese, Manchu, and Mongol.

Speaking of the locality in which this valuable record of the past history of Korea stands, Mr. Foulk says:

"Descending into the valley west of the city (of Kwang ju), we moved northwards along its east border to Song pha, a village of historic interest on the south bank of the Seoul River, 7 miles from Kwang ju and 11 from Seoul. It was just behind this village that the Chinese army which besieged Kwang ju had its camp, the remains of which are yet visible in broken down walls and heaps of earth in the fields. On the edge of the village is a tall building of graceful shape, and indicated to be official by its decorations in red, containing a great marble tablet fully 12 feet high and a foot thick, mounted upon the back of a gigantic granite turtle. The front of the stone is closely filled entirely with an inscription deeply cut in what I took to be Manchu Tartar script characters.

* 月忌. Each month has three such days, the 5th, 14th and 23d.

† I have adopted the name in use among Koreans to designate this celebrated inscription. *Song p'a* is the Korean pronunciation of the Chinese characters *sung pei*, meaning 'commemorative tablet.' It would be, however, more accurate to call it the Sam-jön do inscription, from the name of the place where it stands.

On the back of the stone is another inscription, only partly covering it, in Chinese square characters. Outside of this building, inclosed by a rough railing, is a second great granite turtle, but without a tablet mounted on it. About the place, irregularly scattered on the ground, were many dressed stones, and a number of the stone posts, columns, sheep, and drums seen about Corean graves.

"An officer stationed at Songpha, a Pyelchang, accompanied me in my inspection of these relics. He stated that after the Chinese had begun the invasion of Corea, in 1637, two large marble tablets covered with inscriptions were brought to Corea from China by sea; that the erection of these was violently resisted by Coreans, and one was destroyed; the other was brought to Songpha, and there set up as I saw it, and has been since under the protection of the Corean government. Neither the Pyelchang nor other persons present could (or would) explain the inscriptions, and I was told without special permission from the governor of Kwang ju copies of them could not be made."*

The Chinese text of this inscription is not without many difficulties; and the copy which I had made of it while at Söul, in 1887, from Mr. Foulk's rubbing is not wholly satisfactory. In two places especially characters seem to have been omitted; these I have replaced conjecturally, enclosing them within a line.

Mr. Shuisky, Secretary of the Russian legation at Söul, told me that the Mongol part of the inscription agreed exactly with the Chinese version, and I suppose the Manchu text does also.

(*Translation.*)

Monument commemorating the benevolence of the Emperor of the Ta-ch'ing dynasty.

In the 1st year Ts'ung-tê of the Ta-ch'ing, in the 12th month in winter (January, 1637), the Emperor Kuan-wen-jen-sheng, being greatly incensed at our wrong doings, marched straight to the Eastern country with his army which none could withstand. Then our Sovereign (寡君) was in (Nam) Han, trembling with fear, as one walking on ice in the spring time awaiting the light of day. In fifty days the troops in the eastern and southern provinces were routed and dispersed, and the armies of the west and north were skulking among the mountains unable to advance a step. In the capital provisions were exhausted. It was then that the army (of the Manchu) occupied the city (as suddenly), as the frosty blast sweeps away the withered autumn leaves or as the brazier's fire consumes a stork's feather. Though

*See *U. S. Foreign Relations*, 1885, p. 326.

this had come to pass, the Emperor put no one to death, but again manifested his benevolence and proclaimed his will, saying: "Come, or else we will utterly destroy you by the sword."

Yo-jo, Ying-ma, and the other generals, having received the imperial commands, made it known through the provinces.

Then our Sovereign assembled his ministers, civil and military, and said to them: "I have been at peace with the great country (大邦) for ten years, but now through my foolishness I have brought on me the punishment of Heaven, and myriads of families have been brought to naught* through the fault of myself alone. Still the Emperor has not allowed executions, and has spoken as above. How can I but obey his command, and perform my duties to my ancestors above and save my people below?"

The Ministers agreeing with this, they followed (the king) several tens on horseback, and coming in front of the (Manchu) army confessed their faults.

The Emperor showed him great courtesy and treated him with kindness. As soon as he saw him his heart went out to him, and his benevolence extended to all even to the accompanying officers. The ceremony being ended, our Sovereign returned to Söul. The Emperor ordered the troops which had gone southward to come back and march westward (to Manchuria). The people's fears were allayed and they went back to their farming, scattering far and near like pheasants going back to their homes. Was not this a great blessing?

Our country (小邦) had done evil, but the superior country for a long time did nothing. Later on the (Korean) general Kang Hong-ip assisted the Ming with troops.† They were routed and he was captured. The Emperor T'ai-tsu-wu only kept Hong-ip and some others and sent all the others back.†

Nothing could exceed this clemency, but our country in its ignorance did not comprehend it.

In the year *ting mao* (1627), the Emperor had ordered his generals to subdue our country. Our Prince and his ministers fled to the islands in the sea, and sent an envoy to arrange matters. The Emperor, bearing in mind that (Korea) was a younger brother country (兄弟國), returned the land to (the reigning) family, and moreover sent back Hong-ip.

After the submission (of Korea), relations (between it and Manchuria) were free, and the hats (of both nations were seen) mixing together.

Reckless talk which had fed the fire of discord suddenly made it burst forth. Our government (小邦) reprimanded the

* Lit. myriads of families (were hashed) like fishes' flesh.

† This and the succeeding paragraphs only repeat in detail what is said in the first part of the inscription.

border officers, but its words were not friendly, and its despatches were taken by the high ministers of state (of the Manchus and submitted to the Emperor).* The Emperor in his great clemency pardoned this, and did not at once send his troops. He first proclaimed his orders, stating that he would restore tranquillity with his troops if his orders were not obeyed, for the command which came from his mouth could not possibly be evaded. Our Prince and ministers had no means of concealing their crime.

Then the Emperor with his army surrounded Nan-han, and ordered one of his generals to capture first Kang do (i. e. Kang-hwa island). The queen, the crown prince, and the families of the high officers of the crown were captured (on it). The Emperor gave orders to his officers that no injury should be done them, and sent officials and eunuchs to look after and protect them. Later on, in the abundance of his goodness, he allowed the Prince of our country, his ministers, and the captives whom he had protected to return to their homes. Once more the season of frost and snow had given place to that of bright spring (or of sunshine and spring), the drought had vanished before the rains. The country (靉) which had been lost was existing again; the ancestral line (lit. ancestors) from which we had been cut asunder was again tied together. All the thousands of *li* within the Eastern country (i. e. Korea) were regenerated. Since of old, never had such a thing been heard of!

At the place of the Emperor's headquarters, on the altar ground, I the Sovereign have therefore given orders to the Naval board, that the altar be added to and made higher, and that a stone with an inscription be erected thereon, to make known to all future generations that the mercy and virtue of the Emperor is all-pervading like heaven and earth, that on it our country for all future generations will rely, and to the end that the most remote places might reverence the praiseworthy humanity of the great dynasty (of Ta-ch'ing), which has no parallel; for if we consider the expanse of heaven and earth, or the brilliancy of the sun and moon, they cannot compare to one ten thousandth (of its humanity).

Reverently recording its general features, this inscription tells us:†

Heaven sends down the frost and dew,
 Bringing cold and bringing life;
 So also is the Emperor,
 And wide-reaching his majesty and virtue.

* My translation of this paragraph is subject to correction. I have followed the explanations given me by my Chinese *sien-sheng*. Conf. account of these events given page 10.

† The latter part of the inscription, from this line to the end, is in verse.

The Emperor came to the East
 With ten myriads of his men,
 (Like) the rumbling of thunder,
 Like tigers, like bears—
 From the western Fan poor and needy,
 To the region of the North.
 Grasping their halberds they rode before.*
 Glorious is (the Emperor's) energy.†
 The Emperor, in his great mercy,
 Graciously spoke words of kindness.
 All the orders which he spoke
 While awe-inspiring were yet kind.
 When first spoken they were not understood,
 So we brought misery on ourselves.
 Clear were the Emperor's commands;
 Like one awakening from sleep,
 Our Sovereign was filled with reverence,
 And together with his people he returned (to obedience).
 Not only was it fear (of the Emperor's) might,
 But also confidence in his goodness.
 The Emperor commended him;
 And his kindness was great and vast his graciousness.
 It brought back brightness and smiles,
 And the arms of war were put away.
 What has he given us?
 Noble steeds and light fur gowns,
 The people of Sōul, gentry and women,
 Sing songs and ballads (in his praise).
 Speaking of the army,
 The Emperor sent back home his troops.
 He has brought to life the people,
 And, pitying our dismembered state,
 He has exhorted us to take to our occupations.
 ('T was like) rich colors laid afresh on vessels of gold,‡
 As flesh reappearing on dried bones,
 Or winter vanishing before returning spring.
 There is a great block of stone
 At the head of the great river (大江),
 And for ten thousand years in the land of Ham
 It will be a glorification of the Emperor.

Erected in the 4th year of Ch'ung tē, 12th month, 8th day
 (January, 1640).

The Minister Yō I-ch'i with the title of Ka-san tai-pu, a Vice-President of the 1st class (*Champan*) of the Board of Rites, and Tong-chi-wi-kōn Pusa, composed (this) under royal instructions.

The Minister Wo Syun with the title of Cha-hōn tai-pu, a Vice-President of the 2d class (*Pan-i*) of the majority of Sōul (*Han-cheng pu*), traced the characters under royal instructions.

The Minister Ni Kyōng-shōk with the title of Cha-hōn tai-pu, President (*Pan-so*) of the Board of Civil Office, and Chancellor of the Academy (*Hong-wan kuan*), Chancellor of the College for literary studies (*Hak-ye-mun kuan*), and Ki-syong Kyun-sa, revised it under royal instructions.

* See *Shih ching*, *Wei shih*, ode *Po-hsi*.

† See *Shih ching*, *Shang-sung*, ode *Yin-wu*.

‡ These two lines in my copy of the text are probably badly copied, as two characters are missing. I have, however, translated in accordance with my copy, omitting the words 玉宇, which are only suggestions.

Songpha Inscription.

大清皇帝功德碑

大清崇德元年冬十有二月

寬溫仁聖皇帝以壞自我始赫然怒以武士臨之直擣而東莫
敢有抗者時我寡君棲于漢凜凜若履春冰而待白日者殆
五旬東南諸道兵相繼山崩潰西北師逗撓峽內不能進一步城中
食且盡當此之時以大兵城如霜風之卷秋箨爐火之燎鴻毛而
皇帝不殺為武惟布德是先乃降敕之曰來朕全爾否屠之有若英
馬諸大將承

皇帝相屬于道于是我寡君集文武諸臣謂曰予托和好于大邦十
年于茲矣由予愆惑自速天討萬姓魚肉罪在予一人

皇帝猶不忍戕之諭之如此予曷敢不欽承以上全我宗社下保我生
靈乎大臣協贊之遂從數十騎詣軍前請罪

II. 皇帝乃優之以禮拊之以恩一見而推心腹 錫賚之恩遍及從臣禮罷即

還我寡君子都城立召兵之南下者振旅而西 撫民勸農遠近之雉

烏散者咸復厥居詎非大幸歟小邦之獲罪 上國久已未之役都元師姜
立弘助兵明朝兵敗被擒

太祖武皇帝只弘立等數人餘悉放回 恩莫大焉而小邦迷不知悟丁卯歲今

皇帝命將征本國君臣避入海島遣使成

皇帝久之視為兄弟國強土復宗弘立亦還矣自茲以征禮遇不晉冠蓋交跡

不幸浮議扇惑構成亂梯小邦申飭邊臣言涉不避而其文為大臣所得

皇帝猶寬貸之不即加兵乃先降明旨諭以師期丁寧反復不翅若耳提

面命而終未免焉小邦君臣之罪益無逃矣

皇帝已以大兵圍南漢而又 命偏師先陷江都宮嬪王子暨卿士家小俱被俘

獲

皇帝戒諸將不得擾害令官及內侍看護既而大霈恩典小邦君臣及其被
 獲眷屬復歸于舊霜雪變為陽春枯旱轉為時雨區土既亡而復存宗
 社已絕而還續環東土數千里咸囿于生成之澤此實古昔簡策所稀
 覲也

皇帝駐蹕之所也壇場在焉我寡君爰命水部就壇所增而高大
 之又代石以碑之垂諸永久而彰夫

皇帝之功之德直與造化而同流也豈我小邦世世而永賴抑亦

大朝之仁聲武誼無遠不服者未始不茲顧募天地之大盡日月

之明不足以彷彿其萬一謹將其大畧銘曰

天降霜露載肅載育惟 帝則之並布 威德

皇帝臨東十萬其師殷殷轟轟如虎如貔西蕃窮髮暨夫北落執

口及前驅厥靈赫赫

IV.

皇帝孔仁誕降 言十行昭面既嚴且溫始述不知自貽伊戚

帝有明命如寐之寃我后祇服相率而歸匪惟怛 威惟 德之依

皇帝嘉之澤洽禮優載色載笑爰束戈予何以 錫之駿馬輕裘

都人士女乃歌乃謳我言 軍旅

皇帝班師活我赤子哀我蕩析勸我樞事金甌依翠 玉宇 維新枯骨

再肉寒發復春有石山巍然大江之頭萬載之韓

皇帝之休

崇德四年十二月初八日 立

嘉善大夫禮曹叅判兼同知義禁府事 臣 呂爾徵奉教篆

資憲大夫漢城府判尹 臣 吳俊奉教書

資憲大夫吏曹判書兼弘文 臣 大提學藝文館大提學智成均事 臣 李景奭奉教撰

VI.

The following document completes the history of Korea's foreign relations, giving as it does an official account of the mode in which treaties with Western powers were concluded, and of the rôle China played in their negotiation.

This paper may invalidate some of the inferences which I have drawn concerning the present relations of Korea and China, but of this I leave my readers to judge. The question is not one into which I care to enter, nor even one which I feel competent to decide; for it cannot be finally judged by our Western rules, and the Asiatic one is to me unknown, since published documents do not explain it sufficiently.

MEMORIAL OF THE KING OF CHÖSEN TO THE EMPEROR OF CHINA IN REFERENCE TO SENDING ENVOYS TO WESTERN COUNTRIES. PUBLISHED IN THE SHIH PAO OF TIEN-TSIN, NOV. 29, 1887.

Your Minister (臣) the King of Chösen, Ni I, respectfully memorializes the Throne in the matter of asking the Imperial consent as a preliminary step to sending envoys to Western countries.

On the 7th day of the 8th month of the present year (23d September, 1887), Shin Wo-chak, Yang-wi-cheng of the Wi-cheng-pu,* reported that he had received a despatch from Yüan Shih-K'ai, (Chinese) Minister resident in Chösen for diplomatic and commercial affairs, stating that orders had reached him from the Grand Secretary of State Li Hung-chang, in which he said: "a telegram from the Tsung-li Yamén has been received containing the following Imperial edict:

"As to Chösen sending envoys to Western countries, it is necessary first to solicit the sanction of the Throne; when this has been granted, envoys may be sent. This is in accordance with the ceremonial usages governing the relations of dependent states (with the Imperial government).

Respectfully received."†

"You will immediately communicate this to the (Korean) government (輔政府), so that it may act accordingly.

"In view of these instructions, he (Yüan Shih-K'ai), as in duty bound, communicated the above to the honorable Council of State, requesting it to consider the subject and to take measures in compliance therewith."

In our humble opinion, this country (小邦) has for genera-

* The Wi-cheng-pu is practically the Council of State of Korea.

† This phrase is usually translated by 'respect this,' but it is really an indorsement put on documents emanating from the Emperor by the secretaries of the grand council after copying them for transmission, and forms no part of the Imperial commands.

tions been the recipient of favors from the Heavenly Court, favors as great and as far reaching as (Heaven and Earth) which cover and support all, and as exalted and profound as the mountains and the sea. There is nothing which His Majesty does not comprehend, and they who seek (his aid) do find it.*

As to the matter of foreign relations, we have received express orders from Your Majesty (皇帝陛下), showing his loving kindness for a border protected state (藩服), and his sedulous care in supporting and directing it. He expressly authorized us to enter into relations of commerce and amity with the United States in the first place, and he deputed an officer to assist in negotiating a satisfactory treaty. Besides this, He had prior to this caused (us) to send a despatch (to the United States) clearly stating that Chōsen was a member (屬邦) of the Chinese Empire, but that as to its internal administration and foreign relations it had always enjoyed independence.†

As in duty bound, this country sedulously attends to the duties devolving upon a prince of the Empire (侯度); but as to questions of equality and reciprocity, and of an international character with foreign nations, it and they enjoy sovereign powers.‡

Later on, other Western powers came in turn (to Korea) and negotiated treaties, all of which were based on that concluded with the United States, which was both satisfactory and just. When they were concluded, the facts were reported to Your Majesty and received your approval.

After the exchange of ratifications of the American treaty, a minister plenipotentiary was sent in accordance with its provisions to reside at Sōul, and this country sent an envoy (to the United States) bearing messages of good will, and he (in due course) returned.

But as to sending congratulatory messages to the other (treaty) powers, it was not possible to do so; hence the repeated requests of the envoys of the different (treaty) powers to have us send envoys to reside in their countries.

This country, while having present to its mind the urgency of the occasion was yet desirous of complying with the terms of the treaties, so I have recently appointed my minister §

* Lit., "where there is seeking there is finding." The phrase is in constant use, and may be seen on every wall and in every temple in China, as an expression of belief in the mercy of the gods and an acknowledgment of favors received from them.

† A letter, the contents of which are as herein stated, has been addressed by the Korean government to every power which has concluded a treaty with it. Compare the remark of the Emperor Tai-tsu of the Ming, quoted p. 4: "Kao-li is not under the rule of the Middle Kingdom."

‡ Literally, 'both complete,' 'both with full powers.'

§ The King, speaking of himself as the Emperor's Minister (臣) must needs call his own ministers *p'ei ch'en*, 'subordinate minister.' This

Pak Chōng-yong to be a Minister plenipotentiary, and propose sending him to reside in the United States. I have moreover appointed my minister Chō Chyen-li to be a Minister plenipotentiary, proposing to send him to the five realms of England, France, Germany, Italy and Russia, there to reside for the transaction of international questions.

I now, as in duty bound, submit these facts to Your Majesty, and beg that as an extra act of grace you will deign to sanction the sending of these envoys, to the end that the question of envoys may be settled in accordance with treaties.

Your memorialist has moreover to remark that, in accordance with established regulations when questions arise concerning the presentation of tribute and ceremonial (audiences), he writes (咨)* to the Board of Ceremonies, who in turn present the subject to Your Majesty, while international matters are submitted to Your Majesty by the Prince and Ministers of the Foreign office or the superintendent of northern trade, the Minister of State Li Hung-chang. Except in matters of exceptional gravity, he would not venture to address directly Your Majesty; but in the present case after having listened on bended knee and with unutterable awe and trembling to Your Majesty's telegraphic commands, he ventures, in utter disregard of all sense of propriety, to state unequivocally his innermost thoughts; and he awaits in trepidation the Imperial reply to his request that, as a preliminary step to sending envoys to Western countries, Your Majesty's sanction be obtained, which is hereby respectfully solicited.

is not, however, a peculiarity of this document: it occurs throughout the *Ta-ch'ing hui tien*, where all envoys from the King of Korea are thus styled.

* *Tzu* is used in speaking of correspondence between persons of equal rank.

ARTICLE II.

THE EXTREMITY OF THE ROMANS :

AND

PRAISE BEFORE THE HOLY MYSTERIES:

SYRIAC TEXTS AND TRANSLATIONS.

BY PROFESSOR ISAAC H. HALL,

OF THE METROPOLITAN MUSEUM OF ART, NEW YORK CITY.

Presented to the Society May 11th, 1887.

AMONG the Syriac manuscripts recently acquired by the Union Theological Seminary, through the missionary, Rev. James E. Rogers, of Oroomiah, is a volume in thick, heavy boards, covered with leather, $6 \times 4\frac{1}{4} \times 1\frac{1}{4}$ inches in dimension. It is written on thickish glazed paper; the written space on a page being $4\frac{1}{2} \times 3$ inches, surrounded by a double, ruled, black line, and comprising 14 or 15 lines to a page usually, but often 16, and now and then 13. It consists of 10 quires, all *quiniones* but the last, which is a quaternion; and therefore the manuscript contained originally 98 leaves, or 196 pages. The first five leaves are now so badly mutilated that they may be called wanting. Six pages of the book are occupied with rude colored drawings composed of straight lines and circles or parts of circles; sometimes with some words in Syriac; but the drawings appear to have no connection with the subject-matter. The first 169 pages are occupied with the Revelation of the Apostle Paul, substantially the same with that of which a translation by Rev. Dr. Justin Perkins was published in the *Journal*, vol. viii., though the variants are many. This is followed by the composition now under consideration, which extends from the top of page 170 to the middle of page 188;*

* The pages are not numbered in the MS., and the numbers I give are by count, including the five mutilated leaves.

and the rest of the volume is occupied by a hymn of "Praise before the Holy Mysteries." The title and subscription to the Revelation of Paul are in red, as are also those of the two other compositions. The writing is in a fair Nestorian, apparently of the last century; but the whole manuscript is somewhat careless as a copy. The subscription to the last composition is probably that intended for the whole book; but while it gives the month, it omits the year, and probably several other intended words. This subscription reads as follows:

"And this book was finished in the blessed and blessing Heziran, by the hands of me whose foolish name as deacon is Baryákâ Jalûia, from Bar Kâzi, of Qerîtha Nâhrâ."

The second composition in the MS., "The Extremity of the Romans," I thus far find nowhere else. The nearest thing to it, as I judge from the title, is the MS. Sachau 221 (3), "Der zweite Brief, der aus dem Himmel auf Rom niedergefallen zur Zeit des Patriarchen Theodosius"; but this composition tells about the *third* letter that fell from heaven, in the time of Athanasius, patriarch of the Romans [i. e. Greeks]. It could not be the great Athanasius known to church history, for the time assigned in this document is A. D. 778, or about four centuries and a half later than his time.

Nor does the document seem to be a translation from the Greek, but an original composition; though I have not searched the patristic literature to see if there is extant any Greek composition corresponding. The nearest hint of its genesis that I can get is derived from the fact that it contains a number of Syriac expressions either identical with or closely resembling the Revelation of Paul. But the Revelation of Paul, as appears from a comparison of the Greek and Syriac, was doubtless originally Greek,* the extant Syriac being an amplified translation; and this "Extremity of the Romans" a later composition than that Syriac version. Now the age of the Greek composition was discussed by Tischendorf in the *Theol. Studien u. Kritiken* (Heidelberg), in 1851, with the result that its date was one or two years before the death of the emperor Theodosius; a result which later studies confirmed, and caused him to re-affirm in his *Apocalypses Apocryphae* (Prolegg., p. xvi.) Put this with the fact that the "second letter" of the Sachau MS. above referred to is ascribed to the time of the patriarch of Rome, Theodosius, a character very difficult to find, and it would seem that the lat-

* This too is Tischendorf's judgment, *Apocalypses Apocryphae Prolegomena*, p. xvii. "Utrumque textum comparanti non potest dubium esse quin Graeca antiquiorem et puriorem Syriacis libri formam conservaverint. Ita enim vero in his maxime libris fieri consuevit ut orientalium ingenia libere excolerent quae accepissent a Graecis." This last observation every Oriental scholar knows to be but a mild statement.

ter is the mere confusion of the emperor Theodosius with some of the Syrian patriarchs of that name; and that letter, as well as this "Extremity of the Romans," would seem to be the product of Oriental imagination, excited by a perusal of the Syriac amplified version of the Greek Apocalypse of Paul. The "Extremity" mentions both the first and the second letter; the first being ascribed to the year A.D. 731, the second to the year A.D. 739; while the third, treated of in the "Extremity," is ascribed to the year A.D. 778.

But a look at the chronology of the Syrian patriarchs would seem to show that it was a Syrian Athanasius and a Syrian Theodosius who are referred to in these compositions severally; and that the words "Rome" and "Romans" were used in relation to the Byzantine Greeks, as is frequent among the Syriac writers, nor is it hard to see "Constantinople" or "Antioch" in the "Rome." Even so there is difficulty; but the seat of the Nestorian patriarchs at Baghdad was called "the house of the Romans," or, as we should say in English, "the Greek palace." The nearest supposable Athanasius—whose name is also given as Theodosius—was the Nestorian patriarch who was the greater part of a century too late to be the hero of our story. He had been a Jacobite monk of Edessa. The nearest Theodosius, a little earlier than Athanasius, was still more than half a century too late for the last of these letters.

Considering the Nestorian transmission, if not origin, of this document, it may be too far away to look among the patriarchs of Antioch; but among them was an Athanasius (the fourth of that name) under whose patriarchate the first letter would fall, another under whom the second would come; but the third would belong to the time of their Ignatius I.

I am inclined to think the whole of Nestorian or Eastern origin, and the Athanasius referred to to be a Nestorian patriarch; but in any case the story is contrived by an author who was not too careful about the verisimilitude of his fiction. The fact that the hymn appended treats of the bread and wine of the Lord's Supper reminds us of the excommunication of the Nestorian Athanasius above referred to, because of the heresy supposed to be contained in the words of his liturgy, "We break the heavenly bread."

The Syriac is good, though much marred by the mistakes of the somewhat ignorant and often hasty copyist. The whole manuscript shows the same qualities. I can do little more than guess at the age of the composition; but, from reasons that will occur to any scholar who reads it and considers its matter and language, should not consider it earlier than the tenth century. Its Scripture allusions and adaptations are

from the Peshitto, but sometimes with a change that shows a later habit, though the ancient character of the Peshitto language is not thereby changed. Thus in an adaptation of the language of Matthew v. 23, the word for 'brother' is changed to that for 'fellow'; but the very peculiar and uncommon expression of the verse remains unchanged.

In giving the text, I have attempted to give it absolutely unchanged, even in the punctuation; and to note the obvious errors of the scribe at the foot of the page. In cases where an emendation is evidently needed, but must be more or less conjectural, I have left my views to be inferred from the translation. I have not thought it worth while to burden the translation with many notes; for the value of this composition is greater in connection with other documents than alone by itself. The punctuation (in our sense) may easily be supplied by the reader. In general it is obvious; but where not so, I have shown my views in the translation. In remarking the frequent absence of punctuation where it was to be expected in Syriac documents, it should be remembered that often, among the Orientals, both Syriac and Arabic, the end of a line, or of a paragraph, or the insertion of a note with ink of a different color, seems to be assumed by the scribe as sufficient warning of a full stop. And when a MS. is copied *punctatim*, but the lines are not preserved, and the rubrics omitted, confusion in the punctuation naturally results.

To some it may seem a part of my duty to give all the Scripture references; but a careful examination has convinced me that this is impracticable. Scripture words and phrases are so interwoven with the texture of the whole composition that to notice them all would greatly mar the pages, and add perhaps as much space as the entire text or translation, especially if each reference were to be discussed so as to tell the whole story of the allusion; and the fruit would not reward the labor. Moreover, a number of the Scripture words or phrases used occur in a number of places in the Bible. It is enough to say here that there are clear allusions to the Peshitto version throughout, but very few exact quotations; almost all the Scripture words and phrases being mingled with those of the writer of the composition. Where I have noted the citation of a passage, it is not to be understood that the quotation is entirely exact. Where, however, I have cited one passage, though the reader of the English Bible might imagine that more would be applicable, it is to be understood that no more will do in the Syriac except the one I have noted. Thus, where I have noted Psalm lxix. 28, for "book of life," the phrase is different from that in Philippians iv. 3, or from any of the parallels in the Book of Revelation.

The following is the Syriac text:

207: : סעבסו סלא בן אמנא דכל יוה 207 : 208 : 209 : 210 :
 211 : 212 : 213 : 214 : 215 : 216 : 217 : 218 : 219 : 220 :
 221 : 222 : 223 : 224 : 225 : 226 : 227 : 228 : 229 : 230 :
 231 : 232 : 233 : 234 : 235 : 236 : 237 : 238 : 239 : 240 :
 241 : 242 : 243 : 244 : 245 : 246 : 247 : 248 : 249 : 250 :
 251 : 252 : 253 : 254 : 255 : 256 : 257 : 258 : 259 : 260 :
 261 : 262 : 263 : 264 : 265 : 266 : 267 : 268 : 269 : 270 :
 271 : 272 : 273 : 274 : 275 : 276 : 277 : 278 : 279 : 280 :
 281 : 282 : 283 : 284 : 285 : 286 : 287 : 288 : 289 : 290 :
 291 : 292 : 293 : 294 : 295 : 296 : 297 : 298 : 299 : 300 :
 301 : 302 : 303 : 304 : 305 : 306 : 307 : 308 : 309 : 310 :
 311 : 312 : 313 : 314 : 315 : 316 : 317 : 318 : 319 : 320 :
 321 : 322 : 323 : 324 : 325 : 326 : 327 : 328 : 329 : 330 :
 331 : 332 : 333 : 334 : 335 : 336 : 337 : 338 : 339 : 340 :
 341 : 342 : 343 : 344 : 345 : 346 : 347 : 348 : 349 : 350 :
 351 : 352 : 353 : 354 : 355 : 356 : 357 : 358 : 359 : 360 :
 361 : 362 : 363 : 364 : 365 : 366 : 367 : 368 : 369 : 370 :
 371 : 372 : 373 : 374 : 375 : 376 : 377 : 378 : 379 : 380 :
 381 : 382 : 383 : 384 : 385 : 386 : 387 : 388 : 389 : 390 :
 391 : 392 : 393 : 394 : 395 : 396 : 397 : 398 : 399 : 400 :

4 In the margin, in red, is the numeral 2, marking this as the second division or chapter.

5 A somewhat later hand has added in the margin: **211 : 212 : 213 : 214 : 215 : 216 : 217 : 218 : 219 : 220 :**

6 Written **207**, but **208** written above, with mark of substitution.

7 Isaiah vi. 3.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 849. 850. 851. 852. 853. 854. 855. 856. 857. 858. 859. 860. 861. 862. 863. 864. 865. 866. 867. 868. 869. 870. 871. 872. 873. 874. 875. 876. 877. 878. 879. 880. 881. 882. 883. 884. 885. 886. 887. 888. 889. 890. 891. 892. 893. 894. 895. 896. 897. 898. 899. 900. 901. 902. 903. 904. 905. 906. 907. 908. 909. 910. 911. 912. 913. 914. 915. 916. 917. 918. 919. 920. 921. 922. 923. 924. 925. 926. 927. 928. 929. 930. 931. 932. 933. 934. 935. 936. 937. 938. 939. 940. 941. 942. 943. 944. 945. 946. 947. 948. 949. 950. 951. 952. 953. 954. 955. 956. 957. 958. 959. 960. 961. 962. 963. 964. 965. 966. 967. 968. 969. 970. 971. 972. 973. 974. 975. 976. 977. 978. 979. 980. 981. 982. 983. 984. 985. 986. 987. 988. 989. 990. 991. 992. 993. 994. 995. 996. 997. 998. 999. 1000.

² Read **لَقَدْ** ³ Ps. lxi. 28.

⁴ Matt. v. 23 (with a noteworthy change of word).

מִמֶּנּוּ מִבְּנֵי הַלְוִיִּם 6 לְחֵטֵי אֲשֶׁר עָשְׂתָה לְבְנֵי יִשְׂרָאֵל
 מִן הַיָּמִים הָאֵלֶּם וְעַתָּה שָׂאֵל בְּלִבְּךָ וְעַתָּה
 מִן הַיָּמִים לְחֵטֵי אֲשֶׁר עָשְׂתָה לְבְנֵי יִשְׂרָאֵל 7 מִבְּנֵי
 הַלְוִיִּם וְעַתָּה מִן הַיָּמִים לְחֵטֵי אֲשֶׁר עָשְׂתָה
 לְבְנֵי יִשְׂרָאֵל 8 מִבְּנֵי הַלְוִיִּם וְעַתָּה מִן הַיָּמִים
 לְחֵטֵי אֲשֶׁר עָשְׂתָה לְבְנֵי יִשְׂרָאֵל 9 מִבְּנֵי הַלְוִיִּם
 וְעַתָּה מִן הַיָּמִים לְחֵטֵי אֲשֶׁר עָשְׂתָה לְבְנֵי יִשְׂרָאֵל
 מִבְּנֵי הַלְוִיִּם 10 לְחֵטֵי אֲשֶׁר עָשְׂתָה לְבְנֵי יִשְׂרָאֵל
 מִבְּנֵי הַלְוִיִּם לְחֵטֵי אֲשֶׁר עָשְׂתָה לְבְנֵי יִשְׂרָאֵל
 מִבְּנֵי הַלְוִיִּם לְחֵטֵי אֲשֶׁר עָשְׂתָה לְבְנֵי יִשְׂרָאֵל
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 מִבְּנֵי הַלְוִיִּם לְחֵטֵי אֲשֶׁר עָשְׂתָה לְבְנֵי יִשְׂרָאֵל
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 מִבְּנֵי הַלְוִיִּם לְחֵטֵי אֲשֶׁר עָשְׂתָה לְבְנֵי יִשְׂרָאֵל
 מִבְּנֵי הַלְוִיִּם לְחֵטֵי אֲשֶׁר עָשְׂתָה לְבְנֵי יִשְׂרָאֵל
 מִבְּנֵי הַלְוִיִּם לְחֵטֵי אֲשֶׁר עָשְׂתָה לְבְנֵי יִשְׂרָאֵל
 מִבְּנֵי הַלְוִיִּם לְחֵטֵי אֲשֶׁר עָשְׂתָה לְבְנֵי יִשְׂרָאֵל

6 This word is in the margin. 7 Read מִבְּנֵי הַלְוִיִּם
 8 MS. לְבְנֵי יִשְׂרָאֵל . The correction intended is doubtless that here
 given.
 9 Matt. v. 13. 10 Heb. xiii. 17. 11 Deut. xi. 14.

22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

The following is a translation of the text:

2 Read **ܩܘܪܕܢܐ** 3 An evident error for **ܩܘܪܕܢܐ**

4 This seems to be the reading, which also makes sense; but a letter is marked above, with a (Syriac) caret below, which seems to make it **ܩܘܪܕܢܐ**. But it is probably a double error, and the emendation to be made by joining this with the next word, **ܩܘܪܕܢܐ**. But this last is unnecessary if Castle's remark is true (*Castelli Lex.*, p. 81, s.v. **ܩܘܪܕܢܐ**): "Aliquando est i. q. **ܩܘܪܕܢܐ**," i.e., as I take it, the prefix.

BY THE HAND OF GOD I WRITE

THE EXTREMITY OF THE ROMANS.

IN the year one thousand and ninety of the Greeks, on the twenty-fifth of Kanûn the first [*i. e.* 25 December, A. D. 778], when Athanasius the patriarch of the Romans, with twelve bishops, five hundred and thirty priests and deacons, and twenty-three thousand believers—the aged, the young men, and children, and virgins—were gathered in the great temple of Peter and Paul, and* were engaged† in prayer, on a sudden there was great darkness and blackness, such as never was its like. And a disciple of Athanasius went outside of the temple to see: and he saw a letter hanging above the temple in the air. And he went in to the patriarch and made known to him concerning the wonder that he saw. And Athanasius answered and said, ‘Remain ye now until we offer the holy mysteries, that are life and death to those that behold.’

And when the holy mysteries were finished, Athanasius went out, and much people besides. And he decreed a curse, and said, ‘Let every man that heareth this curse come to the church.’ And there was gathered much people, of priests and deacons that were seven thousand‡ in number, until there remained no one who did not come to the church, except those for whom it was not right to come.

And when they were gathered and were entreating of God, and offering penitence, because of the darkness that had befallen, they heard also a voice from heaven, such as never was its like, that said, ‘Repent, ye sons of men.’ (And when the people heard, they multiplied [their] tears toward God. Then Athanasius the patriarch arose and clad himself in a white priestly garment, and likewise all the people, and purified themselves from all defilement of sin; but Athanasius himself spread out his priestly garment§ and entreated.)|| ‘If you do not keep the day of Friday from the ninth hour until the ninth hour of the morning of Monday, as I commanded you, I will send upon you wicked men, who will shed your blood upon the earth; and famines, and shakings, and commotions, and pestilences, and the locust, and hail, and every evil plague, because of the day of holy Sunday; and if ye will not hear my words, I would wipe off all flesh from the earth, even unless I had sworn by the great Name, and had been working from God toward you by my mighty arm.’

* Literally, “who.”

† Or, “standing.”

‡ A much later hand has added in the margin: “and two hundred, and believers forty-seven thousand.”

§ The Syriac numeral here marks section or chapter II. The scribe evidently thought the following words to be the prayer of Athanasius; but it seems to me otherwise. *i. e.*, more words spoken by the voice.

|| A nearly or quite contemporaneous hand has added in the margin: “as in the days of Noah, because of adultery and fornication.”

And this letter fell upon his priestly garment, and he read it to the people three times. And the people answered and said, 'Alas!* Alas! Alas! For he is holy, holy, holy, Lord God Almighty,† of whom the heaven and the earth are full of his glories, who has sent upon us his signs and his wonders for our consolation.'

And there was written in it thus: 'We sent to you one letter in the year one thousand and forty two of the Greeks [*i. e.* A. D. 731], and we sent another in the year one thousand and fifty [A. D. 739], to the purport that ye should turn to God; and did not turn; and, behold, again we send this third in the year one thousand and ninety of the Greeks [A. D. 778]. Now, then, see, and hear, and keep your tongues from lying, which ye speak in the church when ye offer the living and holy sacrifice of the body and blood of Christ; and do ye keep your bodies from adultery and from fornication, and from all those things that are displeasing to God; and do you keep this holy day of Sunday.

‡ 'Ye lawless ones, Wo to you because of the judgment of orphans, and of the widow, and of the poor, and of the destitute,§ who knock at your doors, and ye do no mercy to them—even that I might do mercy to you. Behold, also, to the Hebrews I gave the law through Moses in Mount Sinai|| and behold, they keep the sabbaths more excellently than ye, and give tithes and alms to the poor. But ye, who are clad in holy baptism and the sign of the glorious Trinity, have made yourselves to hear not nor comply with my words and my commandments. But if ye do not keep the day of Sunday, which is life-giving to your souls, I swear to you by my mighty arm that I will bring upon you great evil. But if now ye turn from your hateful ways and from your evil doings, so as to give alms¶ to the poor, and to keep Sunday and Friday, I will do to you mercy and favor like that which [I did] to the Greeks. But if ye will not hear, I will send for messengers upon you evil beasts, that shall devour the flesh of your sons and of your daughters before your eyes; and I will send upon you winged and destroying serpents, because of your tongues which speak lying.

'Verily verily I say unto you, If ye do not keep the day of Sunday and of Friday, and number the full amount for fasting and prayer, I will avenge upon you bitter judgment in this world and in the world to come.

* Syr. **ܐܠܝܫ** *i. e.* "Heus!"

† So I render, for obvious reasons. But the passage is an amplified quotation from the Peshitto, Isaiah vi. 3, where the word correctly renders the Hebrew **קדושים**. For other instances see R. Payne Smith's *Thesaurus*. Ephraim uses a different word for the same.

‡ The Syriac numeral here marks section III.

§ Syriac **ܥܘܡܩܐ** "and of the dry."

|| Mount Sinai, everywhere in this MS., is in the *plural* number.

¶ Literally, "righteousnesses."

‘ Verily verily I say unto you, He that putteth away his wife and taketh apother, the blood of John the Baptist shall be upon his head. And if ye do not turn from your evil ways, I will send upon you hail stones that come down from heaven, and will destroy you and all your possessions, until ye say, Lo, everything is fulfilled that I said concerning you. But if ye keep the holy day of Sunday, and the day of Friday, I will not do anything that I am minded to do.

‘ Again I say to you, that whoever gives of his labor to the church, I will requite him in this world and in the world to come, thirty fold and sixty fold and a hundred fold; and I will write his name in the book of life. And every one that holdeth anger towards his fellow, and shall deliver his fellow to the authority on the day of Sunday, to him there shall not be forgiveness of sins. And every man that stirreth up evil against his fellow on the day of Sunday, cursed is all his labor. But on the day of Sunday be in love and unity one with another, because the Holy Spirit hovereth over you.

‘ But I swear to you, brethren, by the great and mighty power of God, that—No! by the voice of thunders, and No! by the floods of rain, and No! by the swiftness of lightnings, and No! by the beauty of Seth, and No! by the perfection of Melchizedek, and No! by the prophets without sins, and No! by the just one who committed no fault, and No! by the fasting of righteous men, and No! by the tabernacle that was pitched* on Mount Sinai, and No! by the fasting of Moses nor yet that of Aaron, and No! by the four evangelists Matthew and Mark and Luke and John, and No! by the hour of laying hand upon the head of our Lord, and No! by the womb that bare him and the matrix in which he was† given birth, and No! by his crucifixion,‡ and No! by his sepulchre in which he was buried, and No! by the judgment that he shall judge according to desert, and No! by the mystery of the twelve apostles, and No! by the sepulchre of Abel, and No! by the beauty of Enosh! and No! by the armies of myriads of myriads that serve before Him by night and by day—that this letter was not written by the hand of son of man, but by the finger of the living God! And every one who heareth this letter and doth not take a copy of it and put [it] in the place in which he standeth, or in the church, shall be under a curse. And whosoever doth take and read it, God will indeed bless him and pardon his sins; and he shall enter the bridechamber of Christ. Amen.

‘ We beseech of you, brethren, that ye give alms† to the poor and to strangers, that ye may find mercy and favor before the mighty judgment seat of God most high, and that ye honor§ the

* Or, “ by the shekinah that dwelt.”

† Or, “ by [the fact] of his crucifixion.”

‡ Literally, “ righteousnesses.”

§ The words for “ and that ye honor ” are omitted, but supplied in the margin *a prima manu*.

justice of God, that [justice which] sacrificed the lamb of the living God, him who beareth the sins of this world., And every one who rashly despises God's exhorters,* he is accursed, and the wrath that He sent upon Sodom shall tread him down; because they are the salt of the earth, and they are ministers of God, and teachers of life [i. e. salvation] to the sons of the holy church, and they watch for your souls. But if ye will not hear my words, I will send upon you evil plagues, and divers diseases in full measure hateful, and pustules, and ulcers, and tumors, so that worms shall swarm from them. And I will turn again the light of the sun into darkness, and will turn away my face from you.

"But if ye shall hear my words and turn to me, and keep the holy day of Sunday, I will multiply your fruits with your possessions, and will have mercy upon you and upon your sons, and I will bless your labor, and I will give to you the early and the latter rain in its season, and I will rain upon you blessing from this letter."

A voice was heard from heaven, saying, 'Believe, ye sons of men, and do not doubt.' And with the voice, the temple was filled with sweet and delightful odor, such as its like never was among men. And the voice of the armies of heaven was heard saying, 'Blessed be the honor of the Lord from his holy place, forever and ever. Amen.'

And I Athanasius, patriarch of Rome, wrote a copy of this letter, and sent it to all the extremities of the earth, and it went even to the rising of the sun. And, behold, I swear to you, brethren and beloved, that No! by the strength of our Lord Jesus Christ, and No! by the glorious name of God most high, and No! by the gifts of angels, and No! by the troops of cherubs, and No! by the holiness of seraphs that cry 'Holy, Holy, Holy,' and No! by the prayers of Peter and Paul, and No! by the crowns of martyrs, and No! by the sufferings of confessors—that this letter was not written by the hand of son of man, but by the finger of the living God.

And now I entreat from you, brethren and beloved, that there be no man among you who will not believe in this letter—that be far [from you]! And every one into whose hands it hath come [i. e. who is able] to write a copy of it, [I entreat] that he send [it] to his fellow, forasmuch as it was given from the Holy Spirit, and it is right that it should be transmitted to all believers. And every one that heareth, and into whose hands it hath come [i. e. who is able], and he doth not take a copy of it to his house and to his place, shall be accursed. And every one that believeth, the mercies of God shall be upon him. Yea and Amen, and Amen!

* The word is a strong one, meaning "inciters," or "instigators."

The last composition in the manuscript is the hymn of "Praise before the Holy Mysteries."

The term "Holy Mysteries," or simply "Mysteries," which many translators of Syriac—and indeed of Greek as well—often translate by "secrets," often apparently misunderstanding the application of the term, means the Lord's Supper. The application of a like word to the same thing is regular among nearly all the Eastern Christians, and a very large part of the Western. Two hundred years ago it was generally supposed that the word "mass" had the same derivation and primitive meaning, as well as application; the derivation from "ite, missa est" being quite a modern affair. The following note of Joseph Scaliger will show the former ideas that prevailed respecting it. It is a part of his note on Revelation xvii. 5; the other part being too irrelevant and spicy for our purpose. I take it at second hand from the Elzevir-Whittaker Greek New Testament of 1633, which was printed at Leyden, but bears a London imprint:

"*Ἐπόπται τῶν μυστηρίων* erant, qui apud Christianos *κατηχούμενοι*. Et propterea duplicia erant *μυστήρια τὰ μικρὰ* dicata *κατηγήσει ἐποπτῶν, τὰ μεγάλα τῇ τελετῇ*, propterea elegantissimè Poëta vetus dixit, "*Ἵππος τὰ μικρὰ τοῦ θανάτου μυστήρια*. De neuf nations Chrestiennes de diverses langues qui sont en nature aujourd'hui, il n'y en a pas une qui n'appelle la liturgie mysterium, comme tous ayans pesché du Grec *μυστήριον*, laquelle langue est mere & de la chose & du nom, πάντα περί πάντων τερατευομένη. Bref toutes les langues appellent la Messe, *Myster, Mystir, Mystiri, μυστήριον*, mesmes les Latins. Car le mot de Messe on l'entend & ne l'entend-on point.

Since the text and matter of this hymn are somewhat connected with the "Revelation of Paul" and the "Extremity of Rome," it seems altogether proper to give the Syriac text and a translation. It is noted by the punctuation as composed of four-verse stanzas, each verse octosyllabic. The text is given exactly as it is in the manuscript, except that the point of a *rish* or *dolath* is supplied where it is wanting in the manuscript. Foot-notes supply the necessary emendation. The following is the Syriac text:

דְּכִתְבֵנוּ אֲנִי . וְלִבִּי . חֲזַן מַחְסָא . קִדְשֵׁי כְּדִבְרֵי דְאִשְׁרֵינֵי .
 מִלְּחֵי דְזֵהוּ מְלֵא בְּיָדֵיהֶם . וְיִשְׁתַּחֲוֶה לֵאלֹהֵי דִמְסַחֲמֵם . וְיִבְרַח
 מֵעֵינֵי דְחַיְתֵיהֶם . וְיִשְׁמַע דְּתַשְׁבּוּתֵיהֶם אֲנִי לְהַבְרִיתֵם .
 מַחְסָא מִיבֵּי לְחַיְתֵיהֶם . וְיִשְׁמַע לִבִּי מִלְּחֵי דִמְסַחֲמֵם .
 וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 אֲנִי מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 חֲזַן מַחְסָא מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .

זִכְרֵי וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם

אֲנִי מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .
 וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם . וְיִשְׁמַע מִיבֵּי דְחַיְתֵיהֶם .

3 Possibly a slip for דְּחַיְתֵיהֶם 4 Psalm civ. 15.
 5 At this point the scribe made a mistake; writing first part of a

وَاَلْبَعْدَ مَعَهُ كَتَبْتُمْ - اَجْمَعُ اَمْ يَكْفِيكَ اَمْ كَفَيْتُمْ . ذَكَرَ
 اَجْمَعُ لِكُلِّ وَتَنْ . اَمْ يَكْفِيكَ مَعَهُ مَعْتَبَرًا . اَلْحَقُّ كَلِمَةٌ
 مَعْتَبَرَةٌ . . . - اَمْ يَكْفِيكَ مَعَهُ مَعْتَبَرًا . اَلْحَقُّ مَعْتَبَرًا
 اَمْ يَكْفِيكَ مَعَهُ مَعْتَبَرًا . اَلْحَقُّ مَعْتَبَرًا . اَلْحَقُّ مَعْتَبَرًا .
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word in the next verse, and erasing it. Then after the erased place he began again, apparently mixing the proper word with the same word of the next verse, and finally marking it with dots of erasure. This last-mentioned, omitting the dots of erasure, is either **اَمْ يَكْفِيكَ** or **اَمْ يَكْفِيكَ**. Whatever sense may be given it, not only the dots of erasure but its redundancy in the metre show that it is no part of the text.

^o Read **اَلْحَقُّ**

The following is the translation, keeping line (verse) for line (verse) to the original :

PRAISE BEFORE THE HOLY MYSTERIES.

Let us take the body that maketh us pass over
To the fearful place without terror ;
And drink the cup of salvation,
That cometh down to us from on high, his drink-giving.

When the body is divided [or, broken],
Every man shall behold for himself [*lit.*, in his (own)
person].
Upon the body resteth fire,
And upon the cup a flame.

Between the fire and the flame
Standeth the priest and the sanctified.
The priest is greater than an angel,
And is more excelling fiery.*

Christ made him mediator
Between God and humanity,
That he might put quiet and peace
Between sons of men and spiritual ones.

And whosoever curseth the priest,
He is cursed by night and by day ;
The hours of night curse him,
And moon and stars in the firmament.

Three doves went out to the wilderness
After the heavenly eagle:
The Samaritan [woman], the Canaanite [woman],
And the sinful [woman] that anointed his feet.

To the Samaritan [woman] he gave water,
And to the Canaanite [woman] healing ;
And to the sinful [woman] that anointed his feet
He said, Thy debts are forgiven.

Hannah the daughter of Penuel
Embraced him, also kissed him ;
And the Spirit rested on her lips,
And she prophesied concerning him.

Redeemer of the ages † is he,
And Lord of all created things ;
And his power is in height and depth ;
And he gave his disciples commandment

* The Syriac word is a peculiar epithet of the angels. † Or, " worlds."

That they should be healing all the sick,
 And all the plagued, and all in affliction.
 Blessed is he that arose* from Mary
 And became a man by his own will,

And gave life to† Adam, and to his offspring,
 In the multiplications of his goodness.
 And you his people Christ [raised to life],
 Redeemed by the blood of the Only-begotten.

May the King who is exalted‡ bless you,
 And receive your offerings.
 And may he give life to§ your sons and your daughters,
 And hear in his love your prayers.

May Christ give rest to your departed,
 And pardon to you your sins,
 And fill you with good things to come,
 And for his kingdom make you worthy.

To him be praise from every mouth,
 And his love and his favor [be] entering in
 From age even unto age,||
 And to a generation of generations. Yea and Amen.

Proceed at its close (and to be said with a loud voice) :

We have hope and confidence
 In Jesus Christ the Savior,¶
 Who maketh abound his love and favor
 From his treasure full of might.

Every one that eateth of his body
 And drinketh of the cup of his blood,
 And every man that believeth in him,
 Hath life in himself [*lit.*, in his (own) person].

They who eat of this bread,
 Their souls [have] no taste of death;
 And their bodies, in this world
 And in that which is to come, possess delight.

Every one that eateth in faith,
 To him the body is full of brilliancy;
 To his body sin approacheth not;
 And his soul is a river** in the kingdom.

* i. e., rose like the sun.

† Literally, "the King of exaltation."

‡ Or, "Forever and still ever."

§ I suspect a mistake: ἡσπῆ for ἡσπῆς.

The emendation would substitute "light" for "river."

¶ Or, "saved."

§ Or, "save."

¶ Or, "the life-giver."

This heavenly bread,
Which the mouth life-giving* spake,
Is unceasingly spiritual ;
He gave it in fiery† mystery.

This bread sustains the heart,‡
As David, who maketh wise, declared ;
And every soul that eateth this bread
Liveth thereby, yea is raised again.

This bread enliveneth the understanding,
And enricheth it with splendors ;
And to the body decreeth quiet
And to the soul multiplieth joys [or, passovers].

Eat and be filled, O ye hungry !
That ye hunger no more forever§
And be ye possessing from him
Good things imperishable.

This it is that delivereth from fire :
This it is that showeth light ;
This it is, in which possess honor
The soul and the body together.

This wine, every one that drinketh it
Cometh not into judgment forever,
But enjoyeth delight in a new life
In the day that the dead are renewed.

Every one that is intoxicated with this wine
Thinketh that fire is cold ;
And he that tasteth of it a particle
Shall not see the darkness of the grave :

By this sorrows are endured,
By this joys are made joyful.
In this the churches exult ;
And they sanctify it with praise

Again for the people of Christians,
Who have the life-giving|| mysteries ;
That they may therefrom be sustained,
And hunger no more forever.¶

Every one that believeth in this body
And drinketh of this wine,
Therein he seeth the light
Of that kingdom which passeth not away.

* Or, "saving."

‡ Quoted from Psalm civ. 15.

|| Or, "saving."

† That is, angelically fiery.

§ Literally "for an age of times."

¶ Or, "for an age of times."

The colophon of the manuscript, which is added above (in its place) at the end of the Hymn, perhaps deserves a little more attention than I have given it. It seems to bear the marks of very negligent copying and abbreviating from an older manuscript; with inadvertent omissions, and some supplementing by the copyist. Translated literally, keeping the order of words, it runs thus: "And is finished by my hands this book blessed and blessing Hezîran ◊ who by his name [is, or, am] Deacon fool Baryachâ Jalûiâ who [is] from Bar Kazî who [is] from Qerithâ [i. e., village] Nahrâ." Whether the "blessed and blessing" refer, as usual in subscriptions, to some place of writing [omitted by the copyist]; or, as most natural to the construction as the words stand, to the book; or, as is frequent, to the month; is a question that suggests itself at the start. I incline to the first supposition of the three. The omission of the preposition before "Hezîran," as well as the misapplied plural points over the word, suggest that a full date was present in the archetype, and that in the date occurred the phrase "in the month Hezîran." The latter part of the colophon, after the diamond punctuation-mark, probably refers to the latter copyist.

ARTICLE III.

THE SOCIAL AND MILITARY POSITION OF THE RULING CASTE IN ANCIENT INDIA, AS REPRESENTED BY THE SANSKRIT EPIC.

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PREFACE.

THIS essay, in its original form, was read before the Oriental Society in May, 1886. Further contributions to the subject, made as reported in the subsequent Proceedings of the Society, have now been incorporated into the work, and the point of view of the whole somewhat extended.

My first intention was to record the data furnished by the Mahābhārata in regard to the Warrior-caste. I have since been led to add matter illustrative of my topic from works more or less parallel to the Epic, and this paper now offers *δὲ ἐκτύπων* an inquiry into the conditions of civilization in the Middle Ages of India from the point of view of the ruling-power. Into wider questions of pan-Aryan interest I have through lack of space refrained from entering: for example, into that of land-ownership and village communities, where a new and thorough investigation of India's position is needed.

I believe no especially Epic study of Hindu civilization has yet been attempted. My authorities are, therefore, chiefly the native texts.*

* A study of the Vedic period is presented by Zimmer's *Altindisches Leben*. Weber's *Collectanea (Indische Studien, vol. x.)*, Lassen's *Indische Alterthumskunde*, and Müller's *India touch* on some of the points here discussed. Of Wilson's *Art of War* and Rājendralāla-Mitra's *Indo-Aryans* I shall speak more particularly below. On Epic antiquities Muir has some scattered remarks and a few special studies in his *Sanskrit Texts*. To these general acknowledgment is due. The term Epic I limit, for convenience, to the Mahābhārata, although,

The following abbreviations require explanation. Unprefixed numerical references imply that the quotation is from the *Mahābhārata*, Bombay edition.*

R. = Rāmāyaṇa, ed. Gorresio; M. = Manu's law-book (*māna-vadharmagāṣṭra*); G. = Gāutama's law-book (*dharmagāṣṭra*), ed. Stenzler; Vās. = Vasīṣṭha's law-book (id.), ed. Führer; Āp. = Āpastamba's law-book (*dharmasūtra*), ed. Bühler; B. = translation of Bāudhāyana by Bühler. V. P. and Ag. P. denote respectively the Viṣṇu and Agni Purāṇas. The names of other Purāṇas and the authors of the House-laws (*gr̥hyasūtra*) are when quoted given in full.

I. INTRODUCTION. ORIGIN OF THE EPIC.

In order to a better understanding of the material from which are drawn the chief quotations preferred in this essay, a word will be necessary in regard to the present and past condition of the Hindu Epic. The poem is of obscure origin. History fails us, and who can trust Hindu tradition? More than this: the work when analyzed appears to be inwardly inconsistent. In the same heroes we discover different characters. Opposite tendencies seem at work. The highest god is at the same time a tricky mortal. The chief knights are depicted now as good and now as sinful men. The original theme is, as it were, diverted from its course.†

conversely, this Epic is regarded by native authorities as an 'art-poem,' as was long ago pointed out by Müller (*tyayā ca kāvyam ity uktan̄ tasmāt kāvyam bhaviṣyati*, Mbh. i. 1. 72; Müller, *Ancient Sanskrit Literature*, p. 41). The part of this Epic embraced by the twelfth and thirteenth books I call pseudo-Epic. In regard to the origin of the *Mahābhārata* I have briefly discussed Holtzmann's general argument (*Epos*) in my Introduction, but ignored his speculations on Epic Buddhism: in respect of which I can say only that they fail to convince me of his *demonstrandum*. On the important subject of the critique of our received text of the poem I have not touched in this essay. [See now a paper thereon by the writer reported in the Proceedings for October, 1888.]

* A Pathfinder or concordance of references for the Bombay and Calcutta editions equated by verse-decades has been prepared by the writer, and will soon be published.

† An abstract will indicate this. Of two possible heirs to the throne of Hāstinapura, Pāṇdu, the younger, having succeeded to the sovereignty on account of the blindness of his elder brother, Dhritarāshtra, finally grew weary of ruling, and, retiring into the woods, where he died, left his kingdom to the blind Dhritarāshtra. The latter, regarding Yudhishthira, Pāṇdu's eldest son, as rightful heir, caused him at first to be proclaimed crown prince; but subsequently, persuaded by Duryodhana and others of his sons, reconsidered the matter, yielded to sin, permitted Yudhishthira with his four brothers (called the Pāṇdus, as opposed to the Kurus, Duryodhana and his brothers) to be enticed out of the city, and then settled the whole kingdom on his own son. But the Pāṇdus, at first expelled and in mortal danger, after proceeding to Panchāla and forming an alliance with that king by a polyandrous marriage with his daughter, returned to Hāstinapura, backed by Pan-

From outside sources we know only that the poem is mentioned in the Sūtra of Aṣvalāyana, and seems to be intended in a description of a Hindu epic given by Dio Chrysostomos, in a fragment that may have come from Megasthenes. In the event of the description being original with the first, 100 A. D. may be set as the date of this information; with the second, 400 B. C.* What other accounts we have are not less doubtful in date. Thus, the poem is known to the Mahābhāṣya; but the earliest date of this work is 140 B. C.,† while Pāṇini's evidence is negative, mentioning characters but not the poem by name. Of the war, only the Epic gives an account, and the date of the conflict is matter of inference. Thus, Schroeder reckons that it antedates the Yajur-Veda, because the Kuru-Panchāla alliance therein recorded must have been the result of the war; but this is absolutely uncertain. Analysis led Lassen to suppose that the original poem was an account of a war between Kurus and Panchālas, not between Kurus and Pāndus. There is no very weighty reason for the view thus expressed. The poem itself asserts that its theme is the Kuru-Pāndu war. Objections offered to believing this are based on the fact that the Kurus are an old family, known in more ancient literature, while the Pāndus are not. The working-over of the poem is also thought to be attested by the fact that its introductory part states it to have had different beginnings and different lengths—8800 couplets, 24,000, and 100,000; but as, aside from other proofs of recent time, it is evident that the last length could not have been noted till the work had been completed, this whole

chāla's influence, made terms with their relatives, and took half the realm. In a corner of this they founded and occupied a new town, Indraprastha; and here, after years of conquests, they held a celebration that awakened the envy of Duryodhana, who soon challenged Yudhishthira to a deceitful game of dice. In its course the latter played away his newly acquired greatness, and then gambled again with the understanding that the loser should this time become a hermit. He lost, went into the woods with his brothers, and remained there in accordance with his promise for twelve years. At the close of one further year he found an ally, invoked anew the aid of Panchāla, elected Krishna (Vishnu) as his aid, marched against Hāstinapura with a large force, and routed the yet larger army of Duryodhana by means of desperate and unscrupulous fighting on the part of the Pāndu knights and the unfairly used influence of Krishna (whose help the Kurus had scorned). He found no one to oppose him within the town, and had himself crowned king of both Hāstinapura and Indraprastha; and finally, after a long reign, laid down the crown in order to climb up to heaven in company with his four brothers and the family wife: the successful accomplishment of this journey terminating the story.

* The different views on this subject have lately been set forth by L. von Schroeder, in his *Indiens Literatur und Cultur*, p. 464. Weber thinks the mention in Aṣvalāyana an interpolation. Compare Lassen, *Ind. Alt.*, i. 589-592.

† Weber, *Lit.*, p. 201, 241.

statement can only be regarded as one of comparatively late origin, belonging to the final development of the Epic—a time when the writers knew little in regard to the working-over of their inherited verses. At present the text is overburdened with extraneous matter, tales, laws, moral codes, theologies, metaphysics, quite stifling the original body of living poetry.

From another point of view, efforts have been made to prove not only a change, but a complete inversion (in our present story) of the original theme. This criticism bases itself on the want of unity in the characters. Starting with the two-fold nature of Krishna-Vishnu as man and god,* and with the glossed-over sins of the Pāndus, the critic argues that the first poem was written for the glory of the Kurus, and subsequently tampered with to magnify the Pāndus; and that in this latter form we have our present Epic, dating from before the fourth century B. C.; since the worship of Vishnu was in Megasthenes' time triumphant over that of Brahmā, and it is with the cult of the former god that the Pāndus are bound up. The first poem would thus be completely changed, or, as Schroeder in describing the theory says,† 'set upon its head.' Schroeder's exposition of the theory, being the latest outcome of this criticism (we are indebted to Adolph Holtzmann for its tone), will serve as at once the clearest and most recent explanation of how the Epic may thus have been inverted. 'The original poet (he says in substance) lived at a time when Brahmā was the highest god (700 to 500 or 400 B. C.); and this singer was a child of the Kuru-land. He heard reports of the celebrated Kuru race that once reigned in his land, but had been destroyed by the dishonorable fighting of a strange race of invaders. This tragical overthrow he depicted in such a way as to make his native heroes models of knightly virtue, while he painted the victors (Pāndus, Panchālas, Matsyas), with Krishna, hero of the Yādavas, at their head, as ignoble and shamefully victorious. This is the old Bhārata song mentioned in Āçvalāyana. After a time Krishna became a god, and his priests, supported by the Pāndus, sought to make Krishna (Vishnu) worthy to be set against Buddha. Their exertions were successful. Vishnu in the fourth century became the great god, and his grateful priests rewarded their helpers, the Pāndus, by taking the Bhārata poem in hand and making a complete change in the story, so as to relieve them of the reproaches of the old poet. Finally they worked it into such shape that it praised the Pāndus and blamed their opponents. About this time they inserted all the episodes that glorify Vishnu as the

* On Krishna as shepherd, see Lassen, *Ind. Alt.* i. 770.

† *Lit. u. Cult.*, p. 479.

highest god. The Pāndus then pretended that they had originally belonged to the Kuru stock, and the cousinship portrayed in the poem was invented; whereas they were really an alien, probably a southern, race.*

How differently the same set of facts may be converted into theories is seen by comparing the view of Ludwig.† This scholar holds that the original story was an account of a war between the Bharatas and Kurus, while the Pāndus are a sun and earth myth. Krishna, the dark (earth), is an attractive solution of the polyandrous marriage. The Pāndus are the seasons, each in turn possessing the earth. But the same name in Krishna as the sun is somewhat objectionable. Ludwig's paper is ingenious, but to me unconvincing.

The only basis that we have for inverting the theme of the present poem is in what Schroeder, who warmly supports the inversion-theory, calls ‡ 'the justification of the hateful rôle evidently played by the Pāndus in the old form of the Epic, and the reproaches heaped upon the Kurus, the royal heroes of the old poem.' Theories once started increase, as it were of their own accord, in force of statement. With each new advocate a surer color is given, whence the hypothesis gathers new strength, while the facts remain as at first. The quotation above given contains the last embodiment of a theory (now nearly forty years old) necessitating an entire inversion of the Epic story. What reason have we for believing in this 'justification of the hateful rôle evidently played by the Pāndus?' Do the Pāndus (relatively) play such a rôle? Does the 'justification' of the acts of the Pāndus require us to believe that they were first depicted as the ancestral foes of the original writer or writers? On the assumption that these points cannot be denied hangs the whole inversion-theory. From the religious point of view we have no unanimity of criticism; Schroeder considers Krishna as unitary, deified by the Pāndus, insulted by the Kurus; Holtzmann, with less probability, assumes two distinct Krishnas. The change in the human characters is the mainstay of the modern interpretation.

To my mind, the assumptions on which this theory is based are more negatively wrong than positively untrue. It is true that reproaches are heaped upon the Kurus. But reproaches are also heaped upon the Pāndus. It is true that the Pāndus appear to have played a hateful rôle; but so do the Kurus. It

* Scarcely reconcilable with the theory that the nucleus of the Epic is the war between the Kurus and Panchālas (see Schroeder, loc. cit., 457 and 479).

† To which Schroeder does not allude. It is found in the *Abhandl. d. Königl. böhm. Gesell. d. Wiss.*, vi. Folge, 12 Band.

‡ *Lit. u. Cult.*, p. 479. Holtzmann (Sr.), *Sagen*; (Jr.), *Epos*.

is true that the Pāndus are justified; but is there no other reason for this than that assumed by the theory?

Unless we are willing to reject upon a theory and then theorize upon the rejection, we must admit that the same book and age that contain the reproaches heaped upon the Kurus contain similar reproaches against the Pāndus. Now, passing for a moment the question of the relative sinfulness in the rôles of each party as given by the earliest poem, let us ask why it should naturally follow that the Pāndus alone were justified by the poet? We find many cases where the Pāndus do wrong, are reproached, and are then excused. The inversion-theory says that they sinned in the old poem, and that the poem was rewritten to make them appear good. Suppose we imagine the possibility of the poem being simply what it pretends to be—an account of the Pāndus' conquest of the Kurus. Imagine this poem added to from time to time, as we know it must have been, by the hands of priests bound to glorify, for religious or other reasons, the conquerors in the war. Is it not likely that they would have excused wrongs committed by their own party, which a more naive moral sense had long before depicted without shame? Is it likely, on the other hand, that in excusing their own side they would have taken the trouble to excuse the other, or to exalt their opponents' virtue? It seems to me that up to this point (given an old poem containing records of barbarous deeds done by both parties) it is not necessary to assume an inversion of theme merely because the conquering side is exalted and excused by the conqueror's bards. The inversion-theory, however, assumes that such one-sided extolling obliges us to believe in an original poet who painted the victors black, and in a new poet who re-painted them white. It is perhaps scarcely well to criticize Schroeder's poetical fancy of the sorrowing child of the Kuru-land; but it is a fair question to ask, considering the conditions under which Epic poetry was produced in India, what object a poet would have in writing a poem for public recitation or private circulation with the intent of vilifying those that now ruled his land?

But we have, admitting for the moment that our Pāndus as victors might naturally be glorified by Pāndu priests, a further question to ask: why in process of glorifying the Pāndus was it necessary for later bards to justify their works as represented in the earlier poem?

To answer this question (if we may assert for the time being that the inversion-theory is not yet established), let us consider what were the great developing factors of our Epic. What induced the insertion of this huge bulk of plainly late matter? In part, these additions consist of religious novelties; in part, they are of moral-didactic origin. Has not this last influence

beer: under-estimated in treating of the 'working-over' of the poem? Let us reflect upon the fact, evident to anyone that has traced the lines of growth in Hindu civilization, that, as religion descended, morality ascended; that the later religious feeling was less simple and less pure than the earlier, but the later morality was higher and stricter than that of a former age; or that, at least, the didactic morality as last inculcated was superior to that recognized at first. Consider how penetrated is the Epic by this later morality; how ethical need imposes long sermons on us (not religious) at every turn; how it has added chapter after chapter at variance with earlier feeling and custom; how it everywhere teaches abhorrence of wrong acts, from a point of view often of sternest right; how it condemns the barbarities of an early uncivilized community; how it imposes its new law on the daily acts of life; how it has composed a formal 'code of fighting' that inculcates law more humane than was possibly consistent with the practices of the older times commemorated by the first form of the poem—and then let us ask this question: is it not reasonable to suppose that those same priests who framed the fighting code and endeavored to implant in their brutal warrior-kings a moral, not to say a chivalrous sentiment, might have been swayed by two opposing desires in handing down their national Epic? We know what happened to the text of Homer when his morality offended that of certain Alexandrians. Is it too much to suppose that the Hindu moral teachers (for they were truly that, while being as a body unscrupulous of rewards) felt this same necessity of expunging or excusing the sins of those heroes who had gradually become national models of royal and knightly honor? I conceive it possible that these priests, after spending much labor to expound what a king ought to be, should have made every effort to cause those heroes who had now become from success and glory of war popular types of perfect knights to appear in a light consonant with the moral principles that priestly ethics would inculcate. But how was this possible? The poem was there; it was the popular story; it teemed with records of acts harmonious with the older morality, inconsistent with that of the developed moral sense. So—might they not?—they modified what they could not erase; they excused what they could not pardon; they called in as a last resort the direct command of their deity to justify what to mortal apprehension was unjustifiable; for, if Vishnu commanded a hero to do this, who could question the right or the wrong? The early tale artlessly relates how Arjuna, the defender of the faith, shoots Karna when the latter is helpless. Did the old morality revolt at this? I think not. But the new morality comes, that says 'no noble (Aryan) knight will fight except on equal terms.'

What then are the priests to do? They turn to God. It was Vishnu who shouted to Arjuna 'strike him now,' and the great hero, questioning not the word of God, though with great reluctance, shoots his helpless foe. Here, says the priest, is the truth of this story. Certainly Arjuna killed Karna thus; but you may not cite it for a precedent against our 'code of war,' since God inspired the act from occult reasons, and that takes the deed out of our sphere of judgment.

Another method of eliminating the evil consequences of a bad moral precedent is shown in the priest's choosing the less of two evils. His two inclinations were to glorify the Pāndus, and to uphold a sound morality. In some cases he sacrifices the first to the second. Thus, he permits the justified reproaches of the Kurus to remain against his own heroes. The reproaches are based on a common-sense fairness, but always from the subjective point of view of the person interested and badly treated. Thus, the Kurus reproach the Pāndu bitterly for interfering between two men who are fighting, and for killing his friend's foe who is getting the better of his friend. Arjuna laughs at this *ex parte* view of the case: 'Why,' says he, 'what nonsense for you to blame me! I saw my friend worsted, and struck the man who was worsting him. How are we to have a conflict if every man is to go off and fight by himself? That is no way to fight.' Now, as it seems to me, the Kurus' position expresses an opinion not necessarily founded on any abstraction of right and wrong, though it may indicate an advance on Pāndu morality. But the perplexed priest, unable to omit this striking and vivid scene, finds that the reproaches of the Kurus coincide with his own abstract principles, and he lets them stand, strengthening them with a quotation from his own code, for the sake of moral fighting, even if it offends against his hero. For Arjuna has, from the later point of view, absolutely no valid excuse.

We must remember, again, that if there is any truth at all in the legend of this war and the history of the combatants, then the long-established and noble house of Kurus represented in a modified form a higher degree of civilization than these *nouveaux riches*, these vulgar and modern Pāndus, who not till much later became an established house and men of mark in the civilized community into which they had intruded. Thus it may well have been that the Kurus had really a more developed conscience in the ceremony of right than had the Pāndus, albeit that of both stood far below the plane represented by the priestly poets of subsequent days. The social development of the Kurus was higher, as they had a longer civilization to fall back upon; and we shall perhaps be able to admit that the Kurus' wrath in the above scene was not wholly *ex parte*, but embodied one of their

earlier rules than led afterward to the full code of the completed ethic. Yet we cannot assert for them or their acts any great moral superiority over the Pāndus. Their peculiar sins, however, do seem to smack of a more cultivated wickedness. The Pāndus sin in a very ungentlemanly way. The Kurus sin likewise, but after the manner of adroit and polite rascals. They do not break their smaller laws of propriety. They do not play tricks openly and then exult in them. But they secretly seek to burn the Pāndus alive; they skillfully deceive the Pāndu king at dice and pretend it was fair play; they form a conspiracy and send ten men at once to kill Arjuna; they slay Arjuna's son in order first to weaken the father's heart (later imitated by the Pāndus); they are, in a word, cunning and sly, while the Pāndus are brutal and fierce. But in most cases the crimes of each must have appeared in their nakedness equally shocking to the codified morality of a later era.

So it seems to me that the ethical sense of a subsequent age might have worked upon the legends it received. Not the inversion of the story and of the characters was, perhaps, the aim of the later poets. They only, as I think, blurred the picture where it was too suggestive of evil in should-be types of holiness. But if we accept the inversion-theory, we shall believe that the Pāndus and their partisans, the priests of Vishnu, took a poem that was written to defame the Pāndus and Vishnu, and wrote it over again so as to represent these as perfect. Such is the opinion of scholars justly eminent in criticism of the Epic and in Sanskrit scholarship. As to what basis this theory rests upon enough has been said. We owe all our constructive criticism as well as destructive in this line to Holtzmann; and it is necessary to say that, in suggesting other possibilities than those advocated by him, one only re-builds the material that he has furnished. But supposing it were possible that our present Epic is the legitimate continuation of an original theme, and not a total inversion of it, let us look at the conditions under which it might have arisen. It would not be necessary to reject the supposition of a Pāndu-Panchāla alliance against the Kurus; but there would be no reason for supposing the war essentially Panchāla's, with the Pāndus added as adventitious adherents of that older royal family. The attempt to reconcile king Dhritarāshtra of the Yajur-Veda literature with the date of the late upstart Kurus may be abandoned, as common sense demands: and more than common sense. To that Brahmanic period king Dhritarāshtra is real; the Pāndus as a people are unknown. But to the Epic period the Pāndus are real, and the hypothesized king of the Kurus is a mere shadow. The real king of the Kurus (he receives the title of *vājā* in the poem as it stands to-day) is Duryodhana. It is only in the secondary fable that

Dhritarāshtra is prominent. In the real action of the piece the latter is as good as silent, but becomes, first and last, conspicuous as a lay-figure on which to exhibit teachings of various sorts. To the writers of the Epic the Pāndus seem to have been genuine founders of a dynasty. What had they accomplished? They, a new race, not known by ancestors noble enough to be reflected in the older literature, became formidable through allying themselves with the Panchālas. They attacked and overthrew the venerable Kuru empire, and seated themselves upon the throne of these vanquished Kurus. And which Kurus? Those of the Vedic age? Is it likely that such an event could have taken place unnoticed in the light of the Dhritarāshtra of the Yajus? We must remember that Janamejaya is also of Brahmanic antiquity, but that the Pāndus are unknown. The solution of the difficulty seems to me to lie in a very likely assumption. It is this: that the Pāndus fought and conquered the Kurus, not the old Kurus in their height of renown, but the weak descendants of that race, who came long after the Dhritarāshtra of the Brahmanic period. And now what may we imagine to have followed? The priests of the Pāndus—who, as I think, wrote the poem originally on essentially the same lines as portrayed to-day, barring the inferior moral tone of the first version—in order to exalt the glory of the new house, made out the combat of their national heroes to have been not with the weaker man who really fell, but with the race in its early pride, supported and headed by the glory of the Dhritarāshtra of old, whose name perhaps, without his power, was really borne by this, his inferior descendant. It is not at all necessary to insist poetically on the double name. Hindu historical feeling is quite capable of simply introducing the ancient king into the new era—or, we may perhaps better say, of running the modern contest with all its appurtenances back into a remoter Vedic age. In this same spirit they also pretended that the ancient Janamejaya was the son of the modern hero: that is to say, they put back the hero into an antiquity obscure enough to father him upon Janamejaya. The older, the more venerable; the more venerable, the more glorious the contest. So, too, the eldest of the Pāndus, Yudhishtira, once called Dharna, draws about him the mantle of wisdom associated with that name from the early period; and while in the first stratum of the poem he is nothing but a headstrong, wilful, and cruel head of a family-clan, in the pseudo-Epic he is the incarnation of law and morality.

As to the three periods of development in the poem, although I see no reason for believing any arithmetical statement made by a Hindu in regard to the verses contained in an unguarded poem, we may accept the conclusion that there has been in

general a gradual enlargement, since we can plainly trace the rough outlines of growth.*

We may even go farther, and admit a general threefold evolution (not inversion), judging by the appearance of the poem as it stands to-day. For, examining the work, we find that upon the original story, the Bhārata, have been grafted many 'secondary tales' (*upākhyāna*); and upon these, and apart from these, have been inserted whole poems of romantic, ethical, and theological character, having nothing to do with the course of the Epic itself. We must, however, remember that our Epic has been enlarged in two ways: first, by a natural expansion of matter already extant; secondly, by unnatural addition of new material. The twelfth book may serve as a type of the latter; the eighth, of the former. These dynamically added parts (the twelfth book etc.) bear about the same relation to the original that cars do to a locomotive. We may say, if we will, that the original has 'grown,' but in reality it only drags a load.†

Although not anxious at present to set up a scheme of distention and addition as the plan of growth of the Epic, I may indicate here what seems to me to have been the probable course of events.

If we begin by discarding what appears of most recent origin, we shall certainly strike out first what I have called the pseudo-Epic, and with it the books that follow; for, though pretending to carry on the tale, the fourteenth book, depending on the thirteenth, and existing for the sake of the Anugītā, must fall into the same category with its immediate predecessors; and the fifteenth, with its system of *nīti* leading into the later tales of the heroes after the war is over, takes us to that stage where the Harivaṅṣa is but a natural sequence of the un-Epic nonsense preceding. The last two books we further see omitted in one of the Epic's own catalogues; and, upon the grounds of the complete catalogue in the first book, and the opening chapters bearing on their face every mark of posteriority to the account of the main story, we shall be inclined to put the greater part of the first book into the same list as that of the last. This

* In i. l. 75 ff. the *ślokas* are 8800; in the first version the thirteenth and the last two books of our present edition are not mentioned. In ib. 101 (b) ff. we read: *idaṁ śatasahasraṁ tu lokānām (ślokānām) puṇyakarmaṇām, upākhyānāḥ saha jñeyam ādyaṁ Bhāratam uttamam; caturviṅśatisāhasrīm cakre Bhārata-saṁkhitām, upākhyānāir vinā tāvad Bhāratam procyate budhāḥ* (the first verse is omitted in the Calcutta edition); and in 107 we learn that the present length of the Epic as established among men is 100,000 verses, as opposed to the Bhārata of 24,000 verses, mythical ones, and the compilation in its shortest form of 150 verses just mentioned.

† The significance of a certain appearance of greater antiquity in the pseudo-Epic will be discussed below.

would leave us at the second stage; and beyond this we cannot reject by books, but by sections; for Vishnuism stands side by side with Çivaism and the older Brahmaism, and the chapters of didactic dreariness are interwoven with the thread of the story. These preaching chapters, with the theological chapters, seem to me to belong to the same period of addition as the mass of unnecessary stories here and there interpolated, although some of the latter bear the stamp of being older each as a whole than the time when they were inserted into the Epic. The Bhārata tale alone would remain after this second lightening of foreign elements, but by no means the original tale; for we must bear in mind that the second principle of increase, the natural evolution of old scenes, was at work contemporaneously with the dynamic principle of insertion. Thus, after discarding the foreign elements in any one of the battle-books, we have in our strictly Bhārata residuum not simply the Bhārata tale of old, but that tale expanded by repetition, colored by new descriptions, etc., all at one with the story, but increasing its extent. A certain amount of elimination can doubtless be done here by striking out repeated scenes; but it will be at best an unconvincing critique. In some cases, as in the fourth book, we have a perhaps original episode of the Pāndus seeking alliance at Upaplavya first expanded, and then added to by absurd and unnatural scenes betraying of themselves their lateness; yet we should do wrong to reject the book altogether on this account. Comparing again with the Rāmāyaṇa, we see that the most conspicuous difference between the poems is this: that while the Epic is not wanting in scenes romantic enough to lie parallel to the general tone of the Rāmāyaṇa, the latter is totally wanting in those scenes and touches, familiar to the Epic, that reveal a period older than either poem taken as a whole. But, again, the general character and style of our Epic approaches nearest to that of the other poem in the battle-scenes; so that, were the characters exchanged, we could scarcely say from the general description whether we were reading of the war of Arjuna or of that of Rāma. The Mahābhārata, then, in such portions clearly stands on a par with the Rāmāyaṇa; although, on the one side, there are Epic points untouched in antiquity by Vālmīki's poem, and, on the other, there are smaller points of dress and implements in the latter that seem to indicate posteriority to the Epic.

To sum up the view that seems to me most free from objections, and least radically destructive of such tradition as does not on its face demand total unacceptance—I am inclined to think that our Epic originally described what it in general now pretends to describe, a war between the Kurus and the Pāndus

united with the Panchālas. This war occurred later than the Brahmanic literary period, but before the general acceptance of Vishnuism. Songs and ballads kept alive and popularized the history of the triumph of the Pāndus over the Kurus, who were naturally described as sinful. When the conquerors had died, and the war was already fading into history, the priests composed a metrical account of the events, incorporating the old current songs and ballads. With the steady rise of Vishnuism, and later of Īvaism, these theologies implanted themselves at the hands of the priests in the poem, crowding out for the most part the song-kept Brahmanism of the older period. With the development of morality, the priests sought to explain away the evil deeds of their heroes; for they could not with one breath exhort to virtue, and with the next extol those that disregarded their rules of virtue. But the evil deeds of their heroes' foes they allowed to remain, since these men were sinners anyway, and served as types of such. Furthermore, they ranked the exploits of their heroes higher by uniting them, now that time enough had elapsed to confuse the past, with the great heroes of antiquity, perhaps helped in their pretense by a fortuitous likeness of names. The *gāthās*, or songs of war-like deeds of kings, became absorbed into the *itihāsa*, or legendary tale, now used in its new sense of a story told *per se* and not as part of a religious rite. With this change, all completeness of the individual scenes vanished. The necessary links of connection became lengthened into new chains of stories. The moralizing tendency, in this weakening of the poem, now began to involve the whole tale. The work became thus on the one hand a great collection of 'various stories' grouped about the main story of 'the goodness of the Pāndus and badness of the Kurus,' and on the other a compendium, if the word be allowed, of all moral teachings; while a new religion acted on tale and moral alike, and rendered it finally the holiest of books, 'a new Veda, more weighty than all the Vedas.'*

* i. 1, 3, 11, 100, 254, 266 ff. The latest historical audacity of the priests was probably to unite the two families of foes as cousins, in order to obtain a respectable genealogy for the Pāndus. These genealogical lists, such as i. 75 ff., have the appearance of age, but were probably often forged. It was customary to recite them on state occasions. For an attempt to discover the Vedic beginnings of some Epic legends, see Bradke, *Z. D. M. G.* xxxvi. 474; Oldenberg, *ib.* xxxvii. 54; xxxix. 52 ff., 79. For two scenes in the Epic compared with the *Shāh-Nāmah*, see Darmesteter, *Journ. Asiat.* viii. 38 ff., 52. For reference to Weber's quotations on the musical elements of the Epic, see the last paragraph of this paper.

II. HISTORICAL VALUE OF THE EPIC.

In a land without history, legend becomes dangerously ennobled. We are driven to tales, senseless or sober, for the information that should properly come from record and statute. It is not to be denied that herein lies the possibility of perverting what results we have obtained, and of forcing a pictorial truth to serve as a historical statement. Nevertheless, although we must repudiate as unsound any chronological deductions drawn from Hindu story (for I do not believe that we can credit any of the professedly trustworthy genealogies given in the Epic), although we must confess that we neither know nor can know whether the tales of kings related in the Epic are to be relied upon at all, or in what degree they may be worthy of confidence, yet the main thread of the story and the network of legend with which it is entangled do certainly present opportunity for useful research from the sociological point of view; being in so far of historical worth as it is possible through this means to obtain a view of social relations that by the indigenous writers have been conceived as true, and may, therefore, rightly appear to us as probable. Again, although we labor in the Hindu Epic under the disadvantage of finding united as if in themselves coherent social conditions that plainly belong to many different dates, yet by circumspection we can distinguish fairly well between old and new, and secure two pictures of life that, if not absolutely, are yet relatively historical, and (comparing parallel literature) can illustrate what without over-confidence we may conceive to have been the conditions of social life in India at two periods: the first, that of the half-developed state of about two thousand five hundred years ago; the second, posterior to this by perhaps a thousand years, with portions newer still, bringing the final date to a period far later than our era.*

To what extent we may make use in our investigation of the didactic sections contained in the Epic, is a question open to several answers. These portions are of course of late origin. Yet in a land so conservative as India we must concede that the gist of such dogmatic discourses had probably been for a long time the result of assumed and common custom, especially when the formal law of the early period essentially corroborates it; for law, as the Hindu is fond of saying, is based on custom; and custom, by the same authority, is unchangeable family or clan usage. Hence undisputed assertions specifying this or that as current custom may safely be supposed to have been based on

* Lassen believes the Epic not much changed since Buddha's time. Few can now allow this. Compare *Ind. Alt.* i. 589.

traditions far older than the formulas in which they are handed down. But we must, of course, be conservative against allowing a too great elasticity of time in this regard. Such concrete examples of political wisdom and *bon mots* of polity are worthless except as possible embodiments of older usage; for they include much that the Epic proper does not touch upon, and that could not have been contained in the earlier version. Political or social truths, therefore, involved in many of these sayings can be predicated positively only of the period following the composition of the original poem, and asserted as universal only when strengthened by legal evidence of greater antiquity, or by support in Epic practice. For a true interpretation of the large collection of inferable and formally stated sociological data in the Epic, it is necessary to draw first a sketch of the old and then of the new world thereby presented. It stands to reason that in general much will here be found doubtful and open to criticism; and that, in particular, a certain meagreness will characterize the first, a comparative richness and perhaps suspicious fullness of detail the second picture.

But even the modern Epic, the full completed work—were we to deny to the student the chance of discriminating accurately between the bodies of material necessary to the making up of his two sketches—is not as a whole unimportant in the elucidation of the customs of India in the Middle Ages, reaching back more than two thousand years; though it may be that further study will necessitate our giving a much later date than has been assumed to much of the pseudo-Epic. Further, the impossibility of effecting a complete discrimination of old and new may make it seem to some a vain task to distinguish the factors by their age. It is true that our verdict as to which is early and which is late must in a measure be based upon purely *a priori* assumptions; while it should, where this is possible, certainly be dependent upon an intimate acquaintance with the literature preceding and following the Epic; for many of the threads of our poem are older than its present literary form, and have often been preserved as fragments caught in a substance foreign to them; while what influence, on the other hand, of other sects or other races has made itself felt in the re-weaving of the tale needs careful analysis, being yet far from determined. But a review of what the Epic tells us may, it seems to me, be serviceable in supplying facts that in turn may help the critique of the Epic itself, after these have been compared with results drawn from other sources. I have therefore collected the Epic data as positive aids to research, but as historical material would use them at present only tentatively.

III. SOCIAL POSITION OF THE RULING CASTE.

I have called the warrior-caste the ruling caste of India, because all power, political as well as martial, lay in the hands of the military organization.

The hold that the priest obtained upon the king has been compared with that secured by the European priest in the Middle Ages. There is a great and essential difference. The Hindu priests had no strength of combination. They formed no union of political power parallel to, and capable of opposing itself as a whole against, the sovereignty of the throne. It is true that they formed an association, that they were an exclusive and distinct class. But they formed no corporate body, and had no head. They worked as individuals. Moreover, their power possessed no financial basis such as that of the Roman church. They drew no direct and constant property-contributions from the people. They were dependent on the king. From him they obtained largesses; from him, or rich members of his caste, they obtained their wealth of cattle and later of land: wealth that did not, however, go to swell a general fund, but enriched favored individuals. They lived on charity, and stood under armed patronage. Their very exclusiveness hindered their upgrowth; for had they with the religious tools familiar to them been able to ally themselves by marriage with the nobles, had the priests' daughters (for by their law celibacy was forbidden) wedded the priests' protectors, the religious order might by such family alliance have gained a thorough control of the state. As it chanced, mighty as was the individual ministerial influence of certain priests, coercive as was the religious power they could wield, they still stood apart from the rulers, depending on those whom (it is only fair to say) they despised—a fragmentary class, that enforced respect as a whole through fear of the fate to come upon the king that denied their influence with the gods, but never a class that rose to be independent of that king in respect of support. Moreover, as matter of fact, most of the priests lived retired and quiet lives, content to beg for food, satisfied with a little rice, cows, and a hut, and without worldly ambition; regarded with love or awe by the common outside world, with honor by the nobles, and only occasionally, in the person of the king's private priest and advisers, interfering at all in the matters that concerned the warrior-caste.

This view is of course not brought forward in the law-books. Their authors were the later priests, who regarded the world as made for them alone, and looked upon the king as a steward divinely appointed to provide them with what they needed. Far otherwise appears the Aryan state in the early Epic. A freer life is found here. The king is a king, not an appendage

to the priest. The view of the formal law reflects the vain ideas of men, conscious of mental superiority and anxious to bring the state into harmonious relations with their egotism. The Epic, an unconscious mirror, furnishes social facts as found in an age as yet comparatively independent, and portrays conditions that survived even the unscrupulous handling of the text by those opposing this independence. 'The priest is the standard of the world,' says the formal law; 'the king is the standard,' says the Epic.*

In looking at the state from a political point of view, we must, therefore, reverse the arrangement formally proclaimed by the priests themselves, and put their order below that of the military caste. And next came the 'people.'

There were, thus, three Aryan castes in the Epic period. The ruling caste, comprising the king, his great lords and vassals, together with the knightly part of the army; the priestly caste, elevated by religious knowledge, often individually powerful as guiders of the king's will, but otherwise forming a lowly class of penitents and beggars, who, if not irritated into a wasp-like wrath by unprovoked insult, remained a sedate, humble, and morally useful element in the state; lastly the third caste, called collectively the people, exalted only through their Aryan blood and their fully allowed claim to all Aryan privileges in the matter of legal rights and religious rites, but otherwise constituting a body that was looked upon with contempt by the military and extolled only by the priests. These knew the source of revenue.† There was, too, another and un-Aryan caste, of which the members were, to the Aryan 'twice-born' (re-generate through holy ceremonies), merely "once-born," or 'deprived of good birth.' These had, barring pretense, no spiritual or legal privileges.‡ They possessed no property. Their

* Manu xi. 85: *brāhmaṇah - - pramāṇam lokasya*; Mbh. i. 82. 18: *rājā pramāṇam bhūtānam*. The law and Epic give a well known rule to the effect that the right of way belongs to a blind man, a woman, a burden-bearer, and a king; while, if a king and priest meet, the way belongs to the priest (Vās. xiii. 59; Āp. ii. 5. 11. 6; M. ii. 138-9; Mbh. iii. 133. 1; xiii. 104. 25, etc.); but the same Epic recounts a scene where a king meeting a priest calls out to him 'get out of my way' (*apagaccha patho smākam*), and when the priest repeats the 'law eternal,' as just quoted, it is without effect, and the king even smites him with his whip. The king is cursed by the priest and becomes a demon, but this 'law' and anecdote of Vasishtha may serve as an example to illustrate the gradual increase in priestly power, and the means by which it was obtained.

† Compare v. 132. 30: 'Let the priest beg; the knight defend the people; the people-caste make money; the slave be a server'; or xii. 91. 4: 'work is for the slave; agriculture, for the people-caste.'

‡ *Na hi svam asti çūdrasya* etc., xii. 60. 37: compare the whole section; with 39, Pāijavana, cf. M. vii. 41. The slave might clean up after the offerings were made (*çūdrāir nirmārjanam karyam*, xii. 294. 12-15;

wives were so in name. Their lives depended on their owner's pleasure. They were 'born to servitude,' for they 'came from the foot of God.*' They were in fact the remnant of a displaced native population, marked by race-characteristics and stigmatized by their conqueror's pride as a people apart, worthy only of contempt and slavery. It would at times appear as if the slave were the especial servant of the people-caste, although bound also to serve the other high castes (i. 100. 11; but compare xii. 72. 4-8, 6=M. i. 99). The color-distinction between the castes—the slave being black; the people, yellow; the warrior, red; the priest, white (xii. 188. 5; in ii. 36. 24 *kālapūga* means time, not color)—may possibly indicate a real difference of hue (compare Muir, S.T. i. 140; Zimmer, A. L. p. 113, with literature). The people in general, both those of the country (*jānapada*) and those of the town (*paura*), are divided into the 'people at large and the common people' (*mahājana*, *prthagjana*; cf. xii. 321. 143; xiv. 90. 14) as distinguished *en masse* from the aristocrats, and so may include the people-caste proper and its leavings—that is, those following or adopting occupations too low to be recognized as fit for Aryans (under which name the three upper castes or the people-caste alone are meant). The statement that 'there is no distinction of castes' is meant proleptically, and implies merely that a man changes his caste in future births on earth in accordance with his acts in this; so that e. g. a priest 'might become yellow and be born as a member of the people-caste,' if he failed to act as a priest should (*māitrāyanagataḥ*; xii. 188. 10 ff.; cf. ib. 239. 13; 279. 5).† I prefer to keep the significant, if not absolutely correct, translations of the caste names rather than their native forms: thus, 'priest' for *brāhmaṇa*; ‡ 'warrior' for *kṣatriya* ('man of the ruling order'); 'man of the people' for *vaiçya* (literally 'inhabitant,' or, in the Vedic sense of *viç*, a 'clansman' in general; but later confined to members of such families of the Aryan folk as had not renounced farming

his glory is *dākṣya* (activity), to obey the three castes his duty (21); cf. 295. 1 ff.: a priest who becomes *gūdradharmān* is degraded; the slave becomes a herdsman, however, or a tradesman, if he cannot support himself by service (3. 4); 297. 27 ff.=M. x. 126 ff.: cf. xiii. 165. 10. The pseudo-Epic also declares the slave to be the next removed from a beast (xiii. 118. 24), but in its religious portions admits that a slave may, like the other castes, get a reward for fasting (*uposita*, xiii. 132. 14); just as it says that one of the slave-caste may be made a student (*çrāyayee caturo varṇān kṛtvā brāhmaṇam agrataḥ*, xii. 328. 49) though the *parikṣeta* rule precedes (47). The caste will be later treated in detail.

*It is an old myth that the people-caste came from the loins or thighs of God (Brahmā or Manu), while the warrior-caste came from his arms, the priestly, from his head (mouth), and the slave-caste from his foot; RV. x. 90. 12; law, Vās. iv. 2; B. i. 10. 18. 6; Epic. Mbh. viii. 32. 43 ff.; xii. 60. 28 ff.; 319. 90; R. iii. 20. 30 ff. (here from Manu).

†Compare Muir, *Sanskrit Texts*, i. 138 ff. for this religious view and some quotations on caste-color.

‡Compare Latin *flamen*; see von Bradke, *Beiträge zur Kenntniss der vorhistorischen Entwicklung unseres Sprachstammes*, p. 13.

and trading to live an altogether military or priestly life); 'slave' for *çūdra*. Out of these elements was made the theoretical state of the Hindus. Yet earlier only the three upper castes were recognized as *tout le monde*.^{*} Practically, there came in addition an early recognized and large number of 'mixed castes,' feigned all to have been either degraded branches of the pure castes or their illegitimate descendants. (Compare e. g. xii. 297. 8, 9.) In reality these were outcasts, made so either formally or naturally (through the increasing tendency of the lower orders to take up means of livelihood not sanctioned by the pure), or, far more, remnants of un-Aryan tribes gradually assimilating to the body politic of their conquerors, but not received into the social or religious body. These were increased, again, by ever growing immigration from strictly foreign nations of warriors and traders, practically esteemed but otherwise despised.[†]

But from people-caste, slave-caste, pariahs, or foreigners the

^{*} Compare *etāvad vā idam sarvaṁ yāvad brahma kṣatram vi*, Çat. Br. (ii. 1. 4. 12) iv. 2. 2. 14; Weber, *Ind. Studien*, x. 18.

[†] Compare xii. 207. 41-45, for the disesteem felt for foreigners; xiv. 73. 25, for the distinction between *Kirūtas*, *Yavanas*, with other barbarians, and *Aryans*; or vi. 9. 61, etc.; and xiii. 48 and 49 for the whole account of the mixed castes. The recoil from strangers is not much greater, however, than that of high caste from low caste in the developed state: 'equals with equals: let priests talk with priests; warriors, with warriors; men of the people, with men of the people; slaves, with slaves,' xii. 210. 11-12. Yet in a moral sense even the mixed castes are better than the pure if the latter do not do as they ought, iii. 180. 25-36. The high estimation in which certain foreigners, such as the *Yavanas*, were held is wholly due to the military point of view (see below). Aside from this accident they were all despicable, no matter whence they came, although the *Madrakas* were chief in positive unholiness and in the anti-Aryan character of their civilization. The Northerners in general were as bad as the rest. The sole exception is that of the storied Northern *Kurus*. These were looked upon as occupying an earthly Hyperborean paradise. The flank of Mount Meru is in one place given as their home (*dukṣiṇena tu nīlasya meroh pārve tatho ttare*, vi. 7. 2), but they are regarded as real people of the North in most cases, with laws more conservative than the Southerners (as in i. 122. 7), and blessed with a typical felicity (as in the first passage, and R. ii. 103. 26): so blessed in fact that while some happy heroes go at death to Indra's heaven, others go to the Northern *Kurus* (xv. 33. 13 ff.), as a sort of earthly heaven. A gate sixteen *yojanas* wide used to be blocked up and prevent their passage; but they can now pass through (iii. 231. 98). It is evident that they were half-real, half-mythical to the Epic poets. Other foreigners are simply barbarians, on a par with the *Dasyus*, which latter race may be blessed only by changing its way of life and becoming an adherent of Aryan rules (xii. 135. 22, etc.). Rather noteworthy is the *tutoyer* (*tvaiṅkāra*) of a seer by a slave in iii. 137. 5-6, and by a *Cāndāla* (*taṁ uvāca sa cāndālo maharṣe çṛṇu me vacaḥ*, xii. 141. 55. Compare 85, *bhavān*, and conversely, *Viçvāmitra* to the *Çvapaca bhavān* in 66, *tvam* in 80) though the custom is to exchange 'thou' with 'sir' without ceremony. But the rule is that, though persons younger or of the same age may be addressed with 'thou,' neither 'thou' nor the real name should be said to those that are better (older). Compare xii. 193. 25 (*traiṅkāraṁ nāmadheyāṁ ca jyeṣṭhānām arivarjayet*, etc.)

ruling caste held itself at less or greater intervals aloof. The warriors mingled with the people-caste, indeed, but not by preference. Intercourse with all below this line was held with the mutual understanding that such union was temporary, and tolerable only on the ground of expediency. On the contrary, the priestly and knightly castes were always together, for ill or good. But in either case they were distinguished as the aristocracy from all others, more or less plebeian. They fought bitterly, and learned each the other's strength. They became friendly, joined on the basis of mutual advantage, and from that time on were as one, above the lower order.

But how were all these classes politically united? What part had each in the state-organization? Whence, above all, came the huge revenues necessary to the establishment of a fighting force liable to be called out at any time, and too proud itself to subsist on its own manual labor?*

At a time such as that represented by the first story of the Epic, the warrior was always a robber and pillager. This life was the knight's support. Forays and cattle-lifting provided needed gain. Meantime, although occasionally called into the field, the people (such I name the united 'clansmen' whom conservatism partly retained, and the pride of others forced into a caste) continued the peaceable occupations once shared alike by all members of the folk, and were enabled to build up that substantial wealth that was to make them the later support of the state. But, as time went on, the levies upon the people's wealth, that during an age when feud was the constant condition had been rare, irregular, and generally unnecessary, became with growing civilization more frequent. The king no longer raids along the border. He lives in a walled town, surrounded by a court of polished nobles. War is a serious business, and means often not an attack on out-lying savage races, but a campaign against another Aryan realm grown powerful and civilized as his own. Moreover, as the country becomes settled, the pastime of hunting serves to amuse the war-men in the intervals of fighting, and a costly idle court must be maintained. The people of the country, no longer obliged to retire daily to the mud-built 'fort' for protection from the barbarians, spread themselves over the land in open ranches or half-defended villages, to protect which outposts of soldiers are established, new forts are built, and so new towns developed, but always with increasing expense to the people at large and particularly to the people-caste, in whose hands rests the potential basis of supplies. Larger and larger grow the flocks of the ranchmen; a busier traffic arises. The knights are heavy

* The military-caste-man, if poor, might become a farmer, but only as a resource in need (see below). Otherwise he could be made to work manually only in order to pay a fine: M. ix. 229.

consumers of wealth, but must be supported. The court and its army become a great load. And now regular and oppressive taxes begin to fall upon the supporting caste. War or peace, funds must come into the royal treasury. These funds are drawn from the people-caste. The king is the 'keeper of wealth' (*vittarakṣin*, xii. 321. 143) as opposed to the 'common people'; but these furnish it, and then come to beg of him in need.

The settlements, it may be observed, of the Aryan population may be classed in three divisions. The largest, called city or town (*nagara*, *purā*), was an outgrowth of the village (*grāma*, *kheṭa*), and is represented as walled; while the village is a collection of houses around a fort (*durga*). The village itself is often no more than the natural development of the *ghoṣa*, or cattle-ranch, which the king is bound to have guarded, and seems to have converted in favorable places into a small village by erecting a fort like that around which the *grāma* naturally arose (compare xii. 69. 35). With this *ghoṣa*, and on a par with it, are sometimes mentioned the small barbarian settlements called *pallī* (*pallīghoṣāḥ*, xii. 326. 20). The radical difference between the *ghoṣa* and *grāma* appears to be usually not so much quantitative as qualitative. The *grāma*, being the earliest form of settlement, presupposes a *durga* or fort (defense) of some kind as its nucleus; while the *ghoṣa* (sometimes called *vraja*) is an outpost from city or village, and a cow-pen developed into a ranche, and hence into a village by the addition of a fort to protect it after it had become a centre of population. The word *grāma* is not, however, invariably applied to a natural growth from within, but may be used of a community artificially planted, as in ii. 5. 81, where we read: 'to defend a city, towns (villages) are made, like unto the city; and border-villages (*prāntāḥ*), like unto the towns' (though for *grāmanāvac ca kṛtā ghōṣāḥ*, 215). Characteristic of India is the recommendation in this same passage of ponds, to be built over 'cow-pen' may practically become a village is illustrated verbally in the use of *goṣṭha*, etymologically a 'cow-pen.' This word is used of any general assembly, as in the proverbial verse: 'The joy of him that liveth in a village is the mouth of death; but the god's cow-pen (the place where gods assemble) is the lonely forest.*' As to the constitutional power of the

* xii. 175. 25 (b) = 278. 26 (a); 26 (b) = *nibandhanī vājir eṣā yā grāme*, etc. *Ṛuti*, as often, is merely 'a saying,' a proverb. Like this is iii. 200. 92: 'Wherever learned priests are, that is a city, whether they live in a *vraja* (village) or a forest.' Did Sir William Jones get his poem 'What constitutes a state? Not high walled battlements or labored mound, Thick wall or moated gate, but men', etc., from this passage?

villages, we have no reason to believe that they had any political rights beside the liberty given to them by the royal overseer. It is, however, an aphorism of the legal literature that villages shall be their own authority in matters so especially private or of such family interest as the observances at weddings and funerals. In such case no foreign rite is to be imposed, but local usage shall obtain (Pār. G. S. i. 8. 13).

But it is by no means the Hindu conception of the king's office that the people-caste exists to support it while the throne is free of responsibility. No theory could have appeared more absurd to the Aryan law-givers. The people-caste is a part of the Aryan population, and must not be oppressed. The connection between the king and the people-caste is based on a theory of mutual advantage. The people-caste must be taxed; but the relation between the taxing and taxed parties is always explained in a way evidently calculated to appeal to the latter's business sense. That relation is, in a word, trade. A barter, as is often candidly said, of so much movable property for so much protection. Two things men desire—security and wealth. The people-caste has the latter and wants the former; the military-caste wants the latter and can provide the former. Let us trade, then, says the Hindu, and on the following basis. The taxes shall be low when no danger is at hand. When war is expected, the price of security rises; the levies on the people's wealth shall be greater. The king shall maintain a standing army, and make all the sacrifices necessary to keep the gods in good humor. For this the people shall pay. In return the king shall undertake to keep guard over the country, and defend the agricultural and mercantile classes not only from foes without but from foes within, making good their losses by theft in time of peace, and in time of war keeping them safe from harm, agreeing to become responsible for their sins in the next world if he fails in this after having exacted taxes. The king was thus held responsible to the people for his part of the bargain, and suffered a penalty if he did not fulfil his contract. In small matters, as for instance where a merchant had his goods stolen, the king (his servants) had first to seek for the thief; but if he was not found, the money had to be refunded from the treasury. In event of a great war with defeat, however, where it was absolutely impossible for the king to return the property lost, the people had the satisfaction of knowing that a portion of their sins, or, so to speak, their debts to hell, had been transferred to account of the

Compare vs. 90: *prākārāiḥ ca puradvārāiḥ prāsādāiḥ ca pṛthagvidhāiḥ, nagarāṇi na cōbhante hīnāni brāhmaṇottamāiḥ*, etc. According to the Ag. P. the *kharvaṭa* is a town in size between city and village (256. 18); this appears to be unknown to the Epic.

king's soul, and in this way some compensation would be theirs hereafter, if not in this life, for the king's failure to fulfil his legal obligation of protecting.*

Such is the view most frequently assumed and expressed when the relations between the business classes and the king are discussed. Such a class as this third caste needs, therefore, to be very definitely determined in its social and political limits before we can make an absolute estimate of the ruling or kingly caste. In fact, the latter's power can be best shown by finding first the relative position of the people in respect of the state at large. What then was the people-caste?

The priestly caste formed an undivided whole, except for internal distributions of studies, whereby one member learned more than another of some special branch of a pursuit equally open to all. Except for the king's family-priest, and the election of certain members of the caste to offices bestowed by the king, one member was politically the same as another. The warrior-caste, except for plutocratic distinctions, and the special ability acquired by special members in special acts of warfare, was also a political unit. The slave-caste consisted of so many equal-reckoned slaves. But not so with the people-caste. Here we have class within caste in three well-organized bodies, radically different in their occupations and socially apart. These three bodies met, indeed, on the common basis of their Aryaship in a theoretical view of the state; and the narrower bond of their mutual origin from that part of the people that had gradually confined itself to a business life brought them closer together than they stood as a whole when opposed to the priests or the warriors. But for all that, they were not one body with like aims and needs. Their three subdivisions were, historically, as follows. First, the great body of ranchmen, the cattle-raising population, with their dependants, the herdsmen and cow-

*As the king is personally responsible for the good conduct of the state, any sums stolen in his realm become his debts to the loser. The amount stolen must be refunded either from his own purse (*svakoçât*) or 'from some one that supports himself': that is, he should take it from some wealthy member of the people-caste (the commentator suggests 'a trader'). The financial responsibility is thus later put upon the poor people-caste, but the spiritual loss is the king's and his ministers' (xii. 75. 8, 10, 12; no restriction of priest's property is made here, but may be implied by the context 'all is saved if the priest is saved'). As to the ministers' share, compare xii. 65. 28 ff.; 66. 32 ff.: 'Godlike is the king, and gods revere a just one; the king shares the reward given hereafter for the virtue of the folk; but the evil he shares also; so do the ministers.' 'He that steals from the king himself goes to hell; his property is confiscated; his body, slain,' is the converse. The confiscated property of persons not thieves returns to the family (below: and ib. 96. 6, N.). The passage above gives the king's titles as Ruler, Generous One, Wide-Ruler, All-Ruler, Warrior, Lord of Earth, Protector of Men. The king refunds by the rule of Ag. P. 252. 62.

boys. Next, the agriculturists or farmers, who raised grain, and their smaller imitators, who raised fruit and vegetables. Last, the whole trading population, whether on sea or land, continually having intercourse with foreign traders; whether traveling about the country in caravans or located in one town.

Beside these three divisions, there is a continual row of smaller similar occupations, leading by insensible degrees into the work formally declared to be unfit for Aryans. First, perhaps, money-lending may be mentioned; which, if not an early departure, was one that shows us the gradual extension of caste-functions; for we can still trace its despised appearance, and gradual encouragement, till it is finally received as a legitimate occupation for the twice-born. Here lies, too, the whole mass of inechanics, artizans, carpenters, peddlers, and the like; and the frequent denunciation of those that have embraced such occupations shows us clearly how often the line between respectable and objectionable labor was crossed by Aryans. Such commingling of Aryan and un-Aryan must have begun very early; and I fancy that in the earliest period of the *Épic* the people-caste had already a more and more uncertain line dividing it from the vulgar—a view supported by the circumstance cited below, that this caste is, in spite of Arya-ship, apt to be set along with the slave-caste against the two more exclusively Aryan castes of the warriors and priests.* The formal law in enumerating the three (recognized) classes of the people-caste sometimes reverses the order, and puts the trading-class before the cattle-raisers. This is not only historically wrong, but is contradicted by the arrangement elsewhere preferred in the native texts. In fact, it is even stated, that raising cattle is the only business fit for the people-caste, and that any other occupation is wrong.†

* I do not mean that the army did not also contain a host of un-Aryans. These never commingled and grew together as did the people-caste and the outsiders, but were always oil and water in one jar.

† 'A man of the people should bestow gifts, go over the holy texts, make sacrifice, and get wealth; in doing which let him take care of cattle, and be devoted to them as a father is to his sons; any other business that he performs would be for him a wrong business, since the Creator entrusted cattle to the people-caste' (xii. 60. 23; 23-24 = M. ix. 327). The law, which allows a priest that cannot support himself to follow the occupation of the third caste, also specifies agriculture before trade (which the priest may carry on only with certain limitations), but admits that many object to this pursuit (for a priest) on account of the necessary cruelty involved—the plough injuring the creatures in the earth, and the yoke hurting the cattle (iii. 208. 23, *ahimsā*: cf. i. 63. 11, the ideal place where 'they do not yoke miserable cattle': cf. M. x. 83; *Gāut.* x. 3 ff.). This objection is also brought against agriculture by the trader or 'scales-man' (*tulādhāra*), whose own boast is that his 'scales are the same for everybody,' while he also objects to raising cattle, because it is necessary to castrate them and bore their nostrils (xii. 263. 1, 6, 11, 37). Compare *Pār. G. S.* i. 69 for late inversion of trades.

Once the folk at large, the united clansmen of the Aryan people, the people-caste had thus lost its ancient universal practices and become confined to industry and trade. Gradually, from when each warrior was rich in cattle and each cattle-raiser ready to answer to a call for arms, there came a separation of interests. Some grew to depend on their bows and swords, and, finding fighting more agreeable than labor of hands, settled more and more upon the life which the king lived, and took him as their model. They became 'king's men,' the older name of those forming the warrior-caste. They arose from the people and left them. Some, again, confined themselves to study and religion, and before long gained and kept the fame of being the gods' special ministers. They also arose from the people and left them. And so the 'clansmen' or 'people' grew socially smaller and became the people-caste—in name the whole, in fact a part, and a rapidly degrading part of the population. But a shadow of their former might remained far into the Epic period. Of this, below. The three occupations, already developed in the Vedic age, now abandoned by the warriors and priests, were cherished by the people-caste. Indeed, so rapidly do we find the subdivisions appearing in the light of demarcated professions that we even notice a differentiation between the people-caste on the one hand and the traders on the other, showing that agriculture and cattle seemed still more peculiarly the people's work.*

But the development of commercial interests was sufficient ultimately to cause the establishment of a sort of trade-unions or guilds. These may belong in their full development to a late period, but we find them mentioned early (so in the law-book of Manu) as of importance. Such corporations had their own rules and laws subject to the king's inspection, the king not being allowed (theoretically) to have established or to establish any laws that contradicted those already approved or sanctioned by usage. The heads of these corporations are mentioned together with the priests as political factors of weight, whose views are worth grave consideration; as an informal instance of which, we find a prince defeated in battle and ashamed to return home—'for what,' he exclaims, 'shall I have to say to my relatives, to the priests, and to the heads of the

* 'There the men of the people (*vāiçyāh*) do not injure cattle, nor do the merchants (*vaiñjah*) deal with false weights (*kūtamānāh*, i. 64. 21-22).' It is for pictorial effect that we more often have the sea-trader than the land-trader spoken of in the Epic, the 'merchant wrecked with ship destroyed' being a much loved metaphor. Compare e. g. ix. 3.5; R. v. 26. 12. Not a coaster but a deep-sea sailor is meant. Compare ii. 5. 114: 'Do the merchants that have arrived from afar for the sake of gain pay no more than their proper (shipping) duties?'

corporations?*" Prominence is given to the guilds in the later books of the Epic. There also we find corporations of every sort, under the name of *gana*; of the members of which the king is particularly recommended to be careful, since enemies are apt to make use of them by bribery. But dissension is their weak point. Through dissension and bribery they may be controlled by the king. On the other hand, 'union is the safeguard of corporations.† The power of the corporations is said to be equal to that of all the king's military dependents; 'these two, I think, are equal,' it is said in a passage where the strength of the kingdom is reckoned (unless the dependents include servants of every kind).‡

The intermingling of un-Aryan with Aryan in this caste is perhaps indicated by the fact that the cowboys, who watched for instance the royal cattle, spoke a dialect unintelligible to the Aryans, unless the latter had especially learned it.§ Kings, of course, are always surrounded by interpreters; but this may be referred simply to the effect of the foreign population.||

Two additions to the cattle-raising population are to be found outside of the people-caste. The king is himself a large owner and breeder of cattle, and personally superintends the condition of his flocks at certain times in the year. The whole care is taken, of course, by the cowboys, whose ranches the king visits, when for example the cattle are to be branded. Large gifts of kine are given to kings by foreign allies, and we can still trace pure cattle-raiding expeditions in the Epic story. Such given or stolen cattle were kept for the king. On the other hand, there is comparatively early evidence to show that the priests also, though not personally attending to the duties of the calling, yet carried on more or less cattle-raising and agriculture on their own account, employing the third caste to do the labor.

The third or people-caste has thus, as regards their duties, quite undefined borders. The humblest tender of cows for a master may be of this caste, or the work may be done by one outside the Aryan ranks. The priest and king share the gain

* iii. 249. 16; xii. 54. 20. The *creṇi* or guild thus includes unpriestly corporations. Cf. R. vi. 111. 13.

† xii. 107. 32; xii. 59. 49, *creṇimukhyopājapena*: N. understands military *creṇi*, M. viii. 41. An interesting list of trades is found R. ii. 90. 10 ff. In the same work the collocation of 'assemblies and corporations' is to be noted (*pariśadaḥ creṇayaḥ ca*, R. ii. 120. 5). The further distribution of a popular crowd implied in *sayodhaḥ creṇinīgamah* (*janah*, R. ii. 123. 5) is apparently later than the Epic.

‡ I should here be inclined to take *māula* as native soldiers, *bhṛta* as mercenaries. were it not for the commentator, xv. 7. 8.

§ Their dialect, *bhāṣā*, has to be acquired by Aryans: iv. 10. 1.

|| *Sarvabhāṣavidah*, i. 207. 39; but *sarvabhāṣyavidah*, xii. 321. 15.

of the profession, and practically intrude on the emoluments theoretically set apart for the people-caste.

What was the condition of the small farmers through the realm? We cannot say, further than in their relation to the state as tax-payers. Of the daily worker, shepherd, cowherd, farm-help, we have, however, a chance didactic verse that informs us in regard to his wage. In this passage the lowly laborer is a man of the people-caste: or rather, the people-caste is understood to consist of laborers, as a look at the context will show. After the common formula that the people-caste should tend cattle, we read: 'he should receive the milk of one cow for the care of every six; if he tend a hundred head of cattle, he should receive a pair; in the case of (dealing for the master of the) flocks or in agricultural labor, his general share should be one-seventh of the proceeds or of the increase, but in the case of small cattle (not horned) only a small part (one-sixteenth.)*

Although points of direct contact between the royal and people-castes are, except in the matter of taxation, rarely to be found in the Epic, yet the account of the distribution of the kingly power, as preserved in both Epic and legal literature, points to the fact that the people were in general at the mercy of the king's viceregents, and that the people-caste must have been especially exposed to their predatory natures.†

In describing the 'care of the empire,' tradition divides the realm into seven factors. Of these the first five are the king himself, his ministers, the treasury, army, and allies; the last two are the country-people, and the capital, and 'the city.'‡ In 'the city' the king (theoretically) superintended all duties, even to the adjustment of prices. He had delegates (whom he appointed through the land) to do this for him in other towns and villages. They were stationed chiefly as military commanders. We fortunately have preserved the system of government by which the towns lying out of the king's direct supervision were cared for. The decimal system of classification (found again in the army) is not necessarily a sign of late origin for this array

* xii. 60. 24 ff., *tathā gr̥ṅge kalā khure*. The parentheses are due to the commentator. The amount given is the workman's 'yearly pay' (*sāṅhvatsarī bhṛtīḥ*).

† The technical *īṭayaḥ* or 'adversities' of the husbandman include, however, only foreign invasion (a point contradictory of Megasthenes' account). But see particularly Ag. P. 238. 46; and 262. These *īṭayaḥ* are, I believe, not defined in the Epic by text or commentator, but are explained by a native lexicographer as consisting of 1. too much rain; 2. no rain; 3. grasshoppers; 4. mice or rats; 5. birds; 6. neighboring kings (invading the country). The Epic puts them with sickness as one of the 'faults' of a metaphysical division of things according to their qualities (iii. 149. 35); and alludes to them in the words of a speaker: *īṭayaḥ ca na santi me* (v. 61. 17. For definition see P. W.).

‡ xii. 69. 64 ff.; different order in xii. 321. 154-5. Compare M. ix. 294-297.

of officials; but, though coinciding in all respects with the plan authorized by the legal treatises, since it represents as it must an imperial policy rather than that of a limited kingdom the inference is fair that the system was one adopted only after the foundation of great empires, belonging therefore to the later Epic.

According to this system, the king with his town officers sees to the royal capital, while he is represented in other towns by men selected either from the priestly, the warrior, or the people-castes. It is the duty of these men to protect, each his village, their territory from robbers; more particularly, those that govern a village must keep it and the surrounding country to the distance of a *kroça* (about two miles) in all directions free from thieves, and are bound to repay to the losers whatever is stolen within this district. In the case of a large town the distance guarded is four times as great. They had also to collect the taxes from their districts.* The Epic describes the allotment of territory thus. Every town or village was presided over by a vicegerent, who was under a superior officer called 'ruler of twenty' towns or 'ruler of a hundred.' In a gradually extending circle these overseers received tribute, heard reports, passed them on to the one of next highest authority, and he to the next, till revenues and reports focused in the king, the lord of all. The king should create one over-lord to be the governor of a thousand villages (i. e. here as example, over the whole realm); all the villages are to be divided into groups, or departments, of one hundred villages each; these, again, are subdivided into counties of twenty each and ten each, while a head-man is to be appointed over each division, reckoning from the village as a unit. The head-man or mayor of each village (*grāmasya adhipatiḥ*) sends to the ten-village-man or county officer (*daçagrāmī*) returns of all the crimes committed in his village,† and the ten-village-man in turn sends his report to the twice-ten-man (*dviguṇāyī* or *vinçatipah*);‡ who in turn passes his collected reports to the hundred-village-man (*grāmaçatādhyakṣah*), from whom they go to the general governor (*adhipatiḥ*). The officer in each division draws his own income from the province placed under his control: one village provides support for the village-man; the village-men from ten villages supply the ten-village-man, etc. The ruler of a hundred villages ought to have to supply his needs the revenue derived from one whole flourishing town, while the thousand-

* M. vii. 115-125; Yāj. i. 321; Āp. ii. 10. 26. 4ff.

† *Grāmadoṣāḥ*; probably the returns are sent monthly.

‡ The ruler of ten is also called *daçapah*; and the ruler of one village, *grāmikaḥ*.

village-man has a large city, gold, grain, etc., appropriated to his use.*

Beside these special supervisors, each city should be provided with one general officer, a mayor (?) or superintendent of affairs, whose official title is 'he-that-thinks-about-everything'; his duties are not defined.† A military garrison is stationed in every town and along the border-forts; and the realm is watched by military police, recommended as guards of the city parks (*purodyāna*) and other crowded places.‡ Such is the later 'defense of the realm,' as distinguished from the earlier single fort and environs.

Many of these cities are, of course, those brought under the sway of the king. We may assume, since the general officers here described are particularly urged not to exceed their powers, and to be tender-hearted toward the unfortunate (a plea often urged before kings, as in Nārada's great sermon in the Sabhā), that they exercised pretty free control and were apt to abuse it.§ In fact, with an uncertain rate of taxation, they could practically demand what they pleased. The proper rate of taxation is not certainly established in the Epic, but at its best was very severe. Agriculture is always implied. It is

* It is said in the second book that there are five general officers of the military caste in each town as collectors. What their exact functions were the Epic does not say (*kae cic chūrāh kṛtaprajñāh pañca pañca svanuṣṭhitāh, kṣemam kurvanti saṁhatya rājan janapade tava*, ii. 5. 80; the context shows that *pañca* refers to officers of towns). I suspect that collecting here refers to collecting the regular taxes. One thousand villages given away as a 'means of livelihood' is not uncommon in the time of the empires: compare e. g. R. ii. 31. 16. According to Manu the lord of ten villages has as much as can be cultivated by twelve oxen; of twenty villages, by five times that; of one hundred, the produce of a village; of a thousand, the revenue of a town. This certainly seems an older version than that of the Epic. The word *kula*, here employed, land enough for a family, is interpreted by the commentators as 'what can be ploughed by twelve oxen.'

† This 'one-thinker-about-everything' (*ekah sarvārthacintakah*) appears to be an additional officer, not a substitute for the city-lord; *vā* or *ca* is read, M. vii. 121-122. The description is found xii. 87. 1 ff. Military garrisons are spoken of ib. 69. 6 ff. They are to be stationed through the realm, and on the border-land.

‡ Compare ii. 5. 82 ff., 121, 114, where a garrison guards each town.
§ We learn little of these officers from the law. In M. x. 126; xi. 64 (Mbh. xiii. 165. 10; xii. 297. 25-26) the three upper castes have *adhikāra*, but not the slave-caste; extending (in the Epic law) to any 'rule of right' (in Manu *adhikāra* of law and of mines). But in the Epic practical rule we find the slaves have a certain authority (see below). These officers were, as were the king and all royal officers, exempted from certain ceremonial impurities (occasioned by the death of relatives) 'lest business be impeded (*kāryavirodhāt*) G. xiv. 45; M. v. 98-95. We find often that Hindu strictness in this regard is practically less than at first sight appears.

only in an ideal realm that we find 'in that place there was no confusion of castes, and no mining or agricultural labor.'*

In practical life 'the king must not be too kind, he must not cut off his own root, he must tax as he finds necessary.'† The proper tax, to levy which the king is enjoined, and in taking which he 'does no wrong,' is in the proportion of one sixth of the annual gain got by the party taxed, with special rules for special cases. This regular rate is not regarded as imposing a heavy tax. Further statutes show that it may be increased, and permit even a fourth of the annual income to be so taken 'in time of need,' i. e. when danger threatens—the king in each case incurring the same proportion of the people's sins if he does not return the barter-value of this tax in 'protecting the people': especially, as is once sharply added, 'the better classes of people, and the wealthy classes.'‡

* i. 68. 6: *na varṇasāṅkaro na kṛṣyākarakṛj jānaḥ.*

† v. 34. 18. The further advice that the king should be merciful toward his people 'as if toward the gods' (ib. 38. 41) is, as shown by many examples, based rather on the utilitarian principle that 'a realm is like a cow; it must not be over-milked' (xii. 87. 13-21), than on any principle of abstract right. An idea of what was reasonable in taxation may be drawn from the converse of a rule in regard to the king's expenditures. We are told that he ought to be every morning informed of what he has spent, and that his (yearly) expenditure ought not to cover more than three fourths of his income (ii. 5. 70-72). That is to say, he ought to tax heavily enough largely to increase his actual needs in private and public outlay. One half, one quarter, or three quarters, are given as the legitimate ratios of expense to income. The account is kept by 'calculators' (*gaṇakalekhakāḥ*).

‡ All traders' taxes, by legal and Epic rule, are to be apportioned according to the conditions under which the goods are presented for taxation: that is to say, a merchant's wares are to be taxed 'after the king has carefully considered the price at which they are to be sold, and were bought, and the distance they have been carried'; where an impost duty is intended. The artisan also must be taxed in such a way that 'both the king and the artisan may get profit.' Taxation more than 'legal' is decried; larger taxes must not be demanded, it is sometimes said, but begged for, and that from all the castes, except the priests (xii. 87. 13-21; 71. 15). But when the king conquers and is conscious that his taxes are not unjustly levied, then 'let the king address his new people, saying "give me the rightful tax;" if they give it, it is well; if not, let them be forced' (xii. 95. 2). The proper tax is formally given as above, i. 213. 9; xii. 24. 11 ff.; 69. 25; 139. 100. The yearly income is regarded as the basis of reckoning the tax in cattle-increase and grain-increase. Compare ii. 5. 78, and M. vii. 80. The Calcutta reading in ii. 212 (=5. 78) *pādikan ca śatam* is certainly to be rejected for the Bombay *pratyekam ca śatam*. The king is here advised to befriend the husbandmen when the crops are poor, and to take one in the hundred of the increase as a moderated equivalent of the normal tax; not to tax (more heavily than before) at the rate of twenty-five per cent. The possibility of the kingdom's existing without taxation seems especially to irritate the compilers of the pseudo-Epic. They revert to the subject again and again, and prove that the king must have wealth; his army, his happiness, his virtue depend on it; 'as a robe conceals a woman's nakedness, so does wealth conceal sin; therefore let him get wealth, even if he be sinful' (xii. 133. 7). The twelfth book says in effect to the

The authority of Megasthenes, if rightly reported, would induce us to believe that the agriculturists hold the land as tenants to the king, and that the gain of rents goes into the royal treasury, besides the payment of a fourth part of the crops as tax. Except on the principle of the Hindu proverb, that 'the cow (seemingly) belongs to the calf, the cowherd, the owner, and the thief, but he that gets the milk is the real owner' (xii. 174.32), we must decline *in toto* to accept this statement as valid for the times covered by the Epic narration, and, since they represent a more imperial policy than that depicted in the native works, conclude either that Megasthenes is misquoted in respect of land ownership and taxes, or that he speaks of a small part of the land where such custom prevailed, or writes of times different from that represented by Epic didactic poetry. Arrian says that Megasthenes saw only a little of India; but I am inclined to think that the present difference between the quarter and the sixth as a regular grain-(income) tax indicates a difference of time rather than of locality, and that the Epic coinciding with the law represents in this point an ideal, or older state of affairs than that found by the Greek (c. 300 B. C.).*

king: 'rules do not hold in certain contingencies; do not ordinarily tax too much; but yet let your first care be to keep your treasury full; if it is necessary to tax heavily in order to this end, do so; money is the chief thing; wealth is a necessity; let the king imitate the people, they make as much as they can; for poverty is a crime' (xii.130.33 to end). The verse distinguishing between protection for the people in general and the better classes (xii. 24. 17. *cūrās cāryās ca satkāryā vidvānsaś ca, . . . gomīno dhanīnaś cāv' va paripālyā piśeṣatah*) is, despite the commentator, especially in the interest of the rich men of the people: 'Warriors, Aryans (the people-caste), and sages (priests) should all be treated well: those rich in cattle and those possessing property should be especially well protected.' As to the moral guilt incurred by a king through his people's sin see below. It is remarked in xiii. 61. 32 that 'the people ought to kill the rascal of a king who does not protect them' (*araksitārāṇi hartārāṇi vilopārāṇi anāyakaṃ, tair vai rājakaṭiṇi hanjyuh prajāḥ saimahaḥ nirghṛṇam*; in 33, *saḥ . . . nihantavyaḥ*).

* Of the seven social orders that Megasthenes notes, the first is the order of priests; the second, the agriculturists, who greatly outnumber the others. These abstain from war, he says, and from all other public service, spending their time in agriculture; and no enemy injures the crops, because everyone looks on the agricultural class as a public benefactor—whence the richness of the uninjured land. He continues, as quoted by Diodorus and given above, with the words: *βιοῦσι δ' ἐπὶ τῆς χώρας μετὰ τέκνων καὶ γυναικῶν γεωροῖσι, καὶ τῆς εἰς τὴν πόλιν καταβάσεως παντελῶς ἀφιστήκασι. Τῆς δὲ χώρας μισθοῖς τελοῦσι τῷ βασιλεῖ διὰ τὸ πᾶσαν τὴν Ἰνδικὴν βασιλικὴν εἶναι, ἰδίωτη δὲ μηδενὶ γῆν ἐξείναι κεκτησθαι· χωρὶς δὲ τῆς μισθώσεως τετάρτην εἰς τὸ βασιλικὸν τελοῦσι.* In the next class Megasthenes rightly distinguishes from these farmers the herdsmen, shepherds, and poorer members of the people-caste; for though theoretically one, they were, as we have seen, in reality a different order; and we are not surprised to find no hint from the Greek observer that the two classes belong together. These poorer people, he says, are great hunters; they do not live in towns or villages, but *σκιρτήθη δὲ βίῳ χρώνται*: εἴ-

The statement that the king holds all the land as his own (and disposes of it as he will?) is not an unnatural deduction from the fact that the king may give away as much land as he likes, and is the 'lord of all' (compare Bühler on M. viii. 39). Still, practically the ownership is vested in each hereditary occupant; his right is secured by title; boundary disputes are settled by careful surveys; no sin is graver than 'depriving a priest of land,' nor any glory greater than 'giving land to a priest;' so that we may doubt if this right of universal ownership was exercised. No tax is put upon land: that is, no rent is paid for it. All the taxes of the law and Epic are arranged on the basis of increase in the year's stock, a part of which must be paid as tax; but it is nowhere implied that such a tax is regarded as rent for the land. The 'fourth part,' evidently declared by Megasthenes to be the proportion exacted, contradicts the perpetual statement of native authorities, that the proportion on grain is one-sixth, and one-fourth only in emergencies. Indeed, one of the standing epithets of the king is based on this proportion; he is called often the *ṣaḍbhāgin*, 'he that gets one-sixth.*' Such taxes in cattle, grain, and merchandise were levied in kind. Besides custom house duties, 'a piece in kind' for the king was exacted of merchants; that is, beside the apportioned duty, they surrendered one specimen of their goods to the royal treasury.†

idently the inhabitants of the *ghoṣa*. To complete this foreign description, we find the Greek's 'fourth class' to be what the Hindus call a part of the 'mixed castes'—namely, the artisans and manufacturers of implements, who pay no tax, but draw grain from the royal treasury: that is, if they are employed by the king as army artisans, or otherwise serviceable. Compare M. vii. 126, where from one to six *panas* a month, clothing every semester, and a tub of grain every month, are given to the menials of the royal household (as some say, the grain increasing with the money for the better servants). The tax of ordinary artisans is in kind, according to the native accounts. Megasthenes's class of warriors is touched on below; the sixth caste is that of the 'ephors,' probably the rulers described above: οἱτοὶ δὲ πολοπραγμανοῦντες πάντα καὶ ἐφορῶντες τὰ κατὰ τὴν Ἰνδικὴν ἀπαγγέλλουσι τοῖς βασιλεῦσιν, ἐὰν δὲ ἡ πόλις αὐτῶν ἀβασίλευτος ᾖ, τοῖς ἄρχουσιν. The last class is called the class of councilors, judges, etc. So Diodorus; and essentially the same, Arrian and Strabo. But it is important to notice that Arrian merely says in regard to the taxes of the agriculturists that 'they pay to the king or to autonomous cities the *φόροι*,' not specifying how much. Strabo says only that they rent the land, and pay one fourth of the crops in lieu of tax. Diod. ii. 40; Arrian, 11; Strabo, xv., p. 703 (Didot).

* It is by giving gifts (to the priests) that the members of the third caste attain heaven (iii. 150. 51). Now it is said: 'a man of the people-caste that gives a part of his harvest to the priests after he has taken out the sixth part (for taxes) is released from sin' (xiii. 112. 19: *ṣaḍbhāgapa-riçuddhan ca kṛṣer bhāgam upārjitam, vaiçyo dadad dvijātibhyaḥ pāpebhyah parimucyate*).

† A king that takes 'even a fourth' is not guilty of wrong 'in a time of distress' (M. x. 118ff.); but the legal tax from the people-caste is one sixth or one eighth on grain, one twentieth on gold and cattle, or only

All these taxes, it will be noticed, are drawn from the third estate or people-caste, which (including the degraded) appears in Megasthenes as in native works more properly a heterogeneous order, without likeness of parts, than one united caste-body. All these, however, poor or rich, must pay taxes. Not so with the soldiers. The latter are practically exempt from taxation; the priests (unless degraded) are so by divine law. It remained for the farmers and their kind to pay. The freedom from taxation of the military caste is negatively implied by two facts—first, that servants of the king are not taxed, and all in military service were called the royal servants (*bhartya*, soldiers); second, that the soldiers were not ‘protected,’ but did protect, and therefore it would be clearly against the theory of taxation as barter to demand tax of the military caste. Only the people-caste are meant as tax-payers; and Megasthenes also implies that none of the military paid taxes. We must of course ex-

one twelfth on grain and one fiftieth on gold, while in smaller industries (profits from trees, meat, honey, flowers, skins, pottery, etc.) one sixth only is known to the code of Manu. See my note on M. vii. 130. In a fable of the Epic, Manu himself comes to earth and draws a tax on grain of only one tenth, on gold and cattle of one fiftieth, according to xii. 67. 17 ff. The grain-tax is not on the value of the whole property, but on the gain (contra my note). Gāutama’s law allows a tax of a tenth, an eighth, or a sixth (G. x. 24. 25); and the last is usually recognized by all law books as the right (grain) tax (Vās. i. 42, *rājā tu dharmenā nuçāsat saṣṭhañ dhanasya hared anyatra brāhmaṇāt*. So Bāudh. i. 10. 18. 1). The Rāmāyaṇa, too, has verses to the same effect: ‘A king may take one sixth, provided he protects’ (R. iii. 10. 12–16). The expression ‘gold’ includes all mercantile transactions, according to some commentators. Gāutama says that one twentieth is the duty (*gulka*, as distinguished from *bali*, tax) on all merchandise, but makes that on flowers, fruit, etc., one sixth (or sixtieth?). Compare M. viii. 398, and the statement, ib. 402, that market prices are adjusted every five days or half month. The ten per cent. duty appears to be especially for imported goods, a sample being also taken (B. i. 10. 18. 14, with Bühler’s note). The day laborers, not in royal service, pay for tax one day’s labor a month on public works (G. x. 31; M. vii. 137–138), while artisans pay some trifle in the same way (Vās. xix. 28: *pratimāsam udvāhakaram tv āgamayet*). This labor-pay was termed *viṣṭi*, a sort of *corvée*, a tax in toil. The Sanskrit word means the laborer forced to give his work, or the work itself. The formal eight factors of the king’s war resources include such labor: chariots, elephants, horse, foot, *viṣṭi*, ships, spies, guides (xii. 59. 41; 76. 5; 121. 44 ff.). Thus the native authorities on taxes. Law and Epic repudiate the idea of one fourth being a proper or customary tax. Yet even royal monopolies are recognized, and the minutiae of taxation laid down in these law-books. What inference may we draw? That the ‘extremity tax’ allowed in time of dire need had in the Greek’s day become the regular tax? This, unless we assume that the rate of taxation decreased instead of increased. But see Burnell to M. vii. 130. It would seem, then, that Megasthenes post-dates even the original didactic part of the Epic. His famous account of the soldiers’ deference to the farmers, like the farmers’ indifference to the soldiers in Alexander’s battles, may be true, but the Epic custom is to destroy the enemy’s land and crops (see below). The *na sasya-ghātaḥ* rule (xii. 103. 40) does not refer to the foe’s land.

cept those of this caste that had given up the profession of arms and become practically farmers. These were taxed as such. Of the people-caste, the wealthy members were of course most heavily taxed; but, more content with inference, the didactic part of the Epic says: 'Those that make wealth should be taxed: tillers of the soil, raisers of cattle, traders; for a wealthy man is the crown of creation.'*

Certain practices and prerogatives of the king increased his treasury, in part at new expense to the people-caste. For if any man of this caste was not an orthodox believer, his goods might be confiscated for the purpose of paying therewith for the cost of a sacrifice—that is, his cattle might be given to the priests: 'Whatever shall be necessary for the sacrifice the king shall take from the possessions of a wealthy man of the people, if the latter be irreligious.' The king owned, of course, all the wealth of his family. That of his younger brothers became in reality his own. Thus the king offers 'all his own and all his brother's wealth,' without question of that brother's desire.† The Dasyu (un-Aryan) population was also liable to have its goods confiscated, if the king needed them.‡ A legal prerogative of the king is the possession of property found without owner: bearing on all castes, of course, but particularly on the wealthy. Any property found abandoned is taken in charge by government officials and guarded for the owner during a year; it is then confiscated. All property found goes into the royal treasury, after a fourth has been presented to the finder. But all treasure-trove goes to the king,§ or the king and the priests. I have noted no rule to this effect in the Epic.

If we turn back to the earliest Vedic period, we find that the tribute paid to the king seems to have been but a voluntary offering; in the latest, it was required. The Brāhmaṇa-literature appears to show the people-caste as a class existing mainly for the purpose of being levied upon and 'devoured.'¶ A small poll-tax, symbolized as a love-offering, may have been

* xii. 88. 26; M. x. 115. Certain persons were always exempt from taxation (*akarah*): priests, children, women, royal officers, and various afflicted persons. Compare v. 33. 93 ff.; M. vii. 133; viii. 394; Vās. xix. 23 (*rājapumān*); i. 48; Āp. ii. 10. 26. 10, ff.; G. x. 11.

† *Yan mamā'sti dhanam kiñcid Arjunasya ca vecmani*; xv. 12. 11.

‡ xii. 136. 1-11; 165. 5-7; M. xi. 11; G. xviii. 24 ff. Gautama permits such confiscation also to defray wedding expenses, and from those that have shown themselves irreligious (that is, from such of the people-caste, as the context shows).

§ Vās. xvi. 19; B. i. 10. 18. 16; G. x. 38. 42; M. viii. 38. According to some, only a sixth is deducted for the finder. Priests may, however, keep all they find (Vās. iii. 13-14; G. x. 45).

¶ Compare Zimmer, *Alt. Leben*, p. 166 (Ait. Br. vii. 29), who quotes apropos Tac. Germ. § 15.

customary besides the tax on produce, as a survival of the original free *balī* or offering, or may well have been a later natural addition to the regular tax, without thought of the antiquity of the custom: At any rate, the 'love-tax' is common in the Epic, and was given by everybody, including those not liable to taxation—priests, etc. 'For love's sake (*prītyartham*), the priests, the warriors, the men of the people, the slaves, the barbarians, all the folk, high and low, brought tribute to the king.* So thoroughly, however, has the man of the people become identified with the 'man that pays taxes,' that the latter has become in the Epic a standing epithet or even a synonym of the former.† This expression is applied also to subject princes, not to native members of the warrior-caste, and means in such circumstances tribute-giver.‡ Rather a remarkable case of a forced levy on such subject princes occurs in the third book: remarkable, because such princes have usually a certain war-tribute to pay, while here they are obliged to submit to an extraordinary demand in time of peace. The heir to the throne of Hastina (practically the king) desires to raise a sudden sum of which his treasury is incapable. His ministers advise him thus: 'Let these protectors of earth that pay tribute to thee furnish thee with the (necessary) tributes and the gold.' This was done, apparently; for the building and sacrifice that the king wished to complete are carried on without further difficulty.§

Taxes were, then, levied by force, if occasion required, or stood at a nominally fixed rate of a sixth from the annual gain in crops, or a fiftieth in the case of cattle and on invested moneys: rates subject to variation and subsequently increased;

* ii. 52. 37-39. The extravagance of the description somewhat impairs the value of the citation. The context mentions gold jars, hundreds of maidens, etc., etc., as being received by the king on this occasion. He was about to become emperor.

† *vāicīyāh* . . . *karapradāh*, ii. 47. 28. Compare below i. 192. 15. The 'lord of earth' always means a warrior (king); the man of the people is called 'a tax-giver' (*karadāh*).

‡ The conquests of war always result in large caravans of tribute returning to the conqueror's city with him. Such tribute consisted of horses, sandalwood, aloes, rare cloth, skins, gems, pearls, blankets, gold, silver, coral, etc. Horses, particularly northern and western horses, are greatly prized. Compare ii. 30. 28, and 27. 27, 28. 6: 'Eight parrot-colored horses, and others of a peacock color from the North and West countries.' These were taken by Arjuna 'as tribute' (*karārtham*).

§ iii. 255. 16: *ya ime pṛthivīpālāh karadās tava, te karān samprayacchantu suvarṇam ca*. Compare iv. 18. 26 (Yudhishtira's) *balībhrtaḥ pṛthivīpālāh*, or subjected and tributary princes (and viii. 8. 20). This is the old word for tribute of conquered peoples; compare RV. vii. 6. 5. But it is used also of the third-caste tax-payers (xii. 88. 26: a passage strongly condemning those officers that exact unjust taxes; when discovered, they should be supplanted, and made to pay up what they have stolen).

and the people brought voluntary offerings in addition to those required.*

These irregular allusions to taxes are truly the main points wherein the two great supporting castes touch each other in our Epic, and but little remains to indicate the formerly proud condition of the herdsman; for, as Pūshan, the Vedic god of the cattle-dealers, was fabled to have lost his teeth and been obliged to live on mush, so the power of his pet caste had decayed. I have elsewhere† sought to show that in late legal literature there is a distinct separation of the third caste from the other two, and a tendency almost to put the people on a par with the slave; and this is seen in the Epic: not alone in such allusions as simply indicate that the people were regarded mainly as a tax-paying machine, but in forms of expression like, for example, 'The warriors were like the people, waiting upon the twice-born and bringing gems' (ii. 49. 35); or in such facts as this: that the term applied to represent the relation of the third caste to both the military and priestly presents the idea of distinct subordination.‡ Also, when the castes are grouped, as in describing a procession, the natural arrangement seems to be not to put the three Aryan castes against the slave-caste, but to unite the slave-caste and people-caste as one group over against the warrior- and priestly-castes as another distinct group.§ Also, in this connection, the wording of God in the Great Song (Bhagavad-Gītā) is significant: 'Whoever they be that seek their rest in Me, even they that are of low worth, even women, men of the people-caste, and slaves—even these find bliss.'|| Also the fact that a difference is made between the rights of the people and warriors in the matter of

* The knightly rule of not asking for a gift (iii. 154. 10: *nā 'hañ yācī-tum utsahe, na hi yācanti rājāna eṣa dharmah sanātanaḥ*: cf. xii. 88. 16; R. ii. 95. 19), arising from the priestly privilege of begging being confined to that caste, so as to exclude the members of all other castes from the three peculiar privileges sacred to the priest (making sacrifice for others, teaching, receiving gifts: e. g. M. x. 77), seems to have had an effect on the attitude of the king toward the tax-payers. The king ought to demand his taxes, not ask for them; and they must be paid, not as a gift, but as if it were a pleasure to pay; it being for the people's interest to be taxed. This attitude, however, is not constant.

† Relation of the Four Castes in Manu.

‡ *Upasthā*, compare iii. 4. 15: *vaicyā ivā 'smān upatiṣṭhantu*.

§ Compare i. 126. 13-14; 164. 20, and the grouping in xiv. 89. 26; 'Next to the priests came the warriors: then too the people- and slave-crowds, and then the barbarous races (*tathā viçādrasāṅghāç ca tathā 'nye mlecchajātayah*).

|| vi. 33. 32. Compare the like words employed of the division of the castes in the second great song (*Anugītā*), where it is said: 'Abiding by this law whatever evil-born people there be, women, men of the people-caste, and slaves—even these find bliss; how much more the priests and the warriors!' xiv. 19. 61.

fasting may be mentioned, couched in these words: 'Fasting three nights or two nights is enjoined only for priests and warriors; but if men of the people-caste and slaves should institute such a fast through delusion of mind, they would get no reward for it.*' The favors granted to the people-caste are the same as to the slaves; the only difference being in the form of words expressing this. 'To the people-caste the king should give protection; to the slave-caste, non-injury.†' In all these cases, late as they are, we see the reflex of an unacknowledged process of amalgamation between the people-caste and the non-Aryan population. This process has two phases. First, the inevitable tendency of the third estate to take up with new work, needful and profitable, but not sanctioned by usage; this was a natural drifting away from the Aryan aristocrats. Second, the long-continued and ever-increasing binding together of the warrior- and priestly-castes, practically leading to an exclusion of the third estate from the inner and intenser Arya-hood of the two more powerful orders. The people-caste was partially seduced and partially pushed out of the national ring. They stood on the edge between good blood and barbarous. As was likely to be the case, the caste that patronized them most and flattered them with sweet words was the priestly. Such proverbs as they have left show us, however, that all regard for the caste was based on an appreciation of the bakshish they could give. 'He is blessed with fulfilment of all his desires who gives a night's rest to a man of the people' (iii. 200. 122) is a remark polite enough to make us think this man a person of importance; but when a reason for honoring him is vouchsafed, it is merely that he has wealth. A poor man of the people was of no consequence. In fact, he is in such circumstances advised to become a slave at once (M. x. 98; but in V. P. iii. 8 he is told to adopt the warrior's life). How nearly on a social par with the slave the man of the people stood is well shown by the frightened exclamation of King Drupada when he finds his daughter gone: 'What, he exclaims, my daughter gone? Oh, whither? Who has taken her away? Is it possible that any base-born slave or tax-paying man of the people has carried her off? Is it possible that the muddy foot (of such a man) has been placed on my head, and that this wreath of flowers (my daughter) has been cast upon a graveyard (that wretch)?' (i. 192. 15). It is

* xiii. 106. 12ff. The two latter castes may have a *caturthabhaktakṣa-pāya* but not a *trivātra*-fast.

† i. 85. 3ff. Compare also: 'Priests are pleased with bounty; warriors, with a good fight; the people-caste, with protection; women, with love; the slave-caste, with mercy; common people (*prthagjana*), with bounty's leavings' (xiv. 90. 13).

only in its sustaining or 'supporting' power that the people-caste finds a begrudged honor; for in this regard the royal power and the power of the farmers is declared to be equal.*

A further point of contact between the third and second castes remains to be considered: namely, the military obligations of the third caste. Was the people-caste liable to military duty? Of course, as a general thing, no. The soldiering was done by the standing army and mercenary troops. But men of the people-caste did serve in the army, although Megasthenes says they did not. What else is meant when all the law-books say that men of the priestly and the people-caste may take up arms 'to prevent a mixture of caste'? This is emphatically decried as a custom for priests, because 'the duties of a warrior are too cruel for a priest':† but as an occasional necessity the two unmilitary castes must have served. Antecedently it would seem unnecessary to prove this. In view, however, of Megasthenes' picture of the farmer, it may be well to point out what is said by native authorities.‡ The Epic has the same formal rule as the law-books: 'To save a cow, to save a priest, or when the castes become confounded, there let the man of the people take arms—and to protect himself.'§ But in the battle-scenes we find a curious dictum, to the effect that 'it is a holy and heavenly thing to knights, men of the people, and slaves to fight in battle'; which takes the presence of these men in battle as a matter of course.¶ They were there to make part of the resisting mass, but not to be individually marked as fighters, like the warriors. See the battle-descriptions below, and the difference between the mass of the army and the individual heroes. It is stated in one passage that the people-men, slaves, and mixed castes took the side of Karna in battle (viii. 87. 48); but the context will not allow us to assume that they were in the fight. The half 'people' origin of Drona, one of the great generals of the Kurus, as well as that of Yuyutsu, shows, however, that people-caste-blood was no bar to fighting. As to the priests, see below. It may be parenthetically observed that the great army chosen by Duryodhana (instead of Krishna) consisted only of cow-herds;

* Compare iii. 150. 30 ff., on *vārtā*.

† 'A priest's defense is wrath, he does not fight with weapons,' it is said (iii. 200. 78).

‡ The legal maxims are given Vās. iii. 24–25: *ātmatrāṇe varnasamvarge brāhmaṇavāicyān śastram ādadyātām*; G. vii. 25; B. ii. 2. 4. 18. Compare Āp. i. 10. 29. 6, and G. vii. 6 (spurious, according to Bühler: cf. B., loc. cit., 17).

§ xii. 165. 33. The next verse gives an interesting variant on M. xi. 147 (supporting Medh.): 'Drinking *surā*, killing a priest, adultery with the *guru*'s wife, they consider inexpiable; death is the penalty' (so Nil.).

¶ viii. 47. 18: observe the adjective *vīra*: *ṣatratviṣṭūdravirāḥ*.

but this is a particular Krishnite case, depending on the conception of that deity as himself a cowherd (v. 7. 17 ff.)

Official relations between king and people-caste are rarely alluded to. We have seen that in the defense of the realm men of the people might be selected as vicegerents for the king, as well as members of the upper castes. We have once also a distinct distribution of subordinate officers, who are to be selected partly from the people-caste: 'The king shall appoint,' says this rule of the pseudo-Epic, 'certain officers of the realm: four of these shall be priests; eight shall be of the warrior-caste; twenty-one should be selected from the people-caste. These last must be wealthy.' There are added to these three members of the slave-caste, who must be modest and of pure character. This would lead us to suppose that the ministers or officers here intended (*amātyāḥ*) are for small offices; although the further addition of the king's charioteer on the list implies that some may be of importance, as this was one of the highest military offices. We are not informed as to the duties of the others mentioned, and the men of the people may be no more than the public servants (*bhṛtyāḥ*) who are elsewhere entrusted with superintendence over different affairs of state, and in the developed realm are overseers of mines, guardians of arsenals, etc., and are chosen from all castes, their positions being adjusted simply by their natural endowments and in accordance with the strict rule that their appointments shall not be 'against the caste order': that is, that an under-officer shall not be of higher caste than his superior.* We may remind ourselves here of that case (spoken of by Lassen) of people-authority surviving by legend in the person of Yuyutsu, son of the king of Hastinapura by a girl of the people-caste, but always treated as an equal and a warrior, and finally entrusted with high authority as minister, and a member of the royal council of the Pāndus. Such authority reflected again in Droṇa, and more strongly in the case of the minister Vidura, son of a slave-woman, points to a period of looser caste-distinction as that wherein the Epic originated.†

* xii. 85. 6-9; 118. 1-120, 52 (in 119. 6: *pratilomān na bhṛtyāḥ sthāpṛāḥ*). The commentator on the first passage takes *pañcācadvarṣavyayasam* as applying to each *amātya*; but it really applies only to the charioteer of fifty years of age.

† In diesem Sohne des Dhṛtarāshtra's und seinem Bruder Vidura scheint sich in der Sage die Erinnerung an eine frühere Zeit erhalten zu haben, in welcher die Vāiçya (the people-caste) weniger scharf von den Kriegern gesondert waren als später: Lassen, *Ind. Alt.* i. 784 (Yuyutsu, see P. W.; and add xii. 45. 10; xiii. 168. 10; 169. 11, etc). The same author further notes that in Java the Vāiçyas as state-officials and councillors still bear the name of *gusti* (*goṣṭhi*), as of 'cattle-tending' origin; whereas in Bali only trade and finer artizanship became their regular occupation. In Java the slave (*çūdra*) disappears; in Bali he

Having thus surveyed the general state, and sought to explain how it happened that 'the people,' originally all, gradually shrank socially, became a caste, and then again, by approaching to the lower orders and by absorbing lower trades, expanded; while, ever larger than the military or priestly class, this order, in reaching beyond the occupations ascribed to it, now began to be synonymous with all the folk not embraced by the priestly order, the standing army, the slaves, and such lowly members of the body politic as were still too plebeian to be encroached upon—I turn directly to the warrior-caste, the status of which in many points has already been indicated in this examination of the people-caste. But first a closing

is still the unhappy un-Aryan native: Lassen, *Ind. Alt.* iv. 518-522. R. Frederich (On the Island of Bali, J. R. A. S., N. S., ix. 108) says, however, that the *gusti* may be king. He also notes that in Bali the warrior is called *deva*, *divus*. Some wider notices of points touched on above may here be in order. The Epic (iii. 190. 86) and the Vāyu Purāṇa make what is to us an explained distinction between *puru* and *pattana* (*pura*, *ghoṣa*, *grāma*, and *pattana*, Vāyu P. ii. 32. 40). The Ag. P., while with the Bhāg. P. (see P. W.) mentioning the *kharaṭa* (above, p. 76) as provided with an outlying circuit of common land equal to half that of a city, elsewhere (213. 9) knows only the Epic municipal divisions of *grāma*, *pura*, and *khetaka*: or *nagara*, *grāma*, *khetā* (ib. 93. 33): varying with *durga* for *khetā* (ib. 105. 1: rules for protecting and furnishing these outposts in ib. 221). This Purāṇa also gives the rules for establishing boundaries, and the fines for transgressing them (256), and the decimal system of governors (222. 1 ff. taxes, deposits, thieves). The Bṛhad Āraṇyaka Up. recognizes a system of governors over villages: iv. 3. 37. It is here also that we find the admission that 'none is greater than the warrior, and the priest under the warrior worships at the ceremony called *rājasūya*, since the warrior alone gives (the priest) glory' (ib. i. 4). The distinction between townspeople and countrymen (p. 72: add xv. 8. 13), and the narrowing of the term 'people,' is reflected in late literature, as in the Varāha P., where traders stand opposed on the one hand to townspeople in general, and on the other to the 'people-caste' (*vāṅgāh*, Var. P. 122. 64). To quotations on the color of the castes we may add ib. 75. 15 (the Northern Kurus, ib. 75. 58); and Vāyu P. i. 26. 35 (34. 19), the warrior is 'red,' since he came from the third face of Brahmā. The *grāmaśāgrāsa* (hereditary claim to part of the produce of a village, discussed by Weber, *Pañcadaṇḍ*. p. 34, note 180) seems in the Epic entirely unknown. That the corporations or guilds (above, p. 80) are not solely guilds of priests is seen, apart from the definition of military and mercantile guilds mentioned above and by the commentators on M. viii. 41 (see Bühler's note), by comparing the definition of *çreṇī* by the commentator to Varāhamihira (vii. 10) as any 'body of men belonging to the same caste' (Kern, J. R. A. S., N. S., v. 46); while Nil. on Mbh. xii. 36. 19 (*jātiçreṇyadhivāsānām kuladharmāṅ ca sarvataḥ, varjayante ca ye dharmam teṣām dharmo na vidyate*) defines *jāti* as caste and *çreṇī* as *grhasthādīnām pañktiḥ*, as if one of the orders in the divisions of any Aryan's life. The 'chief of a corporation' seems indicative of a wealthy man in the drama (Mṛcch. Act iii.). Zimmer, loc. cit. p. 159, gives the older clan divisions, the folk consisting of tribes, these of communities, these of families. The folk, in the Epic, presents itself rather in the newer antithesis, city versus country, but the village-life and family-factor are, in spite of the theme of the Epic being military, still prominent.

word in respect of this latter order. In stating that it began to expand again into the people at large, I have touched upon but one side of its degenerate development. We have seen the caste in its longitudinal divisions. Cattle-raising, crop-raising, money-raising formed, until we come to times farther back than the Epic, almost parallel lines of division.* But there is, on the other hand, a latitudinal division, one of absolute wealth irrespective of the business creating it, which appears to have arisen in the Epic period, and to have made almost as great a subdivision of the caste by plutocratic measure as was created by the three primitive coördinate qualitative divisions of labor.† In the early period the people-caste is, as a whole, in wretched plight. In the Epic a social distinction appears between the rich, whether farmer, ranchman, or trader, and the poor of the same caste. Only he that makes a corner in grain and obliges poor people to suffer is despised in spite of his wealth (see below, B. 3). With ease, comparative immunity from state-service, and golden opportunities, the enterprising members of the caste advanced beyond their fellows, accumulated wealth, made themselves felt as a power in the state, and gained straightway admission to the royal council again—as they had before been members of that council, ere the haughty knights crushed them socially downward. I do not mean that they ever regained the social equality they had lost. But they were *en route* to do so, as the Epic shows. There is a greater social difference between the wealthy farmer and his kind (of the same caste) than between that laborer and the farmer's slave, in all but religious privileges; a greater political difference than between the farmer and the poor warrior. 'Head man in a village,' says Zimmer, speaking of the Vedic man of the people, 'was the highest honor he could attain.' In the Epic he may (if wealthy) become a royal adviser, and manager of local concerns in town.‡

* *kṛsigorakṣyavānījyam iha lokasya jīvanam, karma cūdre kṛṣīr vāicye*: iii. 207. 24.

† 'Even wealthy slaves' are a sign of prosperity; not to speak of wealthy priests, warriors, and the 'people-herds' mentioned in the same list, xv. 26. 8 (*cūdrā vā pi kuṭumbīnaḥ; vāicyaavargāḥ*). So in R. vi. 62. 40 we read that a Chanḍāla and a poor man are the same to the speaker (*dvāv eva sadṛṣṭāu mama*).

‡ A late verse in the fifth book, given apparently for its reference to woman, seems possibly applicable in an older state of affairs than the part of the Epic in which it is imbedded can concern. It may be of general application only; but it is not improbable that it should once have referred to a king's division of authority among his family and officers. 'One should put the care of the inner-city (inner-house?) into the hands of his father; the charge of the cuisine (*mahāvāsa*) should be intrusted to his mother; a friend should attend to the cattle; the needs of merchants (guests) should be attended to by various dependents (or officers, *bhṛtyāḥ*); his sons should look after the priests (guests?); the man (king?) himself should devote himself to agriculture.' v. 38. 12 ff. .

The warriors, not nobles, but of poorer sort, those that had no wealth, whose position was that of common soldiers, are, as might be expected, almost as much ignored in the grandiloquent Epic as the poor trader or cow-herd. From the indications in the battle-scenes, rather than from formal statement, it seems probable that the king supported a large army of common men, inferior fighters, not much respected, who differed among themselves by virtue of their respective personal dexterity and ability in certain arts of war. Thus, the archers are sharply distinguished from the spearmen; the elephant-riders, from the horse-riders; but little more is to be seen of them. They were the common soldiers and nothing more. Some were native troops, and enjoyed Aryan privileges in religious rights and rites; but there seems to be no distinction between the legal or military rights of the native Aryan soldier and of the hired mercenary. The matter is more clouded from the fact that most of the common soldiers in the war are just these imported mercenary or allied foreign troops. A certain patronage of each great knight may be referable to the latter's rank as general; and I should hesitate to assume from the nearness of the knight to his particular body of men, or from their fidelity to him, that there was any patron-and-client-relationship, or that any one of the great nobles stood nearer to one regiment than to another. Yet, as member of a clan, such must have been the case at first; and since we see that even in the Epic, just as in the Vedic period, the troops were arranged 'clan by clan,' or family by family, it is perhaps only reasonable to assume that the respective captains and other officers (*balamukhyāḥ*) were stationed at the head of their own family or clan men, in so far as these were separable from the like sort of fighters belonging to other clans. These soldiers when disabled were supported by the king. I group below the few general remarks concerning them to be found in the Epic (for their actual fighting life, see the next division of this paper). There is nothing whatever in the Epic to justify the statement of the law that a warrior lacking means to pursue his proper business should be taken care of by a priest; and, indeed, the law itself contradicts this, and advises the poor warrior to betake himself to farming (M. x. 83, 95; viii. 411). As the soldiers drew their pay from the king, and were cared for if disabled, there was no necessity for recourse to a priest. Out of the battles they appear so mixed up with the general populace that we can make nothing of their position. As Megasthenes says, they probably did nothing but amuse themselves when not in the field. Occasionally we catch a legendary glimpse of the process by which a poor soldier becomes one of the great nobles and founds a family. Karṇa was a cow-herd's son, but a good fighter, and

the king liked him. He became a royal favorite. He even ventured to enter a knightly tournament; but an objection being made to this on the ground of his obscure origin, the king at once knighted him, so to speak, or really kinged him, making him 'king of Anga' on the spot, and triumphantly insisted that his new rank placed him on a level with kings, or with the best knights of his court (i. 136. 36). The cowherd's son became *rājā* of a dependent town, and was thus ennobled. Such a king (and many appear in the Epic) is of course merely a governor under royal orders.

The king's court was made up of native nobles,* royal allies, family connections, and subject kings. I shall add the priests, but with a restriction. They belong to his council, but seem a gradual intrusion on the knightly assembly (see below). These nobles, for the most part native and well-born, took part in council, conducted the assemblies, led the army, and were the king's vicegerents in all military affairs. Not a few of the highest knights were in reality conquered or allied kings. Some were the relatives of the king by marriage, drawn away from their home to new connections. Thus one of Dhritarāshtra's craftiest advisers was his wife's brother. So Krishna, a near relative of the Pāndus' wife, spent most of his time at the court of her spouses.† These nobles, knighted warriors, who had in the Epic account to prove themselves worthy of their rank on reaching the end of boyhood, and were recognized as knights only after giving an exhibition of their skill and prowess in a formal joust, made the real aristocracy of the land. Power they shared with the priests, and the latter received a formal precedence from their spiritual and intellectual superiority. But the court, with all its brilliant accompaniment of festival, show, hunting, dance, gambling, fighting, and general folly, consisted of and depended on these military nobles. They were alone the equals of the king in tastes and desires, and were socially his practical equals also, as many a scene will show. Or, if we wish didactic proof, it offers itself in the statement that there is a three-fold origin of kings according to the codes: namely, an aristocrat, a hero, and a comman-

* There is a verse in the Rāmāyaṇa (I do not remember where, and cannot now find the place) that defines the *çūra*, or knight, as (I think) *pāurusēṇa hi yo yuktaḥ sa çūra iti samjñītaḥ*. That is, a man of might is the real knight. But *çūra* means more than this, and, associated as it almost always is with *satkulīṇa*, 'well-born,' means a noble, technically speaking—a man of the upper class at court and in the field. *Kulaja* (well-born), as epithet of a warrior, is indicative of power, as in vii. 185. 29.

† One of the law-books says that a king is obliged to support all his chief wife's relations; Vās. xix. 31 ff.: *rājamahīṣyāḥ pitṛvyamātulān rājā bibhṛyāt tadbandhūṅc cā 'nyāñc ca*.

der of armies: which means historically that kings are made from these three kinds of men, or, as the use made of the quotation indicates, these three men rank as royal.

But historically the remark is of greater interest. It shows what was probably true: that, in spite of the many boasts of hereditary crowns, the king is recognized as often chosen for his personal characteristics. In the case of the established kings it is a truism that 'their superiority consists in their valor' (*vīryacresthāḥ ca rājānaḥ*, i. 136. 19). Family, personal bravery, and skill in leadership are, then, according to Epic rule and usage, the conditions under which the warriors become chiefs and are reckoned as on a par with kings. The words of Tacitus rush to our minds at once; indeed, the comparison is a most remarkable one. Let us put the two passages side by side. The Epic says that these three produce kings (or, as said above, according to the application, may rank as royal)—an aristocrat (*satkulīna*); a hero (*çūra*);* and he that leads forward an army (*yaç ca senām prakarsati*). Tacitus says: "reges ex nobilitate, duces ex virtute sumunt . . . et duces exemplo potius quam imperio, si prompti si conspiciui si ante aciem! agant admiratione praesunt."† With the appointment of every high official we are continually reminded that he must be of good family. Great wealth can ennoble a man of the people-caste somewhat; great bravery or skill can do the same for a warrior. But the descendant of a good family is qualified for high standing even if not remarkable for personal endowments.

The later Epic, and especially the Rāmāyaṇa, gives the impression that the ministers and all the councillors of the king are of the priestly caste.‡ We often find 'councillor' and 'priest' as synonymous terms. At the great deliberation in Vālmiki's poem all the state affairs are in the priests' hands. It is a priestly council that decides the whole matter of succession, and whether it is best to crown the second prince. In fact, it is here the family-priest alone. So in reading the late

* On the different kinds of *çūras*, in a religious sense, see xiii. 75. 22 ff. In vii. 163. 35, C. reads *yudhāḥ* for *çūrāḥ*.

† Tacitus, *Germania*, 7. Mbh. i. 136. 35 (*trividhā yonī rājñām çāstraviniçaye*). The commander, or general in chief, usually stood in the van; the king, as in Sparta, usually remaining in the centre, though not always so. Compare below on the army; or, in general, e. g. xiii. 62. 85, on the commander's position: 'If heroes are slain leading in the van, they go to heaven.' In India the king is derived, for example, from 'one that leads forward an army,' or such a one is a princeps. In Germany *si ante aciem agat* corresponds exactly; but such a one is only a noble; the dux cannot become rex: 'their kings they choose from the aristocracy; their leaders in accordance with their bravery' (I cannot refer *et duces*, as some do, to the kings, 'the power of the kings is limited, and being leaders,' etc.).

‡ Compare xv. 5. 20: *mantriyaç cāi 'va kurvithā dvijān*.

advice ascribed to Kanika,* a figure that is interpolated and appears on the scene only to vanish forever, we are led to believe that important state matters are deliberated upon by the priests. This is a clouding of facts; and, in justice to the nobles of military caste, we must, before dismissing the subject of their social position, note that they are the real advisers of the king in all matters not purely judicial or spiritual. For the *mantrins*, or cabinet councillors, consist chiefly of these nobles. This term, like all others of the sort, is but half technical. It means councillor, and may apply to anyone acting in the capacity of adviser. It is, however, usually restricted to members of the royal council, and, though generally understood of priests, is not confined, even by the commentators, to such an interpretation. It may apply even to general officers, according to the native interpretation of the passage quoted above concerning the men of the people and others as officers (*amātyāḥ*); for here we are told that the king should also select eight councillors, and these are understood by the commentator to be an elect body of these *amātyas*, consisting of the charioteer, the three slaves, and the four priests; but this is very improbable. All the *sacivas* (comites) may be, and often are, purely military. These are officials of the highest rank, to whom in the king's absence, for instance, all the royal business is left (i. 49. 23). At times (although Manu recommends 'seven or eight *sacivas*') we find but one appointed, while the 'assembly men' (*pāriṣadāḥ*) guard the king's councils; but both of these ranks are really military.† When Yudhishtira leaves his capital with his brothers, the city remains in charge of the Purohita and Yuyutsu: a half spiritual, half military command (xv. 23. 15). In (i. 102. 1) another case it is Bhīshma alone who 'guarded the realm' in the minority of the king. Absence of defined titles and functions among the ministers makes it impossible to differentiate strictly the different values of these titles. The functions run into each other, and even the number of the bodies concerned is not given consistently. Thus, in another passage (xii. 80. 23 ff.; cf. 83. 2), a description of the *amātyas*‡ is given, of whom nine are here mentioned ('two or three men should not be appointed to [share] the same office'); and, again, members of the assembly and nine *mantrins*; while a little further on (83. 22) the *mantrasahāyāḥ*, who are

* i. 140. 2 ff. He is a 'councillor' (*mantrin*). Observe that the family-priest proper is not asked for his advice.

† M. vii. 54; Mbh. v. 38. 14-20. Yudhishtira's *sacivas* are pre-eminently his four brothers (xv. 9. 12)

‡ The *amātya* is properly a member of the household or relation. Such is the earlier meaning. The Epic speaks of *amātya* as a general officer or minister; but compare ib. 80. 23: *gṛhe vased amātyas te*, the chief-priest, teacher, or a friend.

surely the same, are spoken of as distinct from the *arthakārinah* (cf. M. vii. 64), who are alone five in number, and have the same characteristics as the *mantrins* previously mentioned. The *sahāya* or 'helper' is a high minister (cf. xii. 57. 23 ff.). After quoting Manu twice (xii. 112. 17, 19) to the effect that power gives victory, and stating that an abiding realm must depend on a good helper, *sahāya*, the sage proceeds to describe an efficient *saciva* (compare M. vii. 54) with the words (ib. 118. 3 ff.): 'he must be of good family; skilful; know the use of spies; understand peace and war; know the threefold department of a king (*trivargavettā*); know how to make trenches, and conduct military movements (*khātakavyūhatattvajñāḥ*), and know the art of training elephants (*hastiçikṣā*, cf. *hastiçikṣikāḥ* in viii. 38. 16). The general minister meant here by *saciva* is, therefore, not of the priestly, but of the military caste. On the other hand, *bhṛtya* is anyone in the pay of the king, employed (*niyukta*) on any service, even to the keepers of the harem.*

But the high ministers of the king, those that led his councils, are ordinarily regarded in later times as priests. Not so earlier. In the Epic the royal relatives of the monarch take the part of ministers, and we find Bhishma to be the minister of war; and Vidura (whose mother was a slave-woman) to be the minister to 'superintend the treasury, and see to the appointment of servants and make arrangements for provisions' (v. 148. 9-10); while in the final adjustment of the empire by Yudhishtira (xii. 41), the king's brothers and cousins are made generals, war-ministers, and councillors. The nobles, then, of the warrior-caste are the practical 'helpers' of the king, and take, so far as the Epic shows us, the chief part in public consultations; wherein the priests appear of little importance, and are far less the leaders of assemblies than in the Rāmāyaṇa. On the other hand, the priests recommend that the private councillors of the king be priests, and the word *mantrin* (councillor) seems gradually to have become an indication of priestly caste. Moreover, wherever a knowledge of old wisdom, custom, or law is required, there the priests appear as the king's representatives. The ministers (military or priestly) hold the power in the absence of the king, and, as a legend would indicate, even the queen's commands must first be endorsed by the ministers, if the king is away (iii. 60. 21-22). It is from the priests that the king appoints the officers of justice or judges (*dhārmikāḥ*).† He is further directed to put Pan-

* Compare R. v. 70. 7: *yo hi bhṛtyo niyuktaḥ san bhartrā karmani duṣkare kuryāt tadanurūpam*; and R. ii. 97. 20: *antaḥpuracarā bhṛtyāḥ*. In the army the mercenary troops are meant by this term.

† The legal expression *prādvivāka* (judge) belongs perhaps to the same period that furnishes us with an 'eight-fold' division of the war-forces

dits in charge of the treasury, but does not seem to do so in fact. Eunuchs for the harem, and 'cruel men for cruel acts' (executioners) are among the minor officers specified, and it is said in respect of all these people that the king should treat them with alternate repression and indulgence, that they may remain both humble and devoted (*nigraha, anugraha*, iii. 150. 44-48; *dhārmikān dharmakāryesu - - niyujjīta*, etc.; *micrena*, xii. 58. 22). Besides 'good family,' moral requisites are made of all high officers, and good morals their usual praise (xii. 57. 23 ff.). As in the law, a list of those not fit to be employed as councillors is given—women, fools, greedy men, and frivolous persons—and six 'doors of council-breaking' are enumerated: viz., drunkenness, sleep, indiscretion, changeableness, trust in bad ministers, or in ambassadors (v. 37. 57; iii. 150. 44; v. 39. 37).

The high-born and rich, then, from the warrior-caste, formed (as we saw was the case among the farmers) an aristocracy apart from the poorer members of their own caste and those that could not boast so high a descent. Now these latter, formally and as far as caste went acknowledged as equals, were practically on a par with the caste below them. The regular means of livelihood for a poor warrior, as for a poor priest, was to join the working community. He might take up his caste duties again as soon as he was able to support himself by them. Since this was an exchange of caste admitted even by the strict law, we may well believe that it was common in the time of the freer Epic. Gautama says that in need 'the priest may bear arms; the warrior practice the profession of one of the people-caste.' Certain exceptions are, however, taken to a warrior's life when he becomes a man of the people; and, just as a priest in similar circumstances is forbidden to sell human beings (G. vii. 14), so the warrior, permitted to become a trader (G. vii. 26), may not practice usury, while others are forbidden to exact from him more than three per cent. interest (a month); but elsewhere he is permitted to lend money to barbarians and sinners at a good rate of interest.*

instead of the earlier four, and an exhaustive analysis of the constituents of the state, xii. 121. 46. *Dhārmikāh* seems to denote judges in R. vi. iii. 13, where these and the 'chief of the twice-born' walk in a procession. Usually the king himself is the judge, or he appoints *āptas*, i. e. simply fit persons.

* Compare the law in G. vii. 8-21; Vās. ii. 24. 40, 48; B. i. 5. 10. 25; M. viii. 142. Agriculture was also practiced by the priests, and a discussion on this point in Bāudhāyana shows that it was not unusual for them to do so; for though it is here stated that 'the Veda impedes agriculture and agriculture impedes the Veda,' yet permission to study and to farm is granted to those that are able to carry on both pursuits: B. i. 5. 10. 28 ff. (in spite of 24); Bühler's translation above; compare M. x. 78-82, and Bühler's note to G. x. 5. *I do not see how we can translate

Before passing to the chief exponent of the warrior-caste, the king, it may be well to see how much we may gather from the contemporary or earlier legal statutes that can help us to understand the general rules hedging all the members of this order. Such points as are here given belong more naturally to legal than to Epic literature, and we can draw no negative evidence from the silence of the latter upon them. On the contrary, the unanimity of the legal works in most of these particulars would point to their being of universal custom; and we may safely assume that, if not for the time of the imagined early beginning of the Epic, at least for the time when our Bhārata took its present legendary shape, such rules were generally recognized. From the Epic itself I first draw three rules for warrior-conduct: three fundamental rules, which are so often urged that they appear to constitute the Hindu warrior's private code toward his fellows. The first is the guest-law: every guest was inviolable. The second was the law of 'not forgetting a kindness.' The third was the sacredness of a refugee, or of one that threw himself even in battle upon mercy.*

I turn now to the smaller matters of the warrior's life, the end of which must if possible come on the field of battle.†

This life is governed, nominally, by minute laws in many particulars. We see, however, that these laws do not (except in strictly religious matters) affect other than the priest to any great degree after the age of manhood is passed. We find the

(G. vii. 25) *prānasamçaye* both as 'if his life is threatened' (that is, in a momentary danger), and 'in times of distress' when understood, as it must be, in 26 (*rājanyo vaiçyākarma*). It means when in dire distress (*āpadi*) in both cases, and 25 seems to me no argument against *tadalābhe kṣatriyavṛttiḥ* in 6 (as Bühler says it is, p. lii, *Introd.*). Compare Çāṅkh. G. S. iv. 11. 15.

* For special fighting rules, see below. The prominence given to these rules of social morality does not imply that the ordinary rules may be disregarded by the warrior, but that these particular ones are specially urged, appealed to, enforced, as peculiarly characteristic of the warrior's code. A reference for each from the Mahābhārata and the Rāmāyaṇa must suffice, among many similar cases. The first law (*ātithya*), that a guest must always be hospitably received, kindly treated, and sent away unharmed, holds good even in the case of an enemy: xii. 146. 5; R. ii. 105. 50. The second law, that to forget a kindness (*kṛtaghnaḥ*) is an inexcusable crime, is declared in xii. 172. 25; 173. 20 ff.; 272. 11; R. iv. 34. 18. Theft, adultery, and suspicion of a friend are the three sins particularly reprehended in R. vi. 66. 26. The last law, of non-injury to a refugee or one that calls for mercy, is especially prominent in tales and teaching; to violate this is also an inexcusable crime: xii. 149. 19; R. v. 7. 33. Compare in the drama Candanaka's remarks on the subject, *Mṛcch.*, Acts vi. and vii.

† For 'it is a sin for a soldier to die in bed' (see below). But if he dies at home, it is the rule that his body shall be carried out (*nirharanam*), removed in a wagon (*yāna*), and burned (*dāha*) on the pyre (*çmaçāna*) with proper purifications, just like the ceremony enjoined for members of other Aryan castes who die at home: xii. 298. 38.

rules reaching for the most part back of the Epic period, and may, as said above, regard them as current laws laid down especially for the warrior-caste.

Thus, we learn that the warrior's name should foreshadow his life, indicating power or safety. The young boy-warrior should be invested from the age of six to eleven, the proper time of year being the summer; but the initiation into the caste must take place by the twenty-second year, or the man becomes an outcast, and loses his privileges as a 'twice-born' member of society.*

To distinguish himself from men of other castes, the warrior wore a hemp thread, a girdle made of a bow string,† and a staff long enough to reach the forehead (while other castes had other limitations in respect of these things).‡

Ceremonial distinctions of address also helped to establish a social difference between the warrior and the other castes, but the chief outward distinction was naturally that of dress.§ While the man of the people-caste wears a cowhide or goatskin as an upper garment, the warrior wears one of deer skin, each of course representing the animals near to his caste—agricultural and hunting. The under garment of the warrior should be of

* M. ii. 31-49, 127, 155, for this and following. Compare Oldenberg, note on Çāṅkh. G. S. ii. 1. 1, for the mystical relation between the years eleven to twenty-two and the syllables in the warrior-metre (*triṣṭubh*). Initiation, Vās. xi. 44, 72; G. i. 13; summer, Āp. i. 1. 1. 18. The rule of Āçv. G. S. (i. 15. 7) regarding the use of even and odd syllables in the names of men and women respectively, being contradicted by Epic usage (Arjuna, Janaka, Damayanti), is unquotable. Compare the later names, such as Çāṅkhana, Susandhi: the first a grandson of Āṅka (Vāyu P. ii. 26. 203, 209). The sons have sometimes the raised form of the mother's or father's name, as in Çākuntala, Vāi-rāṭa (so Gāutama and Vāsiṣṭha?), but this is usually a means of denoting the daughter, as in Drāupadi. For a very characteristic view compare Vāyu P. ii. 1. 5: 'the Manavaḥ are called Mānavaḥ when they are in the past.' A priest in the Bṛhannāradiya Purāṇa has three disyllabic and three trisyllabic wives (11. 138). The 'secret name' of the boy, known only to the parents and family priest, is alluded to B. Ā. Up. vi. 4. 26 (on marital intercourse).

† Manu, loc. cit.; Vās. xi. 59; 'muñja-grass with pieces of iron' is enjoined by Āp. i. 1. 2. 35 (that is, the priest's sort, but with iron) as an alternative.

‡ It is not universally granted to the warrior to carry any kind of staff, although this is permitted by Āçv. G. S. i. 20. 1. Most of the law-books say it shall be of banyan or acacia wood. Compare Manu, loc. cit.; G. i. 23; Vās. xi. 53, 56. The height of the staffs of other castes varies relatively, the general rule being a higher staff for a higher caste; but Çāṅkh. G. S. (ii. 1. 21) reverses this rule.

§ The dress of Northerners in general reaches from the feet to the breast, according to the Bṛhat Saṁhitā, 58. 46. Un-Aryan natives of the fourth century appear not to have been so decently clad compare Fergusson's description of the Amarāvati Tope, J. R. A. S., N. S., iii. 163. For royal robes, those of nobles, and knightly apparel, see below.

flax. Whether he should wear both at once, and, if not, which alone, is a disputed question. The cloak when worn is dyed with madder.*

The proper salutation for a warrior to give is made by extending the arm out level with the breast.†

Of social usages, we note that a priest returned home from his studies may not eat in a warrior's house, nor is the warrior a guest of a priest in his own village; but when the warrior goes visiting elsewhere, it is considered right (a pre-Epic rule!) to roast an ox for him.‡ The specially religious rules do not particularly concern us; but in the light of the days of mourning set apart for the king (see below) we may notice that the authorities differ in regard to the temporal impurity incurred by the death of a relative: the warrior being impure for twelve or eleven days according to some; fifteen, according to others.§ Kings never become impure; nor do those warriors that die in battle, since practical reasons forbid it.|| The members of the warrior-caste are allowed two legal wives, though some permit an (illegal) connection with a slave woman, which by others is strictly forbidden. In no case may this marriage be made with holy texts. Bāudhāyana remarks that men of the people and warriors are 'not particular' about their wives, and so allows the warrior three.¶ The warrior, rich or poor, stands by law so much above the man of the people and below the priest that his fines are arranged and crimes estimated by the caste of the offended party. Thus, his crime in theft is twice that of the man of the people, and only one half that of the priest; since the higher the caste the greater the sin.** The penalty for a crime against caste-order is as severe as law can make it, both for an offender of the low and for one of the high caste. These laws are chiefly concerned with the abuse of

* Vās. xi. 62, 65; Āp. i. 1. 2. 40; i. 1. 3. 1, 9, 10; Pār. G. S. ii. 5. 20; Āçv. G. S. i. 10. 11. In like manner the earth on which the warrior's house is built is, if specified at all, to be reddish in color (ib. ii. 8. 7). And later we find that the diamonds of a priest, warrior, man of the people-caste, and slave (!) are respectively white, red, sisira-flower-color, and black: see Bṛhat Saṁhitā, 70. 96; 80. 11. The warrior's house should face the second quarter, east (ib. *vāsagrāhī viprādinām udagdīgād-yāni*). Also we find that the bathing clothes are arranged according to caste: Ag. P. 258. 56.

† Āp. i. 2. 5. 16 (*uraḥsamam prasārya*).

‡ Āp. i. 6. 18. 9; Vās. iv. 8; M. iii. 110-111.

§ M. v. 83; G. xiv. 2; Vās. iv. 27. Compare V. P. iii. 11.

|| M. v. 93-94; G. xiv. 45.

¶ M. iii. 13, 14; Mbh. i. 73. 8 ff.; Bāudh. i. 8. 16. 3; 20. 14 (with B.'s note); Vās. i. 24 ff.; Āp. ii. 5. 12. 3; G. iv. 14-15. Pār. G. S. i. 4. 11. See discussion of the Epic rule in the chapter below on Women.

** M. viii. 337. Compare 375-376, 267; xi. 127; G. xxii. 14; Vās. xx. 31, for fines in adultery and abuse, and proportion to the crime of the priest. The fines in abuse vary with the caste's position.

high-caste people by the lower castes. An instance will illustrate the point. If a man of the people-caste commit adultery with a woman of the warrior-caste, the punishment is as follows: the man is burned alive in a hot fire; the woman is stripped naked, smeared with butter, and driven about the town on a white donkey.* Other more revolting punishments follow, with like transgressions in other law-books. If a warrior kills a priest, he is killed, and his property confiscated.† If, however, members of the upper castes commit adultery with a woman of the slave-caste, their most severe punishment is banishment.‡

Interesting is the fact, supported by two authorities, law and Epic, that the widows of soldiers dying on the field of battle should be given a pension.§ The soldiers are, furthermore, to receive their pay by the month (?), and in advance.||

We learn also from the Epic that a soldier captured alive becomes the servant of his captor: in the full rule, remaining a slave for one year, but not liable to compulsory fighting during that period. After the year is over, he is 'born again': that is, he is set free. Such is the Epic rule, but the legal code does not say that such a slave should be freed. On the contrary, the latter knows him only as one among seven ordinary kinds of slaves.¶

* Vās. xxi. 3-4. The same rule holds if the case is that of a warrior and a woman of the priestly caste.

† B. i. 10. 18, 19; Āp. ii. 10. 27. 16, of a slave.

‡ Āp. ii. 10. 27. 8, 17. Some of these rules, as of the time of initiation, are older than the Sūtra period: and this older Brahmanic literature occasionally touches points not always given in the law: as, for instance, the height of the grave-mound differing according to caste; the *upanayana* of the warrior coming in summer, while that of the people-caste comes in autumn: the former caste belong to Indra, the latter to Varuṇa, etc. These early rules are all collected by Weber, *Ind. Stud.*, x. 7 ff., 14, 20 ff.

§ *kaç cid dārān manuṣyānāṁ tarā rthe mṛtyum iṅṣuṣāṁ vyasanāṁ cā bhṅyapetanām bibharṣi*, ii. 5. 54: cf. xii. 86. 24. So Vās. xix. 20: *avyar-thūh striyaḥ syuh*. Compare the same rule, A. P. 224. 25.

|| Both statements belong to the middle period of the Epic: ii. 5. 59. Compare below the second part of this paper.

¶ The simplest form of the Epic rule implies the law, and reads: 'If one warrior conquers another in battle and gets him into his power and then lets him go free, he becomes to that man a 'revered person' (*guru*): that is, the freed captive must look upon him as a priest or father, and never refuse to offer him homage; the relation of 'father' on the one side implying 'slave' on the other (such is the application made in the text, ii. 38. 7). Compare R. ii. 74. 33: *yo me 'dya syāt pitā bandhur yasya dāso 'smi*. The fuller rule is given in xii. 96. 4, thus interpreted (and rightly) by the commentator: the captor should instruct his captive to say 'I am thy slave'; whether the captive consents to say this or not, the captor should, after the expiration of a year, acknowledge him to be 'a son': that is, let him go free. This rule is based on practice. So Jayadratha as captive is to be made a slave until released, iii. 272. 11. Compare iv. 33. 59, where one is obliged to repeat 'I am a slave' in order to live. It is probably an extension of this rule that makes it incumbent on captive kings to declare by

An important question arises, in reviewing these rules, in regard to the time that the ordinary warrior had to devote to his religious studies (obligatory on the twice-born), and the age at which he usually assumed arms.

Of students of the Vedas in general, from seven and a half to thirteen, eighteen, twenty-four, thirty-six, forty-eight, or even more years are demanded, till their study be perfected.*

In accordance with a practice assumed to be consonant with the spirit of such a law, we find, to take one case of many, that the Pāndus are represented as 'having studied all the Vedas and the various treatises' (on duty, etc.).† It is evident that such a rule could have obtained in its strictness only among priestly students; and we shall be antecedently disposed to think that the students of warrior- and people-caste were permitted to give up study under easier conditions, as they were easily freed from penances obligatory on priests.‡ Their lives made it necessary to allow them more freedom. Studying, sacrificing, and giving are sometimes declared to be their 'three occupations:' that is, the three common to all the twice-born;§ and such study might make them masters of the Vedas sufficiently to be able to teach, even the priest becoming their pupil in time of need: that is, when the student of the priestly caste can get no priest to instruct him (Āp. ii. 2. 4. 25); but as a positive injunction the memorizing of the three Vedas is found only as a command laid upon the king, not upon all members of his caste

signs that they are beasts of various sorts. Compare the interesting account in Bṛhannārad. P. viii. 35, where the routed Yavanas in their fear 'ate grass or leaped into the water' (*trṇāny abhaksayan*). So perhaps Nebuchadnezzar 'ate grass,' i. e. was conquered. The regular 'seven slaves' are, according to M. viii. 415, a man made captive of war, a man that earns his food by serving, a (slave) born in the house, a man purchased, a man given, a man (formerly a paternal slave and) inherited, a man made a slave as fine (debt). The native commentator will not admit here that a member of the warrior-caste may be enslaved (absurd, in the face of the Epic), and refers the 'man' to a member of the slave-caste. But the rule is evidently general, in spite of verse 412. A later code allows slaving 'in caste order': that is, permits priests to enslave warriors, and warriors to enslave men of the people (Yājñ. ii. 188). Universal rule permits a priest to enslave any loose member of the slave-caste (M. viii. 413, etc.). Pār. G. S. iii. 7 gives a curious rite for charming a slave so that he shall not run away.

* M. iii. 1.; B. i. 2. 3. 1 ff. (more than forty-eight years, if the Atharva-Veda be included); Āp. i. 1. 2. 12 ff.; Āçv. G. S. i. 22. 3, etc.

† i. 1. 124 (122), *te 'dhītya nikhilān vedān çāstrāni vividhāni ca*.

‡ G. ix. 1, Bühler's note.

§ Vās. ii. 15; Āp. ii. 5. 10. 6. These stand in contradistinction to the three peculiar to the priest, teaching, making sacrifices for others, and receiving gifts; which three, with the 'six immunities' of the priest (immunity from corporal punishment, imprisonment, fines, exile, reviling, and expulsion, G. viii. 13), constitute the practical difference in the lives of the two upper castes. To the 'three occupations' of the warrior comes also 'protection' as his peculiar duty.

(G. xi. 3; M. vii. 43). Now how is it in the Epic story? We find in the great war that a number of very young knights were engaged in battle; that Arjuna's son, Abhimanyu, who was but sixteen years old (i. 67. 118), had already married, and was looked upon as a fully equipped knight. We see that the Pāndus and Kurus themselves in the early part of the tale were trained, not in the holy writings, but in the 'Veda of the bow;' and when a preceptor was sought for them, he was desired 'to teach them skill,' not Veda; and the result of these instructions in 'bow and arms of all sorts' was that the young Kurus and Pāndus 'soon became expert in every weapon.*' We have in the Rāmāyaṇa also a proof that the sixteenth year† was the end of boyhood, and that the young warrior was ordinarily proficient in arms by that time. For when the chief hero of this poem is about to be taken away from home, his father exclaims 'he is as yet but a boy (*bālu*); he is not yet sixteen, and has not acquired the use of arms:' a passage showing clearly that the age of sixteen was the terminus of boyhood, and that a young man (*yuvan*) of that age was expected to be ready for war.‡ How are we to interpret this? The science of arms required years of patient study. Is it conceivable that a boy otherwise occupied in physical training should by the age of sixteen be master of the special skill that gave him power on the battlefield, and at the same time have found time to commit to memory even one Vedic collection? It is clear that the law is later than the Epic on this point; and even there such knowledge is only to be assumed as desirable for the warrior in general. The active young knight and busy trader must have performed their duties toward the Veda in a very perfunctory way, if at all. The more reasonable supposition seems to me to be that, while

* In the long story of the Pāndus' boyhood, we find the youths half grown up and in need of a teacher. The Kurus too were idle and wicked, and it was necessary to set them to study. So Gāutama and Droṇa became their instructors. The reputation of each was based on his superiority in handling weapons. It was for this reason that, 'desiring a Guru to teach the boys skill' (*gururñ cikṣārtham anviṣya*, i. 129. 42), Gāutama was appointed; and Droṇa's efforts as a teacher were wholly directed to this aim; for 'he taught them the Veda of the bow' (*cikṣa-yāmāsa ca droṇo dhanurvedam*) and treatises, so that they became 'skilled in weapons' (*sarvaśāstraviçārādāḥ*: i. 130. 21 ff., 29-30). This also is the meaning of the hendyadis in the short story of the Pāndus, where the boys begin to learn arms and 'not long after became learned in the Veda and bow' (*na cirād eva vidvāṅso vede dhanuṣi cā bhavan*: i. 61. 6).

† This is usually the age when the *godāna* ceremony (giving the family cut to the hair) was performed: compare e. g. Āçv. G. S. i. 18. 2.

‡ *ūnaśoḍaçaavarṣo 'yam akṛtāstrac ca me sutah*: R. i. 23. 2; iii. 42. 23. Compare for sixteen as the general time of boyhood's ending (always thus by formal law) Mbh. xiv. 56. 22. The boy becomes legally responsible for his acts with his twelfth year: i. 108. 14.

in the early age there was no let to the desire of a young warrior if he wished to be Veda-learned, the conventional practices of his caste nevertheless constrained most of his attention to arms, and in his eight months of schooling (if even this, the later term of yearly study, be allowed for so early a time) he probably did nothing more than 'go over' the text of the Veda.* The memorizing of even one Vedic collection it is absurd to believe could have been attempted by such young warriors as those the Epic depicts. The practice must have been peculiar to the man of leisure, the priest. Indeed, it is not to this caste as a whole that the Epic ascribes such knowledge; but the king alone is, theoretically, acquainted with the three-fold Veda. A sort of commutation of learning seems to be implied in the Sūtra period; for we read that the student, instead of learning all, may even as an alternative to the *anuvāka* (itself a concession) recite only 'as much as the Gūru thinks best;' or 'only the first and last hymn of each seer;' or 'at the beginning of each hymn just one verse.†

But if we examine closely the education of the royal princes, we shall be tempted to doubt if even royal personages learned much more than the art of arms, and the general 'Veda-of-the-bow.' The seer, for example, who quizzes a king on the state of his kingdom and his ability, asks whether that king possesses the Veda and its priest, wives and their fruit, money and its fruit, revelation and its fruit; and, when the puzzled king asks what that means, explains that the Veda and fruit thereof means sacrifice. But when the same seer really wishes to know what the king has studied, he asks him whether he comprehends

* One more quotation would indicate the age of sixteen as the normal age for boys to be knighted and allowed to enter the battle-field. Droṇa, just before his death, is described as raging about the battle-field eighty-five years old, 'yet acting in battle as if he were but sixteen' (*raṇe paryacarad droṇo vṛddhaḥ ṣoḍaḥavarsavat* : vii. 192. 65; 193. 43).

† Cāṅkh. ii. 7. 22 ff. The twenty-second verse alone would give any liberty of shortening (*yāvad vā gurur manyeta*). Oldenberg, translating this, notes the consequence, and calls the plan an 'abridged method, by which students who had not the intention of becoming Vedic scholars, and probably chiefly students of the Kshatriya and Vaiçya caste, could fulfil their duty of learning the Veda.' In xii. 132. 20 (21 = M. viii. 44), we are told that the *dharma-vid*, or king erudite in rules of duty, must know the 'four-fold system of right.' This is best explained by another verse in the same book (xii. 59. 33), where the three-fold (Veda) is one; logic, two; agricultural occupations (including trading, etc.), three; and the system of punishment, four (compare, to the first, the commentator, *trayī cā 'nvīkṣikī cāi 'va vārtā ca daṇḍanītiç ca*). The age of manhood is reached at sixteen. The statement in the Brhat Saṁhitā that a man does not reach his full weight and size till he is twenty-five proves nothing to the contrary (*puruṣaḥ khalu pañcaviṅṣatībhīr abdhāir arhatī mānonmānam*, B. S. 68. 107), though it is rather surprising. In the Rāmāyaṇasāra the hero's age at marriage is fifteen; his bride's, six; compare Rājendralāla Mitra's Notices, No. 2288.

the 'aphorisms on horses, on elephants, and on chariots;' the only Veda here mentioned being the 'Veda-of-the-bow.' The subjects assumed as real objects of royal study are these aphorisms, with further collections of the same sort in regard to poison, city-life, and military machines; for these, with the knowledge of magical weapons and sorcery, constitute the practical erudition of the king.* With such subjects as these alone, at any rate, the royal personages seem familiar; and even Yudhishthira, a lay-figure upon which didactic rags are exhibited, appears less a sage than an ignoramus in regard to all he ought to have known had he studied as formally assumed.†

It is interesting to compare in detail the account given of young Abhimanyu, a model prince. We are told in a general way that the sons of the Pāndus 'went over the Veda, and acquired (the use of) the bow and arrow;' and that the family priest, Dhāumya, saw to the completion of the proper religious ceremonies connected with their birth, etc. Preceding this general statement, however, we have an exact list of the branches of study pursued by Abhimanyu (to the younger generation what his father Arjuna is to the older). 'The Veda-of-the-bow, in four divisions and ten branches,‡ he, the Vedaknower, learned complete from Arjuna, both the divine (weapons) and the human. Then Arjuna taught him the special points in the knowledge of different weapons, in dexterity of use, and in all arts; and both in science and practice made him equal unto himself; and he rejoiced as he beheld him.'

This is all the education that is especially recorded of Abhimanyu, except what Veda-study is generally implied in the following verse quoted above.§ The word Veda in the Epic is

* *kaccit sūtrāṇi sarvāṇi grhṇāsi . . hastisūtrācvasūtrāṇi rathasūtrāṇi . . ; kaccit abhyasyate samyag grhe te . . dhanurvedasya sūtram yantrasūtram ca nāgaram; kaccit astrāṇi sarvāṇi . . brahmadanḍaḥ ca viśayogās tathā sarve viditāḥ*: ii. 5. 110, 120 ff.

† The assumption made in the second act of Utt. Rāmācar. that the studies in archery, etc., are completed by the age of ten, and the young prince is then invested and begins to study the Veda, is a complete inversion of the truth. Compare the also late version of a prince's education in A. P. 224. 1 ff.

‡ Therefore sometimes plural, as in a case apropos, where Daçaratha's sons are learned 'in the Vedas and their mysteries, and in the Vedas-of-the bow.' In this case Rāma and the rest do without doubt learn the Veda and take their task in studentship, according to the poet. They are *vedeṣu sarahasyeṣu dhanurvedeṣu pāragāḥ* and *caritabrahmacaryāḥ* (iii. 277. 4 ff.). Such *snātakāḥ* as these young princes may be the *vrata-snātakāḥ* of Pār. G. S. ii. 5. 34: that is, an admitted class of students whose vow ends before they accomplish their study; but the *snātaka* generally implies only a priest, as the rules for a *snātaka* show, by totally excluding other castes: compare Çāṅkh. G. S. iv. 11. 15, where *snātaka* must mean priest.

§ i. 221. 72 ff. and 88. In the words (72 ff.) *dhanurvedam arjunād veda vedajñāḥ*, only the Veda mentioned can be fairly understood, especially

not strictly applied in any circumstances. The Mahābhārata itself is called the fifth Veda (i. 63. 89: compare v. 43. 41). With that of Abhimanyu we may compare the education recommended to the sons of kings in the thirteenth book: 'Knowledge, the family-laws, the Veda-of-the-bow, the Veda, elephant-riding, horseback-riding, chariot-driving, rules of propriety, word-science, music and the fine arts, legends and tales.' Compare also the education of Drupada's supposed son, who was taught 'drawing and other arts and the bow and arrow.*'

One word on the warrior as a man, before we turn to the king. I do not know whether we may permit ourselves a judgment in respect of the estimated value of the warrior's life by referring to the compensation exacted from him that takes such a life; but it is worth recording that, according to formal law, restitution should be made to the amount of a thousand cows (and a bull) if one kill a member of the warrior-caste. Comparing this with the valuation set on the life of a man of the

as Arjuna of course is not represented as an instructor in spiritual knowledge (*kriyāḥ* means military arts; so *āgame ca prayoge ca*, current information and practice, with the commentator).

* xiii. 104. 125, 146 ff.; v. 189. 1 ff. Compare with the last R. i. 80. 27 ff. After *dhanurvede ca vede ca nitiçāstreṣu*, and the art (*çikṣā*) of elephants and cars, we have *ālekhye, lekhye, laṅghane, plavane*; and 80. 4, *lekhyasamkhyāvid* (cf. R. ii. 2. 6) with *gandharvavidyā, nyāya, nitiçāstrāṇi*, etc. The mass of received literature which a sage may know often groups Vedas, rules, and legends with many other rubrics; but it is impossible to assert to what time these lists belong, and they are consequently of little value for the early usage. As an example, we find in ii. 11. 25 the *āyurvedo 'stāngo (dehavān*, followed by, 32 ff.) the *ṛgvedaḥ, sāmavedaḥ, yajurvedaḥ, atharvavedaḥ; sarvaçāstrāṇi, itihāsāḥ, upavedaḥ, vedāṅgāni, vāṇi saptavidhā, sāmāni, stutiçāstrāṇi (?)*, *gāthā vividhāḥ, bhāṣyāṇi tarkayuktāni, nāṭakāḥ, kāvyāḥ, kathākhyāyikā (kārīkāḥ)*—that is, even a kind of dramatic literature and commentaries. The *kathāḥ* are either *kathā divyāḥ* (xv. 29. 14 etc.) or of war (see below). The passage quoted from the thirteenth book enjoins *çabdaçāstram* and *kalāḥ* along with *yuktiçāstram* (grammar, the fine arts, and etiquette), and so represents perhaps a later list than that from the second book; both, however, showing that the line of education was away from the Veda, and that what time the princes had was given to culture, not to religion. I take it that, as the old royal personal fighting days ended—that is, as the princes were more and more expected to be figure-heads in war, and drove into battle to watch it on an elephant's back rather than to lead it in a war-car—their older bow- and sword-training was given up; but the time so gained was spent in more effeminate, certainly not more dryly intellectual occupations. Perhaps the rather late Virāṭa, with the cowardly little crown-prince, shows us the step between. As to the order of the Vedas, we find generally that the Atharvan stands last; but compare xii. 342. 8: *ṛgvede sayajurvede tathāi 'rā 'tharvasāmasu*; and xiii. 17. 91-92: *atharvaçirṣaḥ sāmāsya ṛksahasrāmitekṣamaḥ, yajuhpādabhujo guhyāḥ* (compare xii. 343. 99-100, *pañcakalpaṃ atharvānam kṛtyābhāḥ paribrūhitam, kalpayanti hi nām viprā atharvānavidāḥ*; and xiii. 14. 309, *atharvaḥ*). The five Vedas are jingled together in v. 43. 41 ff., 52 (*yo veda vedān na sa veda vedyam*, etc.). The Çatapatha-Brāhmaṇa is mentioned by name only in xii. (343. 13 etc.).

people by the same norm, we find that the relative worth of the latter was one tenth that of the warrior, one hundred cows here sufficing. This law is, as Bühler has pointed out, particularly interesting from a pan-Aryan point of view; for the receivers of the indemnity are left doubtful. Only one of the law-books (Bāudhāyana) specifies to whom the cattle are to be paid, and this work says that the restitution shall be made to the king. With this the native commentators are not in accord, and nothing in Hindu law demands such an interpretation. The priestly commentators modestly propose by preference that the kine should be paid to the priests; but Govinda, one of them, sanctions what must be the right opinion: namely, that the cows shall be paid to the relations of the murdered man.*

B. ROYALTY.

1. *The King*.—We get no clear picture of the life of the warrior in peace till we come to the king. Here we are first burdened with a superfluity of epigram and formal advice. Out of this mass and the history of the story we may get a fair picture of the early Aryan monarch.†

As a matter of course, the king is presented, when moral teaching is inculcated in the Epic, with a model little different from that extractable from any other didactic code. It is of passing interest to compare the personality thus predicated for 'a good king' with what we actually find, but the comparison must be drawn from but a fragment of the rich supply of injunctions found in the Epic.

Take the 'fatherly love' alluded to above: there is not a case recorded of the real characters of the Epic where a king exhibits aught but selfish greed, passionate weakness, and regardless fulfilment of his own desires. Not only with the Kurus, who are represented as naturally sinful, but with the so-called pure Pāndus, each follows the desires of the moment, and only religious interpolations soften the characters. It is too much to expect that such chiefs as these concerned themselves much with the

* B. i. 10. 19. 1 (paid to the king); Āp. i. 9. 24. 1 (Bühler's note here suggests the right interpretation); M. xi. 128 (latest form, the case restricted to accidental death at the hands of a priest). Compare Tacitus, Germania, 21: "Luitur homicidium certo armentorum ac pecorum numero, recipitque satisfactionem universa domus." (Since this writing, Roth has shown the earliest form of such atonement in Vedic allusions, Z. D. M. G. xli. 672).

† *Rājan* (nom. *rājā*, rex); sometimes *rājaputra* is the equivalent of *rājan*. The latter appears often in composition as *rāja*; less often (generally as divinities), as *rāj*: e. g. *pretarājah*, passim; *pretarāj*, viii. 14. 17. Other titles are chiefly poetical (see above, p. 77, note); but the common (*viçpatih*) *viçampatih* 'lord of the people' keeps the lost sense of people (for those that are governed), not that of people-caste.

lives of their subjects. The latter were 'protected,' because the former were always fighting and winning battles, while the tale of Nandinī, and other distorted echoes, show in legend the real and overbearing insolence of the kings toward their subjects, even those of priestly caste. But in theory the king must be the embodiment not of protection alone, but of love and care as well. And analogous to the old-time punning derivation of *putra* (son) from the *put*-hell and the idea of saving (*trā*), whereby the son is a 'saver from hell,' we find that the 'warrior' (*kṣatriya*) is derived from two components meaning 'he saves from destruction,'* through being a very storm-god to the foes of the kingdom,† as opposed to the universal benevolence of the priest. It is from this reason that the Epic dares to forge from Manu the bold statement that a king is equal to ten wise priests (i. 41. 27-31), a statement as un-Manu-like in tone as possible. The weighty reason given for a desirable perfection in the character of the king is that the realm will be like him: as is the king, so is his people.‡ This theory is carried out in the discussion more than once opened as to whether, of the four ages known to man, the particular age in which a king lives excuse his character, or the king himself be responsible for his age; since, if he is sinful, comes the 'dark age'; if good, the 'white and perfect age' is man's.§ These 'ages' are brought about by the king's personal conduct and his restraint of vice among his subjects, for he is like the Restrainer, the god of punishment,|| in giving force to the laws of morality. Indicative of the whole tone of Hindu life is the fact that these 'royal laws' set for a king are an application of the earliest extant formulated laws: the royal laws (*rāja-dharma*) being in no sense *leges regiae* (for we have scarcely an instance of a general law formulated by the kingly power), but simply laws made by the har-

* *kṣatād yo vāi trāyati 'ti sa tasmāt kṣatriyaḥ smṛtaḥ*, xii. 29. 138; 59. 126; cf. v. 182. 31; though elsewhere interpreted as 'the destroyer'! The same derivation is found in B. Ā. Up. v. 13. 4: the warrior (*kṣatriya*) is life; life saves (*trāyate*) from hurt (*kṣaṇitoh*), etc.

† *āndro rājanya ucyate . . . pariniṣṭhītakāryaḥ tu nṛpatīḥ pariṣālanāt*, xii. 60. 20; *āndro dharmāḥ kṣatriyānām brāhmaṇānām āthā 'gnīkaḥ*, xii. 141. 64: compare ib. 60. 12, *māitro brāhmaṇa ucyate*, and often.

‡ *yādṛṣo rājā tādṛṣo janah*, xi. 8. 32.

§ On the king's connection with the ages, cf. xii. 91. 6, and v. 132. 12 ff.: 'The king is fitted for godhead or for hell according as he practices virtue or vice; . . . the king makes the age; . . . his reward is heaven if he gives man the perfect *kṛta*-age; if he gives the evil *kali*-age, he goes to hell for a thousand years.' An incorporation of two bad ages at once is found in xv. 31. 10: 'know that Duryodhana is the *kali*-age, Çakuni is the *dvāpara*-age:' that is to say, Çakuni is not quite so sinful as Duryodhana.

|| *yamayann asato yamaḥ*, xii. 139. 103 ff., 5 (with likeness to other gods).

dening of usage into rigid rule, extending very gradually from simple moral saws to rules of conduct, and thence slowly broadening, till the term includes social laws, and laws of administration. When a guide is sought, the sayings of the sage forefather Manu are quoted, who gradually became invested with a law-book that superseded the perhaps older treatise of the united sages Brihaspati and Uçanas, the first that appear to have devoted themselves particularly to the royal needs.* We must therefore deny the truth of the Epic assertion that the royal laws antedate all other regulations of Hindu law.†

These 'laws' may be divided into two classes, embracing first general moral and social duties, and secondly special duties involved in the royal 'objects of consideration.' I examine each briefly. And first the tiresome rules of morality.

2. *Royal Duties.*—How completely the savage old kings of the first poem have become demoralized into priestly subjects is seen by a glance at the first of these classes. Victory is now a question of right and wrong: 'where right is, there is victory';‡ an idea to be later extended on the theological side, and to give us 'where Vishnu is, there is victory' (see below); and paralleled by the repinings of the victorious king, who says that even the perusal of the treatises on knowledge (*buddhigāstra*) is of little moment when one comes to die; but 'let a man be purified in heart, let his folks and ministers reverence his acts, and he is a king, the best of kings'; for 'it is better for a man that he even kill an Aryan than that he rule by overstepping the right' (xii. 25. 6 ff. [on *kāla*], and iii. 34. 15). The king's aim should be to seek first his realm's happiness, and then his own (i. 222. 12, etc.). Compare with this the remark addressed to a king: 'the tears of them that weep for thy wrong-ruling shall slay thee and thy herds; . . . but where the tear of misery is turned into joy, there is a king's duty nobly done.' But to seek the happiness of the state he must first learn to control himself, 'he must overcome love and wrath and subdue his passions' (v. 129. 33-39). This the real kings of the Epic never did. It is, however, in accordance with such general admonitions that we find the duties soon specialized, classified, and arranged in groups. 'Eight virtues

* *bṛhaspatyuçanaḥproktāir nayāir dhāryanti mānavāḥ*: iii. 150. 29.

† 'The royal laws were first produced by God; after these the subsidiary duties of the other castes; all laws depend on the royal laws': xii. 64. 21; 64. 7; 61. 1; 'all duties exist through the royal laws': and, just before this, 'depend on the royal laws.'

‡ *yato dharmas tato jayah*, xi. 14. 9. cf. 12. But, in i. 186. 19, 'right follows after power'! (*balam dharmo nuvartate*). In xii. 199. 70, the version is *yato dharmas tataḥ satyam*, etc. Compare with the following, Vāyu P. ii. 30. 80: *rajir yatas tato dharmo yato dharmas tato jayah*.

cause a man to shine: wisdom, good family, self-restraint, knowledge of revelation, courage, not talking too-much, generosity, thankfulness'; though in the same passage we learn that 'when a king does good to a man, this virtue outshines all virtues'* (v. 35. 52; 37. 32 ff.). On the whole, we find the groups of eight commandments more common, but ten commandments are also made to form a concise exposition of moral law. 'The eight-fold path of duty' has become proverbial,† but varies often: consisting, for instance, of the above, or of sacrifice, generosity, study, penance, self-restraint, truth, uprightness, harmlessness; and varying (in place of the last two) with 'mercy, and lack of greed.‡ An imprecation in a later book on those that have 'broken the ten commandments,' without specifying them, would indicate that the ten had become also a formal group, as in Manu.§ In answer to perpetual questions in regard to duty, Mārkaṇḍeya says to the king: 'Be merciful, be kind, be fond, be not sulky, be truthful, mild, generous, glad to protect the people; do right, avoid wrong; worship the fathers and the gods; practice all this in deed, in thought, and in word' (iii. 191. 23 ff.). The contrast between such a rule and this, for example: 'Just this alone is a king's duty—to bear a rod, to be fierce, to protect' (i. 11. 17), forms one of the questions most vexing to the sages. Pages might be taken from the harping on this theme alone: what proportion exists between a righteous wrath and kingly mercy? ¶ This and the constant injunctions of purity ¶¶ form the staple of these

* xii. 91. 6 ff., ib. 20: cf. 38; finally the usual comparison with Yama, 44, 56; a summary of morals in 52-53. Compare xii. 361.9: 'the king that does not wipe away the tears of the conquered is as sinful as the slayer of a priest.' Compare also ii. 5. 124.

† *mārgo dharmasyā 'śtavidhaḥ*: v. 35. 54, 56.

‡ ib.; the ten in 59.

§ *daṣḍadharmagatāḥ*: the king may confiscate their property, xii. 69. 26: cf. 59. 59-60; M. vii. 47-50; the lists may be modified by Buddhistic influence. Both 'the ten' and 'the eight' are known to the Purāṇas, e. g. in Vāyu P. i. 59. 48.

¶ cf. i. 3. 176: to protect is a king's 'highest duty'; but no absolute 'highest duty' is given. In iii. 150. 37 it is protection; in ii. 22. 5 it is to do good; in iii. 183. 16 ff. it is penance; in iii. 4. 7 it is contentment, etc. Whatever duty fills the mind is for the moment paramount. Even 'the realm' is the 'chief duty,' iii. 52. 15; cf. v. 34. 29-31. Most wearisome are the droning iterations in regard to protection, whereby the poet means not from outside foes alone but from the king's own greed; and it is even recommended that the king should not set his heart on property gained by a foe's downfall, *arer pratipātēna*, v. (39. 77, *pravi*), C. 1522. The idea of 'word, thought, and deed' is sometimes extended: 'in four ways, by eye, mind, voice, and deed, let a king delight his people'; v. 34. 25: cf. iii. 50. 9; 157. 18; 41. 20; he must be a father to his people: iii. 23. 7; i. 121. 15; 100. 18; xii. 57. 83; xiii. 61. 18; he is the warrior's Guru: i. 195. 12.

¶¶ iii. 119. 8; let him be pure; as in xii. 58 and 59, the formal duties are preceded by a recommendation of purity.

moral commonplaces. One example may suffice: 'Through right the king rules; through this he keeps his subjects in order; by means of right he beholds all, when he is furnished with spies.* The king is the savior of the castes; by witchcraft and wrong king's duties are destroyed; let the king dispense right through no love or hate; he should not be too devoted to a friend, nor too severe to a foe; he should not harm right; he should not return evil for evil,' etc. etc.† But, of all that a king should not do (for negative and positive are always treated in the same category), general consent has selected four sins, common to man but particularly reprehensible in a king: these, according to the usual formula, are 'women, dice, hunting, and drinking.'‡

The only part of this formal morality that can particularly interest us is the vices it represents. Didactic strictures, form and contents, are foregone conclusions, given civilization and love for platitudes. These truths of social intercourse were almost as trite in the didactic Epic as they are to-day to us. A man should not lie, steal, murder, drink, gamble, be incontinent in passion, in sleep, in food, or in other provocatives to low living. Especially a king, since he is the norm of morals. All this is dull repetition; for when we once find out on what intellectual level we are standing, we can foretell the comple-

* 'Spies are a king's eyes': v. 34. 34 (see below).

† iii. 207. 26 ff. Right (*dharma*) is now synonymous with law, now with duty.

‡ iii. 13. 7; refers particularly to the warrior-caste: cf. M. vii. 50; this is also shown by 'they say that kings have these four vices, hunting, drink, dice, over-indulgence in sensuality (*grāmye, strībhoge*, N.), ii. 68. 20: cf. xii. 59. 60, the Manu verse. This is the antiquer form, but is kept till the latest time (cf. xiii. 157. 33), although parallel stands a fuller list, 'women, dice, hunting, drinking, brutality in voice or deed, and wanton destruction of property' (v. 33. 91); and elsewhere the 'six sins' are alluded to (i. 49. 16, *śaḍvargajin mahābuddhiḥ*: compare ii. 5. 125, *śaḍanarthāḥ*) as an understood group; but four is the more popular division, so again xii. 289. 26; and even five are given (in the metaphysical section, xii. 302. 55-56) as a group of inborn vices, desire, wrath, fear, sleep, *çvāsa* ('breathing' B. R., or gluttony). The Rāmāyaṇa gives 'twelve faults': seven vices, of which 'four are from love,' as in Manu. Compare R. ii. 109. 66; iii. 13. 3 ff. The instability of the group's members is greater than its number; for the division into four often remains with different definitions, as 'four let a king avoid, council with fools, pokes, wrathful men, and pilgrims' (v. 33. 69, 'and pilgrims', *cāraṇaiç ca*; or *ca-araṇaiç ca*; or *açanañi*; while for *rabhasañi* read *alaçañi*, N.). Ignorance, as 'something childish,' is of course everywhere reprehended; what the king had to learn has been discussed above; *pāugaṇḍa*, xii. 90. 29, is the name given to kingly ignorance. The whole of this section treats of *dharma* (15 = M. viii. 16). Such lists are also Puranic in tone. Compare the *śaḍguṇya*, Ag. P. 233. 17; the *śaḍvarga* (vices), ib. 237. 7; the *saptāṅgaṃ rāḡyam*, ib. 238. 1; and *aṣṭavarga* (duties), ib. 45; the *vyasanāni* of kings, ib. 240. 26 ff. In general these Puranic lists are taken from the earlier literature, however, and offer no occasion for remark.

mentary verses as soon as the poetic sermon begins. But how is it in the real Epic? Let us look to the vices as portrayed, and come nearer to life.

If it be true that vices most rebuked by a people's law are vices most loved by that people, then women and drink were the chief stumbling-blocks of the Hindus.* As the king was allowed a harem unlimited in extent, I need only say that it is well-nigh impossible to disentangle new and old in the Epic material on the royal privileges and deprivations in this particular. As illegitimate children were regarded as a matter of course, and even the priestly saints, as legends tell, were prone to seduce blameless girls, the restrictions of the law may be held to be mainly for practical purposes. Mixture of caste was regarded as an evil. Too great carelessness with women would result in the evil. Therefore it is best not to indulge in sensual pleasures of this kind indiscriminately. Moreover, is it injurious. But every town has its hall for the dancing-girls (*nartanāgāra*), and they and the music-girls of the gaming hall are chiefly prostitutes; though the palace girls are said to 'dance by day and go home at night.' Women are provided for noble and royal guests when they come to spend the night, and are even furnished to the priests. The number of wives a knight had depended on his means. Purity was recommended to students of the Veda and the great ascetics. The military caste was not corrupt, or, perhaps, especially given to sensuality; but it knew nothing of the practice of chastity, except as a student's discipline. Occasionally a member of a royal house is represented as becoming an ascetic in this particular, but he is a wonder to all men.†

* Strabo says that Megasthenes reports frugality, honesty, and temperance among the Hindus, but he seems to recognize their common custom of drinking. In the same fragment he denies to the Hindu written laws and employment of witnesses (Fr. xv).

† The dancing hall (iv. 22. 16) is here a part of the king's house, but a separate building. Prostitution was a respectable profession, and, if hereditary, blameless; only men living on their wives' beauty or on their own were scorned. Idyls like the Nala-tale and Sāvitrī-story show us an ideal decency in men that reflects great art or a simplicity anterior to anything else preserved in the Epic. The Epic's chief and ideal hero was famous for his exploits and gallantry. Quite peculiar is the king in i. 44. 9, who 'having obtained a wife set not his heart on other women' (*tām prāpya nā 'nyanārīṣu mano dadhe*). The Epic heroes in general are not lewd at all, but natural; and no attempt is made to hide their amours and infidelities. One woman, who has committed adultery with her friend's husband, calmly remarks: 'In that your husband was chosen by you, he was thereby chosen by me; for legally a friend's husband is (the same as one's own) husband, my beauty' (*yadā tvayā vrto bhartā vrta eva tadā mayā, sakhībhartā hi dharmeṇa bhartā bhavati ṣobhane*; i. 83. 21). It is right to add, however, that her friend did not see the matter in that light. Purity is not a matter of principle, but of ascetic rule and statute law; intended to torment a man on the one hand, and to keep his hands off his neighbor's goods (women) on the other.

Hunting is reprehended in the same way that sensuality is. The law frowns on it, but it is one of the favorite amusements of the Epic kings and heroes. The later doctrine of non-cruelty to animals made the priests disparage the art, but it always flourished. Pāṇḍu himself (the genuineness of the story is not important) is spoken of as a great hunter. We need not wait for the drama to show us the king with a large retinue rushing afield for sport with the deer. In fact, if we do wait, we find far less love of real hunting than in the Epic, though the dramatic heroes have a decently sporting-like spirit (compare the verses apropos in the second act of *Çakuntalā*; and in general from the dramatic period note that meat is given to a guest, Utt. *Rāmācar.* Act iv.; and hunting everywhere implied, though it is stated that the death of animals is not allowed in a good city, *Mṛch.* Act viii.). The priestly, perhaps Buddhistic, theory of protection to animals is not compatible with the real life of the Epic. 'As to the habit of killing animals, that custom is of course allowed by the custom of killing enemies' (i. 118. 12). The next verse declares that the slaughter of animals is a right of the king, supporting the statement by an allusion to *Agastya* (compare *Ag. P.* 240. 40). We find that after hunting they eat the carcass, as in the characteristic story of *Dushyanta* (i. 69. 21). A king 'firm in virtue and vowed to hunting' is elsewhere spoken of as possessing two good qualities.* The king usually hunts with a train: 'They all went out a-hunting in their chariots.'† But sometimes the king goes out alone with one horse.‡

Not only killing deer, but eating meat, later a sin, is commonly indulged in. One king sends as a present 'a great deal of meat' (*māṅsam bahv ca paçavam*); and, at a certain wedding-feast, 'they killed all sorts of wild game and pure domestic animals, and brought (to the feast) a quantity of intoxicating liquor.'§

* i. 63. 1: *rājā dharmanityaḥ . . . babhūva, mṛgayāṁ gantum sadā dhṛtavrataḥ*. *Dushyanta* kills tigers with a sword (above). The hunt is usually for deer; but in *Varāha P.* vi. 21 a king goes out with a train 'to kill tigers especially' (*çvāpadāni*). Lion-hunting with dogs, attested by *Aelian* and *Strabo* (cf. *Ktesias*, I. S, Ind. Ant. X) is indicated by *Mbh.* ii. 40. 7, 'like dogs about a lion.'

† i. 132. 36-8: *rathāir viniryayukḥ sarve mṛgayām*. The 'fool dog' (*çvā . . . mūḍhaḥ*) appears here to have been an adventitious companion of the hunting party.

‡ When he usually meets a girl whom he seduces, persuading her that connubial union is best without religious rites. Compare i. 171. 21 ff. Other hunts are recorded in i. 221. 64 ff.; iii. 36. 45, etc. In the latter case the arrows are expressly stated to be free from poison.

§ iii. 75. 11, and iv. 72. 26-28 (*uccāvacaṁ mṛgāñ jaghnur medhyāṅç ca caṭaçaḥ paçūn* (to eat, as context shows); also *surām āireyapānāni*). Village or domestic animals (opposed to the tiger etc. of the forest) are

I may add the exquisitely sober tale of the man who had to sell meat. There was a worthy man that had inherited a slaughter-house (*sūnā*) from his father. He was visited by a priest. The heir to butcherhood sat in the 'middle of the slaughter-house selling meat (venison, buffalo meat, and boar's meat), and there was such a crowd of buyers about him that the priest had to stand some time before he was seen. When gently reproved for engaging in such a sad business,* the worthy butcher earnestly replied: 'I do indeed sell meat, but I do not eat it, and do not kill the animals. This is my inherited occupation. Therefore it is right for me to practice it. In fact, if I did not, I should do wrong.' The tale well illustrates several phases of Hindu thought. The crowd buying of course bought to eat.†

Even a priest may be guilty of hunting, and presumably of eating animals, if I may quote another tale in the pseudo-Epic (xii. 168. 29 ff. to 172. 25), where we read of a 'priest of the middle district,' who went begging among the barbarians of the north country (*udīcyām dīṣi mleccheṣu*). He shortly became no better than a Dasyu (northern barbarian) or wild robber. But by and bye another priest came up to the same county, and found him armed with bow and arrows and covered with blood. Being heartily reproved for his bad ways, the first priest left and went to sea to make money by trading, since 'he was poor and did not know the Veda,' and had set his soul on making money. His course is not held up for our edification, however.‡

And so (with vices as with moral saws, to show not all cases, but examples) we come to the next great vice, drinking. We

the cow, goat, man, sheep, horse, ass, and mule (Vāyu P. i. 9. 42). *mṛga* is a generic term for game; thus the tiger is the king of *mṛgas*: e. g. A. P. 19. 27.

* The priestly law tries to impress the sin of eating meat by a pun—'Me-eat shall he in the next life whose meat I eat here' (Lanman to Manu v. 55: cf. Mbh. xiii. 116. 35; the same pun in *mām dhāsyati* = Māndhātā, iii. 126. 30). The Vāyu Purāṇa also gives the usual *māṃsasya māṃsātvaṃ*, ii. 26. 23.

† iii. 207. 10 ff. The Varāha P., relating also a funny story of Dharmavyādha, makes him appear very angry at the insinuation of his son-in-law's sister that he is a meat-eater. He says he does eat meat, but he kills only one animal (*paṇu*) a day, and will not be called a *jīvahantar*, retorting: *pācayitvā svayaṃ cāi 'va kasmāt tvam nā 'dya bhūñjase*: Var. P. viii. 25 and 28. In Mbh. iii. 208. 9 Rantideva kills a large number of cows every day to be eaten. See Indo-Aryans, i. 426, where this verse is quoted.

‡ Eating meat of kine is forbidden, but the earlier law allowed it. In the ceremony for the dead, *gavya* may be interpreted 'beef' in V. P. iii. 16. 1, but (comparing M.) is probably 'cow's milk' (compare Wilson's note). Vās. iv. 8: *brāhmaṇāya vā rājanyāya vā 'bhyāgatāya mahokṣāṇam . . pacet*. At the *madhuparka* ceremony meat is always allowed (Çāṅkh. G. S. ii. 16. 1, from Manu, as Vās. iv. 5-6; M. v. 41).

need not go to the Harivaṅṣa to find all the forbidden pleasures indulged in. • Men and women drink freely; and only in didactic portions are such practices decried. They drank at the wedding mentioned above the worst sort of distilled liquors. There were many kinds of simple wines and distilled drinks, different for men and women, since the women prefer a sweeter sort than the men.* Intoxicating liquors were used on all festal occasions. A king gives a dinner to the priests, and many women come and eat and drink 'just as they like.' A grand festival is held, and men and women go out with dance and music and drink. The chief hero gets completely intoxicated (*kṣība*). Again, the royal family in another town make a great river picnic. Here also they have music of harp and flute and tambourine. They dance and they sing. The women grow very gay. They begin to get drunk. They 'reel from drunkenness;' they 'give away their jewels and their garments; play in the woods and run into the water; begin to laugh and sing and jeer and quarrel, and tell each other secrets.† When a city is about to be besieged, no drinking and dancing is permitted; the dancing girls are turned out, and drink is forbidden.‡ Krishna and Arjuna both sit on their seats in an intoxicated state when they receive the Kurus' ambassador.§

Evidently the rule was first made for the priest, and then extended in the interest of morality to the other castes. There were always certain permitted intoxicating drinks, the number allowed increasing with the lateness of the time from which the law-book comes. In the Epic it is a newly promulgated divine law that 'from this time on a priest that drinks *surā* shall be considered blamable, just like a murderer of a priest.¶

The next great sin of the Hindus (if, indeed, this be not a pan-Aryan vice) is gambling; and here we have not ignor-

* *katham hi pītvā mādhuṅgam pītvā ca madhumādhavīm, lobham sāuvīrake kuryān nārī kā cid iti smaret*, iii. 278. 40 (cf. 39).

† i. 148. 5 ff.; 219. 7; 222. 21 ff.; iv. 15. 7. Compare Indo-Aryans, loc. cit.

‡ iii. 15. 13. Impaling is the penalty for drinking or making *surā* against the law in xvi. 1. 31 (*yaḥ ca no viditān kuryāt peyaṁ kaḥ cin narah kva cit, jīvan sa cūlam ārohet svayamkṛtvā sa bāndhavaḥ*).

§ v. 53. 5: *ubhāu madhvāsuvakṣībāu*. Compare for divine drunkenness v. 98. 14: *bhavanam paçya vāruṇyaṁ yaḍ etat sarvakāñcanam, yat prāpya suratām prāptāḥ surāḥ surapatēḥ sakhe: a vulgar pun on suras, gods, and surā, intoxicating liquor (comm. vāruṇyaṁ vāruṇyāḥ surāyāḥ)*.

¶ i. 76. 67: *yo brāhmaṇo 'dyaprabhṛti 'ha kaḥ cin mohāt surām pāsyati mandabuddhir apetadharmā brahmahā cāi 'va sa syād . . garhitāḥ*. But the priests seem to be victims of vice till the latest time; 'gamblers and tipplers, usurers, singers, and traders' (*vāṇijaka*) are here (as in M. iii. 151 ff.) *apāñkteya* priests (e. g. Vāyu P. ii. 21. 32 ff.). As usual, it is the city and court priests that seem chiefly to offend.

ance of forbidding rules on the part of the warrior, but direct contradiction offered by him to such rules.

The game of dice was an old Vedic amusement, and we have in the Rig-Veda a 'gambler's lament,' and an allusion to the public gaming house.* That same gambling-hall that ruined him survived through all periods of the Hindu's growth. Tales are told, precepts are given, in vain. The sage points to the moral of history: 'kings have ruined themselves by gambling;' but the king-warrior triumphantly quotes 'usage' and silences the adviser. The law distinguishes between playing with animate and with inanimate things, showing that baiting and prize-fighting were common.† But the Epic confines 'playing' to two things, in hyperbole to war, and in matter of fact to gambling. The law yielded a point at last, and, after vain protests, we find in the legal enactments that dice-play is sanctioned, and the 'state gambling-hall' erected under police supervision, the revenue from it going into the royal treasury.‡ In the Epic, where the kings always play dice as a matter of course, the only crime in playing is cheating, or 'using magic.' In the didactic Epic alone is the game forbidden; but we are told that 'the bad kings (*kurājānah*) of old always practiced woe-bringing gambling and deer-slaying' (v. 90. 56). The whole plot of the Epic turns on a game of dice. The king plays away all he has, wealth, crown, brothers, and self; then his wife. A nice point is here raised by the interested parties, as to whether he could rightly stake his wife, after he had himself become a slave by staking and losing himself, 'since slaves own

* R. V. x. 34; A. V. vii. 50, 51; vii. 109. 1; Muir. Hymns from the Rig and Atharvan, J. R. A. S., N. S., ii. 31.

† Dice-playing is forbidden. M. iv. 74; a son is not liable for his dead father's gambling debts, ib. viii. 159; G. xii. 41; gambling with dice, prize-fighting, and drinking, are strictly forbidden, and sinners of this sort punished and banished, M. ix. 220-228 (late). *sumāhūta* in the Epic is 'challenged to play dice,' ii. 48. 19; cf. 49. 39.

‡ The law-book of Āpastamba says that a table shall be set up in the assembly-hall, and respectable members of the three Aryan castes may meet there and play dice. They pay (according to the commentator) something to the keeper of the table, and he pays to the king a regular sum for the privilege of keeping the table. Nārada (Jolly, xvi.) shows a fuller development, and makes a different provision: as, for example, that the keeper gets ten per cent. on the money staked. The earlier text of Āp. reads: *sabhāyā madhye dhīdevanam uddhṛtyā kṣān nīvapet (nir-); āryāḥ . . . divitāraḥ syuh*, Āp. ii. 10. 25. 12 ff. It is added that the dice shall be of even number and of *vibhītaka*. In the later Nārada, the only sin thought of in connection with gaming is dishonest practice, e. g. using false dice, or playing in other places than at the royal tables, for the play was now a monopoly of the king. Compare Āc. G. S. ii. 7. 10. The practice in Nārada agrees with the rule of A. P. 256. 49 ff. But there the *dhūrtakitava* gives up to the keeper of the hall five or ten per cent. of his winnings according to their amount. The game is a monopoly (ib. 47) of the king. Cheats are here branded and banished.

nothing.' The legal light of the court declared that he could not; but it was generally conceded that the queen was thereby really lost, and became a slave. The only anger is caused by the discovery that all the game had been deceitful (see *Sabhā*). This same king, however, afterwards becomes a courtier at another's court; and assumes the rôle of a gambler by profession, 'in order to please the king and his ministers' by casting dice. 'I shall,' he says, 'become a dice-mad, play-loving courtier, and with the bejeweled holders fling out the charming beryl, gold, and ivory dice, dotted black and red.*' And so, in respect of this vice, we can say with Tacitus: *aiam sobrii inter seria exercent, tanta lucrandi perdendive temeritate ut cum omnia defecerunt extremo ac novissimo iactu de libertate et de corpore contentant; victus voluntariam servitutem adit* (Germ. 24).

Four stages of development appear to have been passed through. In the first, gambling is generally practiced, and, casually, privately condemned when the result is bad. In the second, it is generally practiced, but the law begins to note its evils, and condemns it in mild admonitious language. In the third, it is generally practiced, but the law condemns it strongly, regards it as a state crime, and banishes the offenders. In the fourth, it is generally practiced, and the law takes it in charge, patronizes it, gives the king a revenue from it, and makes it a crime to play anywhere but where the king shall get his per cent. from the profits.†

'The king and the priest uphold the (moral) order in the world,' said the priest living before the Epic,‡ but the king en-

* *sabhāstāro bhaviṣyāmi . . matākṣaḥ priyadevanah . . vāidūryān kāncanān dāntān phalāir jyotīrasāih saha, kṛṣṇākṣāl lohītakṣāṅc ca nirvartsyāmi manoramān.* The verb shows the casting out of the dice, and the commentator says the preposition 'with' refers to the means of casting, and defines *phalāh* as *śarīsthāpanārthāni koṣṭhāyuktāni kāṣṭhādīmāyāni phalakāni*, seeming to have in mind hollowed vessels for rattling the dice. I am rather doubtful about construing *saha* as expressing *tesām* (*phalānām*) *nirvartanakarāyam*, but cannot here translate *phala* as ('Auge auf sinem Würfel' (so B. R.)), or take it alone as 'on the boards,' with *jyotis* as another kind of dice. The comm. would make the words for materials refer to color, blue, yellow, red, and white (resolving *jyotīrasāih*) but I cannot follow him (iv. 1. 25). Simple dicing, not draughts on 'boards,' seems meant. The ordinary term for the dice-board is *āsphura*; for the bet made, *glaha*: ii. 56. 3-4. *Nala* as *akṣapriyāh* is to be compared with *dyūtapriyāh* (ii. 48. 19) of *Yudhishtira*, here called *priyadevanah*, Comm. *krīdāpriyāh*.

† The *Rig Veda*; *Manu* and the Epic sages: *Mānavaçāstra*, ix. 220 ff.; *Āpastamba* and *Nārada*—these illustrate the progression. The verse in *Āpastamba* must be later than the (spurious) passage in *Manu*, and is probably interpolated, as recognition of state gambling-tables postdates the *Sūtra* period. The Puranic use shows that gaming is assumed as common. Compare A. P. above, and 258. 79: *vyuṣṭāyām udīte sūrye dyūte jayam avāpnuyāt*; and the quarrel over the game in V. P., v. 28.

‡ *dhr̥tavrataū*, Çat. Br. v. 4. 4. 5 (compare G. viii. 1).

joyed himself still, in spite of priest and law. The life of revelry indulged in by the warrior-caste, already indicated by the rules on drinking, dicing, and contests between animals, and shown by the law, is perhaps caricatured by the great carousal in the *Harivaṅṣa*, but is testified to not only by Megasthenes,* but by the description in the Epic of all the paraphernalia of pastime at court. Majestic preparations! An amphitheatre for a joust at arms, moated and walled like a gated city;† a casino by the river-side ‡ for the amusement of the princes; an amusement whenever any event offers an excuse;§ meat and wine at every festival; drunkenness, gambling, and love, the enjoyments of peace—what use to quote the sage's rule that a man shall not drink, shall not eat meat, shall not gamble, and shall be continent? Such rules were made by the priest, and for the priest; till a later age, influenced by modern feeling, extended them to the other castes, and interpolated them upon the early Epic.¶

* *πέμπτον (μέρος) ἐστὶ τὸ τῶν πολεμιστῶν οἷς τὸν ἄλλον χρόνον ἐν σχολῇ καὶ πότεις ὁ βίος ἐστὶν ἐκ τοῦ βασιλικῆς διαταγμένους*, etc.: Strabo, xv. p. 707.

† *prākāra, dhāra, toraṃa, parikhā*, i. 185. 17 ff. Compare the public games in V. P. v. 20.

‡ i. 128. 33. *udakakrīḍana*.

§ In i. 221. 69 the king makes an occasion of 'giving gifts' out of the fact that his brother has a son born.

¶ Outside the law, in all profane writings, rules restricting food and drink are found. Thus, as B. ii. 1. 1. 21 limits the use of intoxicating liquor for all twice-born castes, so does R. ii. 34. 27; 80. 4; iv. 16. 31 ff., v. 34. 10, for priest and warrior, limit eating, suppressing meat and *madhu* 'wine.' 'The king is lord of all but the priest' (G. xi. 1); and in this respect the latter enforced his rules gradually, so that it may be that the non-priestly castes were slowly led to temperance. Luxury is forbidden to the priest who is out in the world (ii. 21. 42), but the caste as a whole led an easy and comfortable life, and allusions are plenty to show how delicately cared for and fastidious the town-priests were (cf. e. g. iii. 92. 20). Even here we have no great asceticism as a rule. So, still more, a quasi-asceticism may be enjoined on the king and warrior; but I miss the sign of it in popular poetry, and distrust it in didactic epigrams. To speak the truth and not to steal seem to be in India the earliest moralities enjoined. Drinking and gambling and lust are frowned upon much later, and by priests. But in those first two, the 'moral sense' originated (not from the priests) from mutual advantages, and needs of social life; for until the most advanced moral code there is no thought of an abstract wrong in lying or stealing. Indeed, in the former case, certain occasions are mentioned where for utilitarian reasons lying is approved and commanded. For instance, one may lie to a woman at the time of marriage, or to escape pain or loss of one's property or loss of life. I confess I do not see the matter in the light in which Müller, 'India,' p. 34 ff., puts it (see ib. note D, p. 272, for citations). Such expressions as that of the V. P., 'the earth is upheld by truth' (iii. 12) have no great moral significance, weighed against the fact that truth to the Aryan Hindu warrior is a relative term; 'a lie is truth if it pays to lie' is the underlying basis of his morality in this regard. Compare viii. 69. 32: *bhavet satyam avak-tavyam vaktavyam anṛtam bhavet, yatrā 'nṛtam bhavet satyam*, etc.; 57, *yat syād ahinsāsamyuktam sa dharmā iti niçayaḥ*; compare the

If we look at the legitimate amusements of the warrior-caste, we shall find very little but telling tales of war, song, dance, mime-acting, later the drama, and practice of arms in sport or in earnest.* Sometimes sport was combined with a serious intent, as in the tournament, where the valor of the princes is tested, and they through this test become enrolled as worthy members of the caste (i. 134 ff.). As boys, the princes' one amusement, outside of running, leaping, practice in arms, and rough horse-play with each other, seems to have consisted of a game played with a ball or hockey (*vitā*) which they roll or toss about.† The girls danced and played ball or doll (see Appendix). The sport of the cow-boys in the later times of the Krishna legends appears to have consisted in scandalizing and abusing the respectable inhabitants, and getting drunk, thus offering an interesting parallel to the life of our Western cow-boys.‡

3. *Royal Occupations.*—Alertness is perhaps the word best suited to describe the faculty prized in a king. 'He should be ready for the future, firm in the present, and understand what still remains (to be done) from the past.'§ Thus he will be able to protect his Aryan and un-Aryan subjects. Not to rob these, and to be brave and pure, defines his negative and positive duty toward his people.||

whole section and ib. 70. 51 for cause. It was not Bhīṣma's adherence to truth so much as his adherence to chivalric rule that prevented him from slaying a woman. It is, however, true that in legend and precept truth holds a high place; only we should add that moral precepts often hide an opposite practice, and that a simple lie (not perjury) was not in and for itself regarded as wrong (the Christian idea); its sin depended on circumstances. But compare Vāyu P. i. 10. 38; 59. 40.

* Compare vii. 57. 4: (numbers of people at a horse-sacrifice) *naṭanar-takagandharvāiḥ pūrṇakāir vardhamānakāiḥ, nityodyogāiḥ, ca kṛīḍad-bhis tatra sma parihaṛṣitāh.*

† *kṛīḍanto vīṭayā (bālāḥ) paryacaran.*, i. 131. 17 (cf. *kṛīḍanaka*).

‡ The cow-boy Krishna, refusing homage to the old god Indra, says: 'we are not shut in with doors, nor confined within wall; we have neither fields nor houses; we wander about happily wherever we list, traveling in our wagons. . . Brahmans offer worship with prayer; cultivators of the earth adore their landmarks; but we who tend our herds in the forests and mountains should worship them and our kine [alone].' The same cow-boy and his brother once 'went along sportively, looking like two young elephants.' As they roamed about they saw a washerman coloring clothes, and with smiling countenances they went and threw down some of his fine linen. The washerman . . . provoked the lads with loud and scurrilous abuse, until Krishna struck him down with his head to the ground, and killed him. Then, taking the clothes, they went their way' (Wilson's translation of V. P. v. 10, 20; pp. 524, 548). Such pictures may represent actual scenes from the life of the cow-boys, though these narratives are meant to glorify the cow-boy god.

§ v. 39. 55; M. vii. 178-179.

|| iii. 150. 37; v. 72. 44; 73. 27; 37. 23; xv. 10. 42.

But when we come to a closer examination of what the general 'protection' implies, we find that there is an endless complexity of subjects to which the king must pay attention. It were little better than to schedule the possible combinations of all conceivable military, judicial, civil, and domestic affairs, were we to follow closely the lists given to the king to study. All his duties and cares are parceled out in divisions. He obtains his education by the group-system, 'for the realm is a huge concern,' and needs to be studied in all its particulars, each under its proper head.*

So technical have become in the late and pseudo-Epic some of the groups of objects of consideration, that, finding them unexplained or over-explained by the commentator, we are unable to analyze them, unless by chance they be repeated with more light. So we read simply: 'Let the king have the six royal qualities, and know the seven means.' The commentator gives us the solution. The six royal qualities are eloquence, bravery, wisdom, learning, (knowledge of) polity, and of (sacred) music.† The 'seven means' would be unintelligible, for only 'four means' (of conduct with other unfriendly kings) are recognized in the legal codes (pacification, generosity, intrigue, and punishment); but to these are here added three: namely, poison, incantations, and magic.

The Epic outstrips the groups with which we are familiar in many other particulars, some of which I shall give in full, dry as they are to any but one interested in succinct tabulation; for though they teach us not much (containing generally only such information as might be antecedently expected), they yet show us, as we pick our way through them, how thoroughly the Hindu sages had encircled the king with a net of painful rules, and give us at the same time a glimpse of that methodic nature of the Hindu mind which proved so valuable in other provinces, while it seems so useless in this. Such categories are usually reeled off in the form of catechumenical instructions addressed to a patient king; and they belong all to the middle period of the Epic, when it was made into a book of wisdom.‡

* xii. 58. 21; *sumahat tantram*; so ib. 56. 2, (*dharmam*) *māhāntam bhāram manye*.

† Gain, Right, and Desire, it has just been stated, are the main-springs of human action; these the king should practice in loco (*kāle*): ii. 5. 21 ff. The most common 'group of six' is called the 'six-fold-care' (not to be confused with the 'six-fold array' of the army, described below), and consists of six specially important topics for the king: namely, alliance, war, marching, encampment, partition of forces, and seeking allies. Compare ii. 5. 8; v. 38. 24 (xii. 59. 32); xii. 69. 64 ff.: xv. 6. 5 (*sāḍ-guṇyam āyattam*); M. vii. 160; Yājñ. i. 346.

‡ Some of these lists presuppose not only great technical dexterity in interpretation, but also a sense of less serious meaning than belongs to

There are 'eight acts' for a king to attend to (that is, eight subjects to care for in time of peace): agriculture, trade, roads, forts, bridges, elephant-training, taxes, and the occupation of deserted places.* Some of these are embraced in an unintelligible 'group of fourteen' just preceding, objects to be attended to when the land is held by the enemy: as, for instance, the country, town, forts, elephants, liquor-saloons, etc. (commentator); and in another place we find again that there are 'ten objects of consideration,' explained by the same guide to be the king's own and his foe's ministers, realm, fortress, treasury, and army.†

most of them. They appear almost in the light of riddles or implied conundrums, and have a painful resemblance to Mother Goose verses, reminding us of 'two legs sat upon three legs,' etc. Nevertheless, when we find the interpretation, it partakes of no sportiveness. But I fancy the priests amused themselves in a sober way with such verses; there can, at least, be no Sūtra-like technicality about them. A sage will give us an example from v. 33. 44: 'By means of one perceiving two and subduing three by means of four while conquering five, understanding six and forsaking seven—be thou blessed.' It does not clear the matter up much to insert definite articles or the gender of each numeral: and in fact the commentator does not know what the verse means, for he explains it by different guesses, the cleverest being as follows: 'The verse may mean: the king shall by means of one undivided intelligence discern the two sets of things, those to be done and not to be done: and by means of the four methods of subduing foes (soothing, bribery, dissension, force) get into his power the three kinds of men, friends, neutrals, foes; while he shall subdue the five organs of sense and know the six conditions of a state (alliance, rupture, etc.), and leave the seven vices, women, dice, hunting, drinking, harsh words, cruel punishment, injury to property—and then he will be happy.' But in ib. 36. 48 there are six organs. One such specimen suffices.

* ii. 5. 22; these 'acts' are said to be 'declared by the code.' The last (*cūṅgānān nīceṇanam*) may perhaps be colonization. Compare M. vii. 154, where the same (unexplained) group is mentioned, and expounded by the three commentators in the way of Nil., and otherwise. (See notes to M. in Bühler's and B. H.'s translations.)

† xii. 57. 18, *vetā ca daṣṭarargasya sthānavṛddhikṣayātmanah*. The 'sixfold division' in a near and subsequent section (*ṣaḍvargo nītijah*) is said to mean self, time-and-clime, means, duty, minister, cause, xii. 59. 32: compare the following for the whole list of duties (33-78). The three-fold division (*kṣaya, sthāna, vṛddhi*) occurs independently in xii. 69. 64 ff.: where also duty, gain, and desire, as usual, form another triad (so y. 39. 40): and 'guarding the people well' is at the end the sum of it all, according to Angras; the section closing with the oft-repeated discussion of the relation between the king and his age; whether the king influences his age, or the age in which he lives determines the character of the king (79 ff.). Here, too, are the 'seven divisions of the kingdom' already alluded to (see above, p. 45, and again in text, ii. 5. 23): namely, the king, his officials, allies, wealth, realm, fort, and army. With xii. 59. 35 ff. compare xv. 6. 1 ff. Note that in xv. 5. 8 we have 'an eight-fold state,' *aṣṭāṅgam rājyam*, explained as 'king, ministers, etc.' (i. e. seven); but, I think, really confused with the 'army of eight.' Most of these groups occur explained in the late polity-books, such as Kām. Nīt. and Nītiprak.

Perhaps the most interesting group is that of the state officials (which comes under the rubric of categories of occupations, because, like most of the others, the king has to be occupied with them), since they can be compared with the list of royal officials handed down by Megasthenes. The latter says that there are certain high state officers, partly civil and partly military, and these make in his report a special class by themselves.

In Nārada's speech, quoted above from the second book, we find seven general state officers—the inspector of the fort, the inspector of the army, the inspector of laws, the commander-in-chief of the army, the chief priest, physician, and astrologer—offered as a group explanatory of the functions of certain officials that represent the king (comm. to ii. 5. 23); but a fuller group of administrative officials is implied by the text itself in a following verse, where a group of eighteen officials is plainly signified by the mention of 'eighteen objects which the king should have carefully watched by spies.' Assuming that the commentator is right in explaining this group by a long quotation from a law-book, we find that the people here intended embrace those members of the council meant by Megasthenes, and others who were not probably included under his sixth division, but may be understood of those that guard the realm,* as viceroys in different parts of the kingdom. The list is as follows: the chief councillor, the chief priest, the crown-prince, the commander-in-chief of the army, the chamberlain, the overseer of the harem, the overseer of prisons, the chief steward, the person having general superintendence of what ought or ought not to be done in affairs, the chief judge, the overseer of the city, the chief engineer, the overseer of justice, the president of the assembly, the guardian of the army (commissioner) or of punishment (criminal judge?), the guardian (perhaps overseer) of forts, the guardian of the boundary, the guardian of the forest.

All these officers in his foe's realm the king must have watched by spies, and all of them in his own realm, except the chief

* It seems to me that Müller goes too far in supposing that the officials set over villages are merely revenue officers with police jurisdiction ('India,' p. 47). The Praçna Up. alludes to these: 'as a king commands his officers, saying, rule over these or those villages' (iii. 4); the Bṛhat Saṁhitā speaks of the 'king and his followers' who destroy the land (xix. 3); and the Epic regards them as viceroys of state. When villages were not tributary, they may have been totally independent (*avilabdha*), they may have had no governor (Br. Sam. xvii. 14, comm., Kern); but when it was possible for Bhīma to give fourteen villages off-hand to a messenger (viii. 76. 40), we can scarcely suppose that the 'self-government' of which Müller speaks could have been a real autonomy, or have made them independent in their laws.

councillor (prime minister) and high-priest (because these are of the priestly caste), and his once son, the crown-prince. The list will give us an idea of the internal policy of the state, though no great antiquity can probably be claimed for it.*

Interesting also is the formal recognition of the relations between state and state—the three kinds of peace (through fear, love, bribery), the four times of marching and army divisions when at war, the division of all outlying principalities into foes, allies, and neutrals, and all the ‘circuit’ about the king; for these, given also in the law, form the germ of the special sciences of polity, already begun in the Epic, which, starting with rules (*nayāh*) such as taught by Brihaspati and Uçanas, were afterward to develop into that Machiavellian state-polity (*nīti*) that in later times governed the policy of the Hindus.

A native résumé of royal occupations found in another book gives us a summary of the king’s daily life, and a general theory of his relations with the powers about him. We find here that ‘system approved by the Mānavas,’ as Kāmandaki calls it, which, corresponding with the suggestions in other parts of the Epic and with the code of Manu, may be looked upon as at once the broadest and the oldest discussion of international relations.† This account is called Instruction, and is given by the old king of Hastināpur to his successor.

The king ought to rise early in the morning,‡ dress, and pay his respects to the elders of the court (here assumed to be

* ii. 5. 38. The list reads : *mantrī purohitaç cāi ’va yuvarājaç camū-patiḥ. pañcama dvārapālaç ca saṣṭho ’ntarveçikas* (sic) *tathā ; kārāgārā-dhikārī ca dravyasañcayakṛt tathā, kṛtyākṛtyeṣu cā ’rthānām navamo viniyojakah* (sic) ; *pradeṣṭā nagarādhyakṣah kāryanirmānakṛt tathā, dharmādhyakṣah sabhādhyakṣo daṇḍapālas tripañcamah ; soḍaço dur-gapālaç ca tathā rāṣṭrāntapālakah, aṭavīpālakāntāni tīrthāny aṣṭāda-çāi ’va ca.* This corresponds closely, though not exactly, with the determination of the Nītiprakāçika on the same subject, as the latter usually resolves the technical formulæ in accordance with our commentator. The Manavic group of eighteen is one of law-titles (M. viii. 3). Compare A. P. 252. Exactly the same formula as in our text is found also R. ii. 109. 45 ; in connection with which fact it may not be impertinent to inquire whether it is mere chance that this whole section of the second book in R. corresponds completely in form and often in verse with a section of the same book in Mbh. ; and is it accidental that the scenes of the two works are distributed in parallel books with sometimes like names : *ādi = ādi ; sabhā* = (assembly at) *ayodhyā ; vana = vana* (B.) ; *kīṣkindhyā = virāṭa* (with names different, but each a change from forest to town life) ; *sundara = udyogya* (preparation for war) ; then in each the *yuddha* ?

† K. Nīti. viii. 24. Compare with this section ii. 5. 26 ff. ; xii. 59 ; M. vii. 153 ff. The résumé is from xv. 5. 10 to 6. 20.

‡ Compare ii. 5. 86, 89 ; where it is added that the king, after rising early, should go about protected by a guard of soldiers dressed in red and armed with swords. An interesting list of the king’s attendants, jesters, pages, etc., is given in R. ii. 32. 20.

necessarily priests). His first business should be to enquire what work there is on hand for the day. This will be explained to him by the elders, and they will also advise him how to act. His councillors (for with the vulgar he must not consult) should be regenerate men, wise, aristocratic, skilled in determining what is right and useful; his general officers should be of hereditary office and superior to deceit (*upādhatātāh*, 14; ii. 5. 43). He should consult with his ministers both collectively and individually; and, to do so, should (early in the morning) enter the well-encircled Hall-of-Council (*mantra-grham* or *sthalam āruhya*, 22), or, if he choose, may go into any other secret place, such as a wood, hill, or housetop. He should exclude from the place of consultation any people or talking birds (*sārikā* ? compare Ratn.) that might betray what is said. Night consultations are a mistake. When he meets his council, he should make a speech, repeating the formula that declares the sins of those that betray council.*

Business affairs† and legal matters he should personally superintend, or have attended to by experts and judges (compare xii. 69. 27 ff.) In making judgments, he should condemn to fines or death, according to circumstances, thieves, adulterers, violent men, cheats, and (among others) those that destroy halls and places of assembly.‡ His morning duties consist also of a conference with those that have the control of his finances. He should then dress, eat, and exercise, examine the arms, and later, in the evening, give audience to ambassadors and interview spies—for he should have well-trained native spies of every sort. The latter part of the night is the proper time for him to decide as to what ought to be done. His meals should be taken at noon and at midnight; but in respect of these divisions of time the general rule is that any time is good for action if there is anything to be done.§ The next day he should rise, dress, and go through the same duties over again: ‘forever turning is the wheel of duty.’|| At all times he should

* This may also imply the punishment mentioned for such a betrayer in A. P. 257. 79, where the *mantrasya bhettā* has his tongue slit open.

† Part of his business was to regulate prices; for the trader, man of the people-caste, was not to charge for his goods as he chose. In fact, the term usually translated ‘usurer’ is by native authority a man that buys grain cheap and sells it dear—a great sinner, according to the Hindus. Compare Vās. ii. 41, and Kern, J. R. A. S., N. S., vi. 40, on our text, xiii. 23. 21 (N.).

‡ The general disposition of the king’s day reminds us of the universal rule that one should devote himself to ‘duty in the forenoon, wealth in the middle of the day, pleasure in the latter part of the day’ (*dharmam pūrve dhanam madhye jaghanye kāmam ācaret, ahany anucared evam eṣa cāstrakṛto vidhīh*, iii. 33. 40).

§ *sarva āupayikāh kālāh kāryāṅām*, xv. 5. 35.

|| *cakravat tāta kāryāṅām paryāyo dṛçyate sadā*, xv. 5. 36.

take particular care to protect himself from assassination, and have his women especially supervised by proper old men.

As to his foreign policy, he must remember that it is all-important to have a capable commander-in-chief,* and should elect him that is faithful, brave, painstaking (rather than one only of good family).

Each king is surrounded by a 'circuit' of consideration, and every king should be familiar with his own and his neighbors' affairs. A technical enumeration of these by the teachers of polity makes seventy-two subjects for consideration.†

Owing to the military and not the civil activity of the king being portrayed by the Epic, we have little to judge by, when we enquire how much the king really had to do with the courts and with other legislative matters. As the sovereign is always represented in the code as attending courts, and as judgment is

* Compare (ii. 5. 37) the *eko 'py amātyaḥ śuraḥ*.

† What these subjects are is variously explained. The legal commentators are agreed that Kāmandakī's work shall interpret Manu's vague grouping of the kings; and they are probably correct in so doing. The legal commentator to Manu explains the great circuit of twelve as consisting of five objects of care (minister, kingdom, fort, treasure, army), multiplied into the twelve kings lying about an imaginable king: to wit, that king's foe, the neutral, the one seeking to become an emperor, the one lying geographically between the subject and his foe (these are the four chief), plus eight others, assumed as well known by the text, and explained as four in front beyond the foe (a friend, the foe's friend, friend's friend, foe's friend's friend) and four behind (rear attacker, rear attacker's attacker, friend of rear attacker, friend of rear attacker's attacker). These twelve kings' own persons, added to these sixty subjects, make the complete circuit of care about one's kingdom. But our present text and commentator are different from these. I am sure the latter's interpretation is incorrect, but the Epic commentator construes that a king has seventy-two subjects to think of: four of these are the friend of his foe and foe's ally and the foe of each respectively; six are those bearing arms against him; two are his own ally and that ally's ally; these twelve are to be added to sixty objects of consultation with ministers—namely, a group of eight on agriculture, etc., of twenty on boys, etc., of fourteen faults, impiety, etc., of eighteen objects of counsel (cf. the eighteen of ii. 5. 38 as explained above). These make seventy-two altogether (reading, as N. does, *mītram amitram*, as in C.). The late date of the corresponding passage in Manu might be inferred from the fact that Uçanas alone is quoted, when an author is mentioned by name (7. 15), although 'polity-wise teachers' (*ācāryā nītikovidāḥ*) are alluded to in general (compare M. vii. 155-156; Kām. Nīt. viii. 14-24; ib. xi. 67). The seventy concerns of the circuit are dismissed in the twelfth book with the remark that the whole subject is fully explained in the Nīticāstra (59. 74). However, if we trust Kāmandakī, the Mānavas have a right to claim the system, since he says the 'circuit' covers twelve provinces according to Manu (vii. 156), or sixteen, or twenty, according to Uçanas and Brihaspati respectively; although others, he adds, allow the circuit to be expanded according to present need (loc. cit.). The same circuit is mentioned in xii. 59. 70-71, and implied in ib. 48; perhaps implied also in *pārśnimūla*, ii. 5. 58. Later works agree in essentials: compare A. P. 232, 234, 238 ff. Compare Vikramorv. Act ii., Wilson's note, p. 209.

given by the Epic king whenever a case occurs, we may assume that the king actually went each morning to the courthouse and heard cases, deciding them by the help of those learned in the law. Such help must have been mainly in quoting precedents, for of all rules this is the strictest, that the law as handed down shall not be changed.* The business was, however, chiefly shifted to the shoulders of the judge, in press of other business, and of course wholly so in all but the imperial city. The king whose justice in judgments is especially sought must always 'let his rod fall alike on friend or foe,'† and, as an incorporation of the God of justice, always opens the court by a set speech, in which he conjures the witnesses to speak the truth. The king himself may not be a witness.‡

If an unjust sentence be delivered in court, the general rule that a king shall assume one-sixth of the moral responsibility when crime is committed is commuted in favor of the people versus the king, so as to read that the king obtains one-fourth; the ministers of justice, one-fourth; the witnesses, one-fourth; the criminal, one-fourth, of the moral guilt (to be cleared off by suffering in the next world).§

* In accordance with the general rule *rājarsīṅām purāṇānām anuyātu gatiṁ nṛpaḥ*, xv. 4. 5 (though here custom only): compare ii. 6. 3. The judge judges, but the king condemns, in Mṛch. Act ix., a good court-picture.

† See below, and compare R. iv. 17. 57.

‡ A list in v. 35. 44 gives, besides, seven people incapable of serving as witnesses: a person that tells fortunes by the hand; a trader (convicted of having been) a thief; a fowler; a physician; a friend and a foe (of the person on trial); a mime-actor. Compare M. viii. 65 ff.

§ The absolute moral responsibility of the king that permits crime to go unpunished is represented by a sixth of that crime. If the crime be punished, the king is freed from moral responsibility for the commission of that sin (see above, pp. 77, 87). If, however, in punishing the crime, the king or the king's representative, the judge, gives an unjust sentence, the moral responsibility is in part shifted back to the shoulders of the government. This later rule (as it seems to me) of one-fourth incurred by the king thus overlies the earlier and proverbial 'sixth share' of the king. I look now on the passages in the thirtieth book of the Epic and the eighth book of Manu as alike indicative of a later court-precision than is shown by the popular rule; and am inclined to believe that the confusion in the pseudo-Epic is due not to a quotation 'from Manu' without authority, but to the temporary ignoring of the popular view in favor of the court-division of guilt as explained in M. viii. 18; and therefore that this quotation direct 'from Manu' is really from our law-book. We should thus have to subtract one case from those which I adduced where the pseudo-Epic failed to correspond with our Manavic text, and thereby strengthen my argument a little more. Add xii. 266. 5. Compare this Journal xi. 264; also M. viii. 18, and 304, with my notes in translation; the Epic passages here treated are chiefly xiii. 61. 34 ff., and xii. 67. 17 ff. Sūtra-rules for the statements given above in regard to witnesses will be found B. i. 10. 19. 18; ib. 8; ib. 10; Vās. xvi. 32; in Manu compare also viii. 88 ff., 113.

Verification of a witness's word by fire-ordeals and tests of other sorts goes back to an early period in India (AV., Chând. Up. vi. 16, etc.), and extends in new phases through the later legal literature.* Compare the Parikṣāpaddhati (McNaughten); Schlagintweit, *Gottesurtheile der Indier*. The fourteen days' limit as a test of veracity after an ordeal invoking the wrath of a god is kept till late.* In the Epic we have no fire-ordeal, properly speaking, such as we have in the Rāmāyaṇa. In the latter the heroine swears 'by her troth' that she is true to her husband, calls on the fire to protect her, and therewith enters fire (R. vi. 101. 11, 28 ff.). In the same scene in the Mahābhārata she simply calls on all the gods to 'deprive her of life if she act falsely,' and begins the list with the fire-god (*mātariḡvan*), not employing any further proof than the formula *sa me vimuñcatu prāṇān yadi pāpaṁ carāmy aham*.† In all the Epic poetry the custom is popularized by the common unjudicial forms of strong asseveration. To swear 'by my troth' is common, as 'by my troth I will slay him; by my troth I raise the weapon' (iii. 252. 43). A colloquial imprecation is '*ruat caelum (pated dyavh)* if my word be not true;' and to this the speaker adds the more local imprecation 'may Himavat burst, may the sea dry up,' etc. (compare iii. 12. 130 ff.; R. ii. 15. 29). The great curse of the seers as a form of imprecation in xiii. 93. 116 ff. deserves notice as suggestive of ordeals. Again, to give more solemnity, a speech is introduced by the speaker while touching water (*vāry upaspr̥c̣ya*): evidently an elliptical form of calling Varuṇa, the Epic god of water and of testimony, to observe the truth of the words to follow.‡

The unanimous treatment of one topic in all the older law-books leads us to the conclusion that, at a time earlier than we have been considering (with a state so adjusted to precise formalities as that prescribed above the practice must have been incompatible), the king acted not only the part of a judge but also that of the punisher. The time would go back of the appointment of a judge-substitute, and represent a period when the king was the head of a small family clan. In the Epic period, the practice could have been one only typical of the royal death-giving power, and conversely of the pardoning

* A. P. 254. 48. Cf. also Vāyu P. ii. 15. 78, *tulā*, 100; Mṛcch. Act ix.

† iii. 291. 23. Compare Kaegi. *Herkunft d. germ. Gottesurtheils*, p. 51.

‡ So in iii. 10. 32, where the speaker was angered through his hearer's insulting him by 'scratching the ground' and 'beating his thighs' in mockery (although the latter act is not necessarily an insult, being also a sign of grief, as when the women 'beat their thighs with their hands and lamented,' as an equal sign of grief with loosening the hair and doffing ornaments: xvi. 7. 17). To swear by all the gods is also common. Compare the oath in the battle-scenes below, and add R. ii. 9. 25.

power. For we read in all codes that, when a thief is caught (and trial for theft seems the earliest kind of judicial inquiry in India), he shall bear a club upon his shoulder to the king, and when his guilt is acknowledged the king shall take the club and slay him, or he shall let him go free by not slaying him. But one code says they shall bear him away and then kill him.* So even in Brhannār. P. the slave is struck, *musalyah*, by the king himself, 28. 20. Not even the members of the king's family are to be allowed to escape the just punishment of their crime: 'He must punish even his next of kin with bonds, torture, or death.' An interesting exception moderates this: 'if, however, these should come to the family-priest and voluntarily confess their crime, saying, "we have sinned; we will not sin (again)"—then they deserve to be let go.' Moreover, of priests it is said: the punishment of priests shall be graded progressively according to their social standing. 'The greater the reverence they enjoyed before they sinned, the greater should be their punishment.†

More specific legal functions of the king are lacking. His duties in peace are chiefly those of his natural profession. Thus, he is expected to visit the armory or arsenal as well as to see to business matters. Only the books on custom and law give us details of his entering the court, etc.‡ The general distribution of the king's whole realm is put in short form under four heads, so that, when one enquires briefly and politely in regard to the state of the kingdom, he says that

* This law is older than the present Epic, and may have been current at the time of the first poem; but I have noted no allusion to it in our text. There the king is more a figure-head in the court. But for the Sūtra-period and law compare G. xii. 43; B. ii. 1. 1. 116-17; Vās. xx. 41; Āp. i. 9. 25. 4; M. viii. 314; xi. 100; Yājñ. iii. 257. The later law-books limit this case, as being very severe, to the case of one that steals gold from a priest! But it is evidently a survival of earliest criminal law. The slaying of criminals ordinarily may be simple (beheading, etc.), or 'variegated' (*citro vadha*): that is, slaying by torture. The Epic allows robbers to be slain by beating (*prahārāḥ*) in its pseudo-parts (xii. 85. 20 ff.), and gives us a tale of a saint, caught by the police, and then at the king's order 'impaled on a stake from suspicion of theft' (*çūle protaḥ cāuraçāṅkayā*). His companions, real thieves, were also slain in the same way: i. 63. 92. Compare xvi. 1. 31, impalement for drinking. Priests are thus capitally punished also, and others slain for theft, by Puranic law, Ag. P. 169. 20; 226. 35 ff.; in ib. 81, *lex talionis*; but night robbers are impaled, also destroyers of houses and fields, ib. 226. 54-63. The first citation is remarkable as preserving the exact form of M. xi. 100 ff., the priest being the thief. But in 257. 59 the priest is branded where others are slain (for abusive language); ib. 62, the stake is appointed for murderers; see also ib. 173. 2 ff.

† xii. 263. 29, 7 ff. So, too, in xii. 140. 47: 'either a son, brother, father, or friend—whoever injures the property of the king, shall be slain; even the Guru shall be punished.'

‡ Compare Pār. G. S. iii. 13. 1 ff.: M. viii. 1 ff.

he hopes the 'kingdom, treasury, army, and town' are faring well.*

In regard to the comparative value of different parts of the kingdom, we are frequently told that a king should preserve his own life even at the expense of the whole realm, just as he should sacrifice a family to preserve a village, and a village, if necessary, in order to preserve a town.†

4. *Modes of government.*—The origin of the great families that gave kings to the Aryan invaders of India is confessed by themselves to be doubtful. The difficulty of tracing back the line, though helped by fable, appeared to them insurmountable. 'The origin of seers, rivers, great families, women, and sin is not to be found out' (v. 35. 72: cf. Pañc. iv. 49); for 'hard to discover are the sources of rivers and heroes' (i. 137. 11). The multiplication of fable, the absence of all history, make it impossible to know to-day what was unknown then. We can be certain of nothing in regard to the origin of any of the kings mentioned in the Epic. We cannot show that the Dhritarāshtra of the poem was the same as the king of that name mentioned in the Brāhmaṇa-literature. Pretense of descent is openly acknowledged in the poem. 'The present royal families,' it is said, 'pretend descent from Āila, Ikshvāku, etc.' (ii. 14. 1-5). Of pure-caste kings there is not even this pretense in many cases. The mother is often low-born, or the father is a 'divinity.' Although especially referable to the Brahmans, a remark in the twelfth book is interesting in this connection: 'There are only four really ancient families, those of Angiras, Kaçyapa, Vasishtha and Bhṛigu; all other families have become great by virtue of works (no blood).‡

According to the received belief in the Epic, royalty, though a divine ordinance, is really the result of an afterthought on the part of the Creator; for man lived originally in a democratic, or rather anarchic, manner. 'How,' asks the king of the Pāndus, 'can one person have such power over others?' The sage questioned answers (xii. 59. 10 ff.): 'Hear how kingship arose: At first there was neither king nor kingdom, nor punishment, nor one to inflict it; but when man's sense of justice was destroyed, then they laid hands on the property of others; this begot desire; desire, passion; passion caused a loss of all knowledge of duty; holy knowledge was destroyed;

* *papraccha kuçalañ cā 'sya rājye koṣe bale pure*, R. ii. 99. 10.

† i. 115. 88; v. 128. 49; compare ib. 37. 16 ff.: let him sacrifice his wealth to save his wife, but his wife to save his own life; and xii. 57. 41.

‡ xii. 297. 17-18, the *mūlagotrāṇi* (aristocratic through birth) and the *karmataḥ samutpannāni* (sprung up through works); the commentator takes the works to be religious ceremonies.

then died the sense of right; the gods became frightened; they created Law and Order; till finally one man, righting the uneven earth, brought the world into a state of order, blessed them by his protecting and directing power, and was thereupon, on account of his kindness, made king.* I have elsewhere† given a somewhat similar legend, in which the kingless world is represented as begging God for a protector. These legends show that such a state was not unfamiliar to the Hindu, though they would do but little toward supporting an argument for early democracies in India. Still, we know from other sources that kingless peoples, *αὐτόνομοι*, were probably not wanting in the later period. Megasthenes plainly implies that 'self-ruled cities,' in distinction from cities governed by kings, were common in his day. Indeed, his words take such towns as a matter of course.‡ Yet none but legendary traces remain even of such a possibility in our Epic, though so many passages are aimed at 'kingless people' that we might well suppose it was not a merely theoretical folly that was thus decried.§ 'King' and 'warrior' are sometimes said to be synonymous,|| but whether a king of Aryans may belong to other than the warrior-caste is not a question answered (except in the case of Karna) by the historical part of the Epic.¶ The didactic part speaks plainly,

* *rañjitāc ca prajāḥ sarvās tena rāje 'ti śabdyaate*, verse 125.

† Manu in the Mahābhārata, on Mbh. xii. 67. 17 ff. : J. A. O. S. xi. 255.

‡ Compare Lassen I. A. ii. 727 and 86; Vaiçālī was such a city; it had a council of five thousand; each member provides one elephant; they had an *uparāju* or under-king, as state officer, under whom was a commander-in-chief of the army; they had also a 'book of customs.' •

§ 'Faults are always engendered in a people that has no king' (*arājake janapade*), i. 41. 27; R. ii. 69. 28; 'in realms without kings the people having no helper are destroyed,' i. 105. 44 ff. : cf. M. vii. 3. Less suggestive is 'like a stoneboat in a river sinks a people ruled by a woman, a gambler, or a child,' v. 38. 43; here the rule is directed against a woman or child being *anuśāsītā*, actual ruler of the state; but immediately following it is said 'grievous is the land where there is no king,' v. 39. 78; as a command we find: 'one shall not live in realms that have no kings,' xii. 67. 4 ff.; with a description familiar from the law of what evils would happen in such a case: 'women and money would be stolen, people would devour each other like fishes;' (and the addition) 'this was the state of the world before Manu was made king; previous to his arrival people had tried to make laws for themselves; these laws were "a boaster, a bully, an adulterer, a thief must be banished;" no one enforced these laws; so the people were miserable; so they asked for a king.'

|| The Nītimayūkha (Rāj. Mitra's Notices, No. 2278), says that the word king refers only to one of warrior-caste: *rājaśabdasya kṣatriyamātre śaktir iti nirūpaṇam*. But this is theoretical; and for the use in the book itself, I know this work only as mentioned here and in Weber's account, *Monatsberichte d. k. Preuss. Akad. d. Wiss.*, Nov. 1873.

¶ The Vāyu-Purāṇa sets the evil period of slave-kings at a time not very long (relatively) before the ascension of Chandragupta ('who will reign for twenty-four years') and Aśoka; but quite a while before the Yavanas, who are to reign for eighty years: Vāyu P. ii. 37. 321 ff., 356.

however. We learn thence that in emergencies kings may be of any caste. Yudhishtira asked: 'Suppose the castes confused, and a hostile army appearing; suppose the regular troops defeated; then suppose some strong man should arise, even a priest, a man of the people-caste, or a slave: if he protected the people (as king), would he do right or not?' The sage replies: 'He that is a shore in a shoreless place, he that is a boat in a boatless place, whether he be a slave or whatever he be, is worthy of honor. Let the people honor him on whom when helpless they rely and prosper; let them honor him as if he were their own blood; for a priest without knowledge and a king without protecting-power are but wooden elephants. He that protects the good and drives evil away should be made king.* This passage explains 'caste-mixture'; it is political confusion, implying war.

5. *Succession, choice of king, primogeniture.*—The kingdom either descended directly to the king's eldest son without question, or the new king was chosen by popular election. Such were the earliest conditions in India,† but the latter case is at all periods rare, and probably unknown in the Epic age.‡ If, however, the people had lost the right of determining absolutely the next occupant of the throne, they still retained, as we see them through historical legends, in a limited though irregular form, the power of modifying the choice determined on by the aristocracy.§ They have still the unchallenged right of protesting against what seems to them an unworthy choice for their next ruler, and dare to deny any such choice to the present king, if it does not coincide with their views. And if

* xii. 78. 35 ff. In a later period, Pariah kings were recognized.

† Compare Zimmer, *Altind. Leb.*, p. 162, 172.

‡ *janmataḥ pramāṇena jyeṣṭho rājā yudhisṭhiraḥ*, i. 115. 25. The extraordinary statement in Parāç. G. S. i. 68, that 'royalty does not depend on hereditary right, but on acquisition by the sword' is well omitted by the commentator. It must be a late interpolation.

§ In the event of an undisputed succession, and the crown-prince being a minor on the king's death, the kingdom is kept for the prince by an older relative who governs it as if he were king, according to the Epic practice (i. 102. 1: *hate citrāṅgade bhīṣmo bāle bhṛātari . . pālayāṃśa tad rājyaṃ satyavatyaṃmate sthītaḥ*; but see 101. 13, *vicitravīryaḥ . . bhīṣmasya vacane sthītaḥ . . anvaçāsat . . piṭṛpāitāmahaṃ padam*). But the boy had a nominal sovereignty, and the dowager queen's authority is said to be respected. The representative is here the elder brother, who in consequence of a vow could not succeed to the throne. The boy-prince (still *bāla* and *apṛāptayāwana*) was not sixteen, and consequently a minor. In the Rāmāyaṇa, on the king's death the whole control of government is immediately assumed by the family-priest, and a session of subordinate priests (R. ii. 69). It will be noticed that no such spiritual guidance of the state is found in the interregnum recorded in the Mahābhārata, although we have instances of kings deluded enough to let the royal power fall into the priests' hands; but this is emphatically stated to be a folly (see below).

we find that in no such case the people gain their point, it is still not less instructive to observe in what manner they lose it; for in each example that legend has preserved we see that the king is obliged to make good his choice (never by force, but) by arguments addressed in a respectful manner to the protests of the people. The inner meaning of such legends seems to be that the king was not yet an absolute monarch. The people's constitution was the tradition of their race. This the king dared virtually to annul; but he did not yet venture to set it aside without a pretext, nor did he feel himself independent of the veto that the people had the power of declaring. 'They say that the warrior-caste owes its superiority to physical might;*' but this physical might depended on the good-will of the people; as its moral power rested in the approbation of the priest, to whom 'the warrior-caste stands nearest.†

A word before giving the legends. The greatest sorrow to a Hindu was lack of a son, since the latter's services in rendering oblations to the manes were necessary to procuring salvation ‡ for the father. If, in addition, the father was a king, and saw his power likely to pass into another line in default of an own son to succeed him, we may imagine what distress was that sonless king's who saw before him at once a prospective loss of private happiness and of family honor. So great seemed this danger that a proverb arose, 'one son is no son;' and, lest an only son should die and leave the afflicted and aged father in a worse condition than before, every means was tried to secure at least two possible heirs.§

* *balajyesthah*, i. 123. 11; *kṣatriyāṇām balam jyeṣṭham*, i. 137. 11.

† iii. 147. 2. These tales, it will be noted, represent the people as a whole (including as a general thing the priests) against the king. We may say that the legend was created to honor the priest, but it seems to me more probable that the general legend was there, and the priest a mere spokesman. For the legends are an Epic growth, as is plainly seen, from an earlier form. Had the priest desired his own glory, he would, in telling the story, have excluded the people, and represented himself alone as the advocate of justice.

‡ i. 159. 5: compare *punnāmno narakāt*, e. g. R. ii. 115. 12.

§ Perhaps the most extreme case of this national dread of sonlessness is shown in the boy Jantu, a legend that may perhaps not be all legend, and is interesting also as adding another to the few recorded stories of human sacrifice. The story in brief is that before the birth of the boy his father had lived long and married a hundred wives, but obtained only one son. An accident causing the king to reflect on the precarious nature of the boy's life, he asked his priests how he could obtain more children. They advised him to sacrifice the boy, promising that each wife should then bear a son. This sacrifice is determined on and carried out, 'the mother shrieking in despair like a bird over its slain offspring.' The boy is bound, laid on the altar, sacrificed, and burned. Of course the priests' prediction is realized: iii. 127-128. Compare the distress of Rāma's father in like circumstances, etc. The same idea, that one son is little better than none, meets us in II. xxiv. 538-540.

The normal succession is shown in the case of Daçaratha and Rāma. The former had several worthy sons. They grew up and married. The eldest was a model prince, beloved by the people and by his father. So the king had a consultation with the *sacivas* or military ministers and the family priests in regard to the time for consecrating the prince in the 'crown-princeship' (*yuvarājya*). These military and priestly ministers (*mantrināḥ*, including both) agreed that the time was now; and the family priest was told to make ready for the ceremony (the 'consecration' of the prince being a formal religious ceremony). Here the king assumes the succession, and asks the advice of the ministers as to the time for the ceremony; and nothing further would have occurred, were it not for the machinations of a queen, who binds the king to change his mind. But the indicated line of action is the ordinary procedure.*

I have now to show, in so far as legendary illustration may, 1. That, if there are two sound sons, the king had no allowed right to select other than the eldest as heir, and if he exceeded his right in this regard the people openly and threateningly called him to account for his departure; 2. that in a case where, on account of disease or legal uncertainty, the legitimate heir in the family was doubtful, the people reserved to themselves the selection between the disputed aspirants; 3. that the people are said to have elected a king, or in another case to have made king and declared as such the infant son of their former king—the point I wish to bring out in the last case being the assumed necessity of ratification on the part of the people of what we should naturally suppose to have needed no such sanction. But the people's election is always limited to a choice from one family (in the Epic tradition) of their own people. I shall premise by saying that, in general, the assumption is that the eldest son is the natural heir, as Yudhishtira is virtually king alone, and has no sharer of his regal dignity, high as stood his brothers in his own and in popular esteem.†

* iii. 277. 1 ff.; 7, *mantrayāmāsa sacivāir dharmajñāiḥ ca purohitāiḥ*.

† The Rāmāyaṇa of course knows only direct succession, to the eldest. Any other transfer was a crime. Compare R. ii. 7. 18-19 for a true summary: *bahūnām api putrāṇām eko rājye 'bhiṣicyate jyeṣṭheṣu putreṣu rājyatantrāṇi pārthivā āsajanti* (and these again on their eldest, never on their brothers). It is quite possible, however, that in an earlier form of our poem the brothers shared more or less in the regal power. Yudhishtira is certainly treated very contemptuously, and badgered a good deal (even in our present version), by his two brothers (compare the gambling scene, and that after Abhimanyu's death). Zimmer makes it probable that an early family-rule existed in some cases, becoming an individual sovereignty only through the audaciousness of one member, who made himself 'the sole ruler,' perhaps with his relatives' consent. Compare Zimmer, pp. 176-7; and for other verses on the subject from the Rāmāyaṇa see R. ii. 86. 10 (cf. 88. 12); iv. 17. 30, where 'three fathers' are the natural father, the teacher, and the eldest brother.

1. A king had caused it to be known that he intended to make his younger son heir, because the eldest had revolted, or (in another version) had not obeyed his wishes. Thereupon the people, headed by the priests, came *en masse* and demanded how he could do this; protesting that a younger son might not 'overstep' the elder, and closing this formal address with the words: 'This we make known to thee; see that thou do thy duty.' The king now mildly argues with the people, and says sophistically that a son who opposes his father is by good men regarded as not being a son at all, 'and the law of Çukra (a semi-divine authority) has induced me to do this.' In consequence solely of these arguments, the people retire and submit: not because of the king's will, but because of his reasoning; and in closing they say expressly, 'and if it is Çukra who has commanded it, there is no more to say.' Thus it was that Yayāti was enabled to establish Pīru his younger son as heir instead of Yadu, his eldest.*

2. As Pāndu the younger son received the kingdom because his brother was defective, 'for the gods do not approve of a defective king' (v. 149. 25), so another ancient legend of the family shows in its Epic form an otherwise legitimate heir deprived of the throne for the same reason by the decision of the people.† Pratīpa (great grandfather of Vāsudeva) had three sons, Devāpi, Bālīka, Çantanu. Although the eldest was a leper, he was yet much beloved by the king, by his brothers, and by the people. No one opposed his succession until his father (who had set his heart on Devāpi's reigning) had made all the preparations necessary to install him as heir-apparent. But in vain was the king's desire. For 'the priests, the seniors (the old councillors), the inhabitants of the city and of the country, forbade his consecration.'‡ This sudden uprising was due to the people's objection to having a leper as sovereign, and their refusal succeeded, without a word of

* i. 85. 22 ff.; v. 149. 1 ff. Compare V. P. iv. 10; Vāyu P. ii. 31. 75.

† Compare the different accounts of Devāpi in Muir's Sanskrit Texts, i. 273 ff. The Matsya asserts that the 'people' in general discarded him. The tale is old, and found thus in the Nirukta (ii. 10), but with the important modification that Çantanu unrighteously got the kingdom without mention of the people. The V. P. (iv. 20. 7 ff.) coincides with the Nirukta version, except in the return of the elder as *purohita*. He is here an unbeliever. In the first book of the Epic we have only the religious zeal of Devāpi given as reason for his becoming a hermit. Compare i. 94. 61; Weber, *Ind. St.* i. 203. This king Çantanu had (i. 95. 46) the power of healing age by touch. Compare Vāyu P.: *yam yam rājā sprçati vāi jīrṇam samayato naram. punar yuvā sa bhavati tasmāt te çantanuṃ viduh.* and thence in the next verse his 'renowned çantanu-tvam'; a good instance of myth from name (Vāyu P. ii. 37. 232), and *glokas* from single words (see Epic verse).

‡ *pāurajānapadāh*, etc., *nivārayāmāsuḥ*, v. 149. 23.

anger on the part of the king. The eldest son soon retired into the woods, and the youngest reigned at his father's death.*

* Not the second son; for the latter, Bāhlika, long before convinced that his elder brother would succeed to the throne, had left the realm and gone to his mother's brother, by whom he was adopted, and to whose throne he ultimately succeeded, permitting his father's throne to pass into the possession of his younger brother. This part of the story has also historical interest. It is his mother's brother to whom the prince goes. • I think the gradual rising of the person called 'mother's brother' has never been noticed. This relative is in the time of the Epic the nearest after those of one's own home. In the war-cries, for instance, as will be seen in the next division of this paper, it is always the 'mother's brother' on whom, next to father and brother, an endangered soldier calls for aid. In fact, the mother's brother is the one prominent uncle; no exception to this general rule being found in the case of Vidura, to whom the Pāndus say 'Thou art our father's brother,' and appeal to him for aid (ii. 78. 7); since I do not mean, of course, that the *pitr̥vya* (*patruus*) vanishes, or that, when he is present and offers aid, he is not, as in this case, termed by the suppliants 'father's brother, like a father.' But when no relative is present, then the 'mother's brother,' not the 'father's brother,' is invoked or spoken of as the uncle *par excellence*. This is e. g. illustrated in fable, as where the demure cat says to the foolish mice 'I will be your guardian, I will be a mother's brother to you' (v. 160. 33). The curious thing about the matter is that this is a new, not an old view of uncleship. For after the Epic come the Purāṇas, and here we find this preponderance of the mother's brother to a still greater extent. Thus we have in the Bṛhannāradiya Purāṇa a list of *gurus*, or 'venerable persons' (see end of note); and among them, although the 'mother's brother' appears, we find no 'father's brother.' The Vāyu Purāṇa (ii. 8. 87) says that 'a son favors his mother's brother, a daughter her fathers, and the son is like his mother:' as if this were an attempt to account for the prominence of the mother's brother ('favor' is really in a Yankee sense, and means resemble, as the text shows: *mātulam bhajate putraḥ pīṭṇ bhajati kanyakā, yathāḥilā bhaven mātā tathāḥilo bhavet sutah*). But this (it is curious to note) is quite opposed to the older law-books, in which we find the father's brother mentioned first—e. g. when honor is to be shown—and the mother's mentioned last. Thus in Vās. xix. 31 (quoted above, p. 99) we find that the king is to support his queen's 'father's brother, mother's brother;' and in G. vi. 7 salutation is enjoined only for the wife of the father's brother; and ib. 9, where the uncles themselves are saluted, the *patruus* precedes. The same in Āpastamba (i. 4. 14. 11), where the father's brother precedes. So also in G. v. 27, when the *madhuparka* is offered, the father's brother is mentioned first; and the same order obtains in the house-laws of Ācvalāyana (i. 24. 4). Manu is later, although in one instance, where the mother's brother is mentioned first (ii. 130), we have afterwards the father's sister (ib. 133) before the mother's sister (131 reverses this, as does Vishnu xxxii. 3). But in general Manu stands with the Epic; thus, in iii. 119, only the *mātula* is honored when returning from a journey (compare ib. 148); and in iv. 179 the only uncle one should not dispute with is the mother's brother, though in general relatives of both father and mother follow; for 'a mother and maternal relatives' are the most important (ib. 183). Whether this change is purely linguistic (*mātula* becomes uncle in general), or represents the growth of 'divided families' (M. ix. 111), I cannot say. It would seem to imply that the mother's brother was in the home more than the father's brother, just as we see that Çakuni, the bosom-friend of Hastina's crown-prince and constant resident in his palace, was his mother's brother. The

This story, given as history, is interesting, on account of the changes introduced into it by the Epic. For in the older version of the Nirukta the priests alone state to the younger brother, who here takes the throne from the elder, that his act is wrong, and convince him that he is a usurper. The Epic, on the other hand, puts the whole people forward as introducing a democratic remonstrance, with the priests as their mouth-piece. To the Epic compilers, therefore, it seemed natural that the people should be in this state of quasi-revolt; or they found the legend changed thus, and representing such a tone as this.

Again, the case of the settlement of the claims between the Pāndus and Kurus themselves—the plot of the whole play. The question to the Hindus is exceedingly complicated. Dhritarāshtra, the natural heir in the first generation, was blind and excluded from the throne; his younger brother, Pāndu, reigned, but resigned the throne to become a hermit. This obliged Dhritarāshtra to rule (the other possible heirs we can overlook in this connection). The sons of each grow up together. Dhritarāshtra installs his nephew as heir-apparent, either from a sense of right or through fear of the people (i. 139. 1-2). And what happens? His own sons conspire to get the throne. The king changes his mind in regard to the heir. Then the people murmured against the king (Dhritarāshtra), and said that his son was not so brave or so good as the nephew; and therefore they would have the nephew for king. They feared a plot, and became even bolder. 'They met in courtyards and on the streets, and in assemblies,' and demanded that the king should be dethroned, and his nephew not only installed as future king but made king at once. 'For how,'

list of *gurus* or venerable persons alluded to above is, though late, interesting enough to quote in full. It is from the Bṛhannārad. Purāṇa, 9. 88 ff., and is followed by a foolish passage which maintains that after all the best *guru* is he that studies the Purāṇas (an evident addition to the list, preceded by an interruption). This list reads: 'I will declare to thee the reverend *gurus*. Those that read the Vedas and those that explain the meanings of the Vedas (*adhyetāraṣ ca vedān ye vedāḥsthānān ca bodhakāḥ*); those that explain the meaning of the codes on polity and a teller of right (*vaktā dharmān*); resolvers of doubt in regard to holy texts and Vedic words; a teller of observances; he that frees one from danger; he that gives or supplies one with sustenance, and he that causes good deeds to be done (or, v. l., prevents bad deeds); a brother-in-law; a mother's brother; an elder brother; a father; he that consecrates or performs other ceremonies—these are the people to be revered.'

On Bālhika, as a type (Bactrian) see Lassen, *Ind. Alt.* i. 742. 'One's own people, even if devoid of virtue, is better (than a strange people)' says the Rāmāyaṇa, vi. 66. 13 ff.—a sentiment strange to the Epic, and based on an extension of the *svadharmah creyān* theory of the castes (*nirguṇaḥ svajānaḥ creyān*).

they asked, 'can this Dhritarāshtra now have a right to the kingdom, when he failed to obtain it before on account of his blindness?*' That these plans would have succeeded is to be inferred from the fact that the king seduced his nephews to a distant town and tried to burn them. The people, believing in their death, sank into passive acquiescence to the yoke. But again, far later in the drama, when this nephew has become king of a neighboring city, and returns to his paternal home, and is cheated out of the kingdom he has made, and banished into the woods by the wiles of Dhritarāshtra's son, even then the people cry out as before against the Kurus, and the priests become enraged and refuse to perform their duties.† In the earlier scene the king is supported in his schemes by his sons, and the ministers give no sign of disapproval. But for the people, he would not have found it necessary to send his nephew away, before putting his son on the throne. The question of legal right is but lightly touched upon. The people know that it is a disputed point which prince has a technical right to reign. They insist, however, on the moral superiority of their choice, and their right to choose. When the technical point comes up for discussion, Dhritarāshtra himself acknowledges that the nephew ought to have had the throne, and throws the whole blame on his son. His queen also says: 'it is the custom in our family that the crown shall descend from father to son;' and therefore argues that the son of the first actually reigning monarch had the right to succeed.‡

3. The last case under discussion is the election and ratification of the king by the people. The first case, of election, is shown by a literal translation of the passage describing how Kuru came to be king. Samvarana had a son called Kuru. He was a virtuous man. 'This Kuru all the people elected (sic) to the kingship, saying "he is a virtuous man."'

§ Ratification by the people is shown in the following legendary instance. At his father's death, Janamejaya was a mere child. It was necessary that he should be installed as king (there were no objections raised). How was this accomplished? 'All the people inhabiting the city collected together, and this boy, the former king's son, they made king (sic); and this Janamejaya whom the people had declared king (sic) governed the kingdom with his councillors and priests.'|| As if to emphasize the fact,

* i. 141. 23 ff.

† ii. 80. 23-26; 81. 22.

‡ *rājyaṃ kurūṇāṃ anupūrvabhōjyaṃ kramāgato naḥ kuladharmasāh*, v. 148. 30.

§ (*kurūṇāṃ*) *rājatve tam prajāḥ sarvādharmañña itī vavrīre*: i. 94. 49.

|| *nṛpaṃ śiṣṭuṃ tasya sutaṃ pracakrīre sametya puravāsīno janāḥ, nṛpaṃ yaṃ āhuḥ tam janamejayaṃ janāḥ*, etc., i. 44. 6. The Purohita

the statement is repeated. These may be nothing but legends, but they are certainly instructive. We may say that 'the people' imply priests in each case. But we see that, though the priests sometimes head the uprising, they are not always implied, and (as e. g. in the case of electing the Pāndu) they are not probably meant at all when 'the people' alone are spoken of. Even where the priests head the remonstrating people, we have the people as a whole protesting against the royal design; for the priests in these legends never undertake to face the king separately, but are represented as the exponents of the popular wish.

As to the disability arising from physical defects (debarring eunuchs, lepers, and even morally imperfect sons, such as drunkards), although insisted upon in the law, and urged, when useful to urge it, in the Epic, it is plain that no such bar was felt to be infrangible in the early period; this is shown by Dhritarāshtra's succeeding his brother, and by the blind king (whose power is described in another story as usurped) being reinstated by the people. The usurper was slain by the 'councillors'; the people then insisted that the former king should be installed again as monarch, saying: 'Blind or not blind, this man shall be our king.'*

The royal laws especially recommend that a king shall 'make his son sure in the kingdom before his own death' (xii. 63. 19); and this is also enjoined in Manu's law-book. From the account of Yudhishtira's sudden leap to fame on being chosen crown-prince (i. 139. 1 ff.), and from the power of the subsequent heir, it seems as if the king, in thus installing his successor, virtually handed over to him most of the governing power. At the court of Dhritarāshtra, all is done by command of his son, who (as in the gambling scene) does not hesitate to insist that the old monarch shall revoke a sentence passed against his own (the crown-prince's) will. Nevertheless, when Yudhishtira finally obtains the kingdom, he makes a formal offer of submission to the old king. But practically the heir-apparent, when chosen crown-prince by his father, seems to have thereby become participator in the ruling power, and the old king sinks gradually into the background. Thus, for instance, Dhritarāshtra is still alive when his son is called the *rājā*.†

and councillors, in the verse preceding, attend only to the ceremonies appropriate to the decease of the old king. It is possible, however, that they are included in the subject (*puravāsinaḥ*) of the next verse. But they cannot exclude these (as they do in the Rāmāyaṇa).

* iii. 299. 5. This is professedly a legend.

† e. g. xv. 10. 20. The old king is a *rājarsi* in ib. 12. 1 (where, by the way, Arjuna calls Bhīma 'his elder and his Guru:' a curious instance of the reverence for age, even when the eldest is not implied).

The king is, however, formally bid to banish the heir-apparent if he does anything worthy of such punishment; in connection with which rule this interesting tale is related: 'The son of Bālu's son, Asamanjas, whose father was wise and good, had to be banished; for he caused the children in the city to be drowned. Therefore he was abandoned by his father, and was banished (*vivāsītah*), even as Çvetaketu was abandoned by Uddālaka the seer, because he treated the priests badly' (xii. 57. 8-10). Whether the people compelled the prince's banishment is not stated.

6. *Royal Consecration*.—The royal consecration* was performed by a bath and baptism of water, as an accompaniment of a religious service. Suitable hymns and a Vedic ceremonial of course characterized the occasion. It is probable that in the simple event of a prince's succeeding a deceased father the repetition of Vedic verses, with the application of water at the hands of the priest, granted the consent of the people, was sufficient: such as, for instance, in the succession as described in the Rāmāyana.† The assent of the people is obtained to the succession in the first place. After the king's death, the priests and council meet, decide which prince shall be called king, baptize him, and he becomes king. In the event of a king's recovering his lost kingdom, we have, as in Yudhishthira's case, more formality. The ceremony itself, as here described, is, however, essentially the same.‡ The king and Krishna sit together on two smooth jewelled-crowned thrones. Krishna rises, takes the consecrated horn, and pours water upon the king, proclaiming him at the same time 'lord of the earth.' This ceremony takes place in the midst of an assembled multitude of all the citizens, to whom gold and other gifts are given. The 'sacred vessel of consecration' (*ābhīṣecanīkam bhāṇḍam*) is richly adorned with gems. Krishna gives next the word to the priest, who completes the consecration with suitable verses (xii. 40. 3 ff.).

This king has already long before passed through the *rājāsūya*, or consecration of king as emperor.§ When the king

* 'To be consecrated, to sacrifice, and to protect the people, are the chief duties of a king,' says the Rāmāyana (ii. 113. 23).

† Accompanied of course by music, singers, etc.: R. ii. 12. 11.

‡ In the Rāmāyana, the priestly council meet in the *sabhā* (assembly-hall), and the chief priest makes an address, explaining the death of the king and the necessity for having a new one consecrated. The elder son being banished, the younger must reign, for many ills ensue to a kingless people. The older councillors say 'even when the king was alive, we stood at your orders (*çāsane*); proceed, then, give your orders' (*sa naḥ çādhi*). After this the election is practically over, and there remains only the ceremony: R. ii. 69. 1 ff., 33; from 70. 1, the councillors are all priests, as usual in later legal assemblies (*pariṣad*).

§ A detailed account of this ceremony will be found in the seventh volume of the J. R. A. S., by Wilson, and in the second volume of Rājendralāla Mitra's Indo-Aryans.

has conquered enough to make himself think that he can assume to be emperor over his surrounding neighbors, reducing them thereby to the condition of tributaries, he must send out armies to verify his claim. All must be subdued and made to give tribute, though some are prevailed upon to own themselves inferior, and send tribute, without an actual conquest having taken place. Friends and relatives may be exempted from this necessity; and, at least in the case of relatives, the superiority of the claimant appears to be waived, as he is regarded as one of the family, and his honor is shared by those of the same blood, although ruling over a different city. If his claim to universal sovereignty is not successfully disputed, the ambitious king proceeds to proclaim himself lord of kings, or emperor, by holding high festival in his own honor, and making a feast, to which all decent people in his own state and the nobility from neighboring states are invited, the conquered kings appearing as underlings, bearing the promised tribute. A ceremony of consecration is gone through with similar to that above, and seems to be a ratification of the first performance, subsequent to a new war occurring some years after imperial power had been proclaimed, which obliged the once acknowledged emperor to reinforce his claim, and show that it was allowed. In the second consecration, we find a new assembly of kings; in the first, the king's and the emperor's brothers serve as attendants.*

Confirmative of imperial power is the formal rite preliminary to the famous horse-sacrifice. This ceremony as a religious rite absolves from sin; politically it proclaims the successful ends of the would-be emperor's desires. The *rājasūya* appears to be a very old, but naturally a rare rite; the horse-sacrifice consummates the same wish, but may also be employed merely as a religious rite by any king, without any such claim. The names of ten kings that have held a *rājasūya* are preserved in the *Āitareya Brāhmaṇa* (viii. 15); the consecration

* The first ceremony is described in ii. 32 ff. The account is here confused by a religious interpolation: apropos of Vishnu's divinity, the later redactors inserted (if the whole account be not a late insertion, which is improbable) the statement that an *arghya* was offered to Krishna. Probably the same water-ceremony as in an ordinary consecration took place. It is formally stated that slaves were not admitted to see the consecration; but, as the text shows, they were all invited if respectable. There is no reason for supposing them excluded; for an open-air ceremony was always girt with crowds of vulgar gazers, who were perhaps kept out of hearing of the Vedic verses. The later text kept them out as unsuitable to the gorgeousness of the occasion. See Wilson's view, and Rājendralāla Mitra's, *loc. cit.* ii. p. 14. Later still, a slave-officer even takes part at a consecration before the Purohita begins: compare Ag. P. 218. 18-20: *mṛṇmayena jaleno 'dak çādrāmātyo 'bhīṣcayef.*

and horse-sacrifice after a year's wandering are reflected again in the late dramatic literature, and in the Purānas.*

An interesting account of the horse-rite as a claim to empire, concluding in the sacrifice of the conquering steed, is given toward the end of the Epic story. The king that desired righteously to possess the whole earth, and after his victories to purify himself from all sin, in order to get the name of 'All-conqueror,' must loose a white horse, and send an army to accompany it. Wherever the horse went the army went. Of course, if the king was not able to support his claim, the different peoples into whose lands the steed wandered drove it off and beat the army back. If no resistance was offered, it was a sign of sovereignty to the king that had sent the horse forth. If resistance was offered, and the horse slain or the army defeated, that ended the matter. This part of the affair being symbolical of an already settled superiority on the part of an ambitious king or emperor, it made little difference how many men were sent out. They were only to serve as a type of the force behind. When Yudhishtira sends forth his steed, the army has, however, to contend with strange foes not yet ready to acknowledge the assumed supremacy. For a year the horse wandered, and was then led back to be sacrificed with appropriate ceremonies.† Such a sacrifice as this is considered so rare and great that it is equal to many more ordinary sacrifices.‡ The initiatory consecration here takes place under full moon (*cāitryān pāurnāmāsyān*) in spring-time. The king's charioteer and the best 'understanders of horse-science,' together with the priests, select a pure horse,§ which is freed after an ordinary propitiatory sacrifice, and allowed to stray. On the successful return of the horse, the *sthapatayah* and other artisans (*çilpinah*) announce the order of sacrifice to the king, who prepares everything. Bejewelled seats, pots, fans, etc., with golden posts of sacrifice, are made.|| After a number of cattle have been sacrificed, the horse is seized and killed; beside it

* Compare the horse-sacrifice in the fourth act of Utt. R. Carita; the inauguration-scene in the last act of Vikramorvaçī; and the horse sent out for a year, guarded by a boy and a hundred *rājputs*, in the fifth act of Mālavikāgnimitra, where the steed is to be brought home in a year (*upāvartaniya*, v. 15). See also Ag. P. 219 (the northern Kurus protect the king in consecration, 54); and Vāyu P. ii. 26. 143: *açvam vicārayāmāsa vājimedhāya dikçitah*.

† It does not lie in my present purpose to describe in detail the religious rites at these ceremonies.

‡ xiv. 71. 15; ib. 72. 4 ff. But of course the original rite was less purificatory than ambitious.

§ *medhyam açvam*; the *açvavidyā* is the same as *hayaçikçā*, in ib. 79. 17.

|| *yūpāh*; six of *bilva*, *khadira*, and *palāça* wood, two of *devadāru*, one of *çleşmātaka*, etc. The posts were therefore gilded.

sits the new All-conqueror's wife. According to rule they next drag out part of the entrails. This the king and his followers kiss (smell). The sixteen priests present burn the steed's limbs. Gifts are then bestowed on the priests, and on all the castes.* Thus the king verifies religiously his right got by the *rājasūya* to be an 'All-conqueror' or emperor, and is furthermore freed from the sin of taking human life involved in his wars. As described in the Epic, the whole ceremony is for two purposes: to make certain his earthly power, and to secure heaven hereafter.

I have here noted only the consecration by sprinkling. A bathing ceremony is also described in the Epic, but the formal *nārājana* is not a part of the ceremony. This rite, according to the later usage alluded to in the Harivaṅṣa and fully described in the Br̥hat Saṁhitā and the Puranic literature, consists in sprinkling the king, his steeds, elephants, etc., even the arms being included.† But the wife shares the sprinkling in the Epic (ii. 67. 30).

7. *The Assembly and Council.*—The earliest assembly for adjusting political affairs in Aryan India was the clan-assembly, called *sabhā* (compare German *Sippe*). In the legal literature, the *sabhā* is a court or judicial assembly presided over by the king as chief judge, and only the councillors, judges, and police officers take part as men of authority over witnesses and accused.‡ In the Epic we find the *sabhā* to be an assembly of any sort. It may be a judicial one, a court of law; it may be a royal one, the king's court; it may be a social gathering for pleasure; and finally it may, in its older meaning, be a political assembly. In such a case as that mentioned above, where the people met 'in assemblies' to discuss political matters, we may perhaps see a trace of the original function of the people's assembly, though such a meeting had, of course, long since ceased to be what the *sabhā* had been—a village assembly for counsel—and corresponds neither to the regular *sabhā* of old nor to the antique state council in which the king took part (*samiti*), the latter having now become a meeting of the nobles and king.

* Gifts as usual of jewels, umbrellas, etc. 'A king ought to be generous,' it is naïvely remarked here, 'for priests love money: ' *brāhmaṇā hi dhanārthinaḥ*. In regard to these points, the division of spoils, and the gifts to the people, compare xiv. 85. 25 ff.; 88. 27 ff.; 89. 4 ff.

† Compare Varāh. B. S. 43; Ag. P. 267, *vidhiḥ*; see P. W.; add Ag. P. 288. 32 (cf. K. Nīt. 4. 66) *nirājitahayadvipaḥ*; ib. 268. 38–39: *vatsare rājño 'bhīṣekāḥ kartavyāḥ purodhasū*, with the 'victory-words' to horse, sword, etc., in the following; compare also ib. 218. 3 ff. The consecration in the Rāmāyaṇa is described in vi. 112. 76 ff.

‡ The *pariṣad* was here a priestly council of ten members, convened to settle rules of that order. Compare Vās. iii. 20; M. xii. 111.

A legal bon-mot on the *sabhā*, preserved in the Epic and law alike, points to the use of the term as a judicial assembly such as the law-books know: 'that is no assembly where there are no elders; those are not elders who do not declare the law.*' As a general term for a convivial assembly, it is used in the (title of the) second book of the Epic: so in the Rig-veda (x. 34. 6), describing a like scene of gambling; and it is convertible with *samsad*, with which in the Epic it is connected. So the *sabhāsad* 'frequenter of assembly' is in the Epic merely a courtier, one of the nobles in the king's court (as in ii. 78. 3); while the *sabhāstāra* seems to be only one who is at the court, or a lower officer in the position of dice-master. Thus Yudhishtira takes the part of a gambler, and goes disguised to Virāta's court. He is then a *sabhāstāra* (iv. i. 24); but when the native courtiers give judgment on Drāupadī, they are called *sabhāsadah*. I do not know whether a difference can be maintained here, as Yudhishtira becomes practically a courtier playing dice with the king—though, to be sure, very ignominiously treated. In the Rāmāyaṇa, the *sabhāsadah* are simply courtiers attending an assembly. They sit together, and rise respectfully at the instance of the chief-priest.† On the other hand, as the popular 'assembly' became the kingly 'court' (*rājasamiti*), so the duties of that assembly became transferred to the 'councillors' or private ministers of the king, some account of whom I have given above in treating of the military officers of the realm. It would, however, be unjust to the importance of the subject in the eyes of the Epic writers were we to pass over without more complete examination the closer relations existing between the king and his advisers.

* *na sā sabhā yatra na santi vṛddhā na 'e vṛddhā ye na vadanti dharmam*; here *vṛddhāḥ* is a pun on *vadanti dharmam*; *sabhā*, on *santi vṛddhāḥ*: v. 35. 58. The use of *vṛddha* is illustrated by v. 5. 5 (cf. *viçīṣṭa*, ib. 6. 3): *bhavan vṛddhatamo rājñān vayasā ca çrutena ca*, 'eldest (most advanced) art thou in age and learning.'

† R. ii. 4. 24. It is, however, difficult to establish any fixed meaning for the *sabhā* here. It may be a council of 'advisers,' where the king sits, to which and to see whom the people are not admitted formally, but crowd out of curiosity (R. ii. 82. 11); or it may comprise all the Aryans (*āryajana*, *rājapṛakṛtayah*), and be synonymous, in the Epic sense, with *pariṣad*, an assembly where the priest addresses the king and ministers: that is, a state council of king and upper castes (R. ii. 88. 1-2, 23). Compare R. ii. 114. 1, where the king speaks 'in the midst of the assembly' (*madhye pariṣadah*, i. e. *sabhāyāḥ*), and ib. 113. But even this *pariṣad* may include the 'townfolk' or elders of the city (*pāurajanapadāḥ*), along with the councillors (*mantriṇaḥ*), ii. 121. 12. Exactly similar to this is the nomenclature in Mbh. xvi. 3. 17, where a kingly assembly is held, and the injury to Bhūriçravaś is discussed *pariṣado madhye*; alongside of ib. 7. 7, where one wishes to see the *amātyas* at once, and rushes into the *sabhā*, and *tam āsanagataṁ tatra sarvāḥ prakṛtayah tathā, brāhmaṇā nāigamās tatra parivāryo 'patasthīre* (ib. 8).

Here we have perhaps the most striking antithesis between legend and history. The heroes of the Mahābhārata are not what they (by later interpolations) are exhorted to be. They act from their own wishes, not from ministerial advice. They consult their brothers and friends, not their priestly advisers. Bhīshma, Vidura, and Droṇa are great sages, and high ministers of the king; but the two first are relatives, and of the warrior-caste; and the last is an ally and a fighting priest; if the fignent of priesthood be closely examined, perhaps not a priest at all.* Bhīshma, the sage, leads the army, and long before had seized three girls in Kāçī and fought for their possession with all contestants.† Kaṇika and Jābālī are in themselves rarities, and the former is not necessarily a priest. The king of Indraprastha has as little to do with ministerial or priestly advice as his uncle in Hastina. When resolved to imperil his kingdom, he does so because he wills it. He seeks no advice from a priest. Dhāumya's name is familiar only as religious officiator, yet he is the chief priest. The king does not employ him as councillor, nor has he an officer's place of any sort till left in charge of the city with Yuyutsu in the late fifteenth book (see above). The king's haughty cousin consults the priests as to the best manner of raising a required sum of money, but not otherwise. Resolving on war, the kings and allies, both of Pāndus and of Kurus, consult together, and, though priests are present, with themselves alone (v. 1 and 148-150). All is practically done by a court of nobles and princes. Duryodhana, being resolved on war, goes against his will to hear the consultation, and retires as determined as before, although the advice of the council is against his wish. Moreover, in this council the real priests are mere figures. When the prince retired, all those that had opposed his measures followed him, 'resolved to die for him.' The council is military.‡ The meaning is clear. The assembly of the people had become an assembly of nobles. The military power of the people had quite become the possession of the king. In all public matters appertaining to the story itself, the priests are as good

* Compare J. T. Wheeler, *History of India*, i. 77.

† Bhīshma is, as we see him, more warrior than sage. Compare his exploit with the three girls (i. 102. 3 ff.) He becomes later the saint and sage, and perhaps is wholly a later interpolation.

‡ So in the Rāmāyaṇa, just before the battle begins, Rāvaṇa enters the *sabhā* for a hasty deliberation; then, coming out with his *sacivas*, a suite of ministers, makes a speech and gives his final orders at once: 'quick with the drum, lead the forces up, there is no time for delay.' The *sabhā* here is simply an assembly for military deliberation (R. vi. 8. 42-45); the *sacivāḥ* may be nothing more than comites in battle (as in R. vi. 21. 41). That is to say, *saciva* was a minister or helper of any sort, *sabhā* was any assembly.

as silent, and the people are suppressed. It is only in such older legends, as are related above, and told in our story as 'ancient tales,' that the power of the people seems to linger, and then not in military but in civil matters.* On the other hand, the third period, represented by the late didactic parts of the Epic, is one when the priests assume the right to be the king's advisers in all particulars. A cabinet council of the greatest secrecy is always recommended. But in the assembly of nobles, as shown in the history, no secrecy is thought of. We have thus three diplomatic stages reflected in our poem: the popular assembly, already restricted to protestation in civil matters; the public aristocratic assembly on war matters; the private† priestly council on all matters.

The last of these councils is most fully illustrated, of course, owing to the priestly interpolation; but we must bear in mind that the council of priests is only didactically urged, and is not a part of the story. Doubtless the king in the last period of the Epic consulted (on military as well as civil and spiritual affairs) chiefly with his priestly prime minister. The important evidence of the Epic story is negative. The plans for war are conducted and completed without asking the advice of priests. Even Bhīshma is regarded as an elder warrior, not as a priest, when heard in the assembly; and the Pāndus consult only their allies. The growth of the 'priestly council' will be seen in the next paragraph.

8. *The Royal Purohita and the Priestly power.*—Before examining the intimate connection between king and priest, assumed (by the priest) as necessary for the welfare of the state, it may be well to remind ourselves that a number of cases are recorded of early antagonism between the warrior and

* There is an interesting example of this in the speech made by king Drupada's ambassador to the Kurus. He is exhorted to appeal to the princes and to the generals, and to represent to the elders the 'family law' as infringed. When he arrives, however, the speech is made only in presence of the royal family and leaders of the army (v. 6. 15; 20. 2: *sarvasenāpraneṭṭṇām madhye vākyam uvāca ha*). This is in the first instance a reminiscence of the older 'assembly,' and the elders are those of the town inhabitants; as is expressly stated in a proposed embassy mentioned for the same purpose on the part of the Pāndus, who urge that an ambassador shall be sent to declare the matter in the presence of the court and the assembled elders of the town (*pāuresu vṛddheṣu ca samāgateṣu*), v. 2. 7. In i. 221. 39 'citizens' (*pāurāḥ*) are distinguished from priests.

† Absolute secrecy in council is a late practice, but as a rule is strongly urged. The king should go to the house-top or a hill-top when he consults with his ministers, who according to the text may live in the palace, but according to the details of the story have separate abodes. Some forms of the rule specify 'a secret chamber' as the place for council (xii. 83. 57; 80. 23; v. 38. 17 ff., etc.). See above.

priestly castes.* It is probably because the priest had in mind the earlier independence of the king that he, even in the latest period, insists so strongly on the necessity of reciprocal support. For in that latest period no orthodox king would have dared to resist the representative of the spiritual power. Let us now see what were the claims of the full-fledged priest in relation to his sovereign's councils.

'A king's power is five-fold,' says the pedant priest: 'brute-force, the first; second, that derived from his ministers; third, from his wealth; fourth, from his descent; fifth, the best, wherein all lie, wisdom.† And this wisdom is the hoard of the priests. 'The king should not eat alone, nor think about things alone, nor walk alone, nor be awake alone' (v. 33. 46). He should never part from his advisers, but do in the ideal state as is recorded in a legend of the first book, where, when the king went into the wood, he was accompanied by all his ministers and the family-priest.‡ At this period the king depends on the advice of his ministers and the accounts of his spies.§ For council, as for war, let him appoint officers (xii. 91.

* Viçvāmitra and Vasishtha; Kritavīrya's sons, etc. This subject is discussed by Lassen. *Ind. Alt.* i. 703 ff. The Epic has three kings that are especially noted as having had contentions with the priests: Viçvāmitra, Nabusha, and Purūravas. The last, for example, 'made war on the priests, and robbed them of their jewels' (i. 75. 20). Manu and the Harivaṅça add among others Vena; but the former does not include Purūravas, who was in older texts reckoned a good king. Compare Muir, *Sanskrit Texts*, i. 296 ff., with M. vii. 41: cf. Mbh. xii. 60. 39.

† *yad balānām balaṁ çreṣṭhāṁ tat prajñābalaṁ ucyate*: v. 37. 52 ff.; 55; cf. ib. 39. 70: *tapo balaṁ tīpasānām brahma brahmavidām balaṁ*, etc., repeated in 34. 75, with the addition *rājñām daṇḍavidhir balaṁ, çuçrūṣā tu balaṁ strīnām (daṇḍa here as in iii. 150. 32, daṇḍanūtim rte nirmāryādam idam bhavel* 'a system of punishment is necessary to the conservation of law'). Compare i. 175. 29, 'a warrior's power is anger; a priest's is patience; although in ib. 45-46 such warrior-power is scorned: *dhig balaṁ kṣatriyabalaṁ brahmatejo balaṁ balaṁ, tapa eva param balaṁ*, 'fie on a warrior's power; the priest's power is the only true power.'

‡ *sāmātyah . . purohitasahāyaç ca*: i. 70. 35.

§ Of these latter the country was full. 'A king may learn wisdom from a fool, as one gets gold from a rock, . . and should glean information from spies, as a gleaner gets ears of corn' (v. 34. 32). They are employed in town and country. 'Surrounded by good ministers, the king governs with his rod (*çāsti daṇḍena*, metaphorical), and employs spies both in every district and every fort' (iii. 150. 37, 38 ff.; cf. 42, 43). These spies are partly military, partly civil. They are the king's very eyes; for 'cows see by smell, priests by knowledge, kings by spies' (v. 34. 34: compare the verses in the last act of *Mṛchakaṭikā*). Even the ministers he must have watched by spies: 'to guard against conspiracy, let him have old houses and such places carefully watched' (xii. 58. 7; cf. 58. 10; 69. 1 ff.). Specially recommended as dangerous are the assemblies (*samāgama*) of priests, four-crossroads, public assemblies, market places, etc. Compare also i. 140. 63; v. 192, 62, where the spies are disguised as beggars and blind men (M. ix. 364).

29), since the voice-power (*vāgbalam*: v. 144. 21) of the priest is as important as the army-power. Everything and everybody must now 'stand under the order of the priests' (*çāsane*: i. 140. 54), and worship them, as they have taught the people to do for themselves and the king.*

The kings themselves recognize the objective point of their priests' endeavors: 'All priests have spent their strength to acquire fame, . . . become followers of teachers just in order to win glory' (i. 124. 12-13). The Guru or teacher of holy knowledge was always to be venerated, and, being always a priest, must still have had an intellectual hold upon the king's mind. In ordinary cases, a pupil may not only do nothing that the Guru forbids, but may not do anything unless this teacher commands it (i. 161. 18); and though with royal pupils the teacher may well have been on his guard, yet, as legends relate, neither he nor the ordinary priest hesitated to turn their wrath against the royal house on trifling occasions. The morality of Kanika is of a very utilitarian sort. Power, in the teaching of this adviser, is the aim of life. What is virtue? 'A hook to reap fruit with' (i. 140. 20: *anikuçam çāucam ity āhrūh*). 'The order given even by a sinful priest is good' (ib. 54). It is pleasant to note, however, that such advice is from the moral point of view opposed to the general tone of priestly doctrine, as are some of the practical rules in the same passage.†

* The king also now becomes *divus*: compare *janako janadevas tu mithilāyām janādhipaḥ* (xii. 218. 3; 219. 1). He is to incorporate god of right and law (i. 113. 24; 180. 9 ff. and 4; 49. 8). His touch is like fire; one must endure all that he does (iii. 41. 20; i. 41. 23-24; iii. 161. 11). The king as divinity is often spoken of in a Homeric way: 'serve the king like a god,' *devarat*, *θεὸν ὡς τιμῶσασιν* (iv. 4. 22; xiv. 63. 24). With the identification of Dharma and king, cf. Manu, vii. 18 and our text again (Rājā = Daṇḍaḥ) xii. 15. 34 (the personified punishment reminds us of the Eumenides: 'He wanders about, splitting, chopping, causing bursting, causing rending, causing slaying, pursuing; thus wanders even the god, punishment,' xii. 121. 19). Godlike characteristics of a good king are given in i. 64. 13 ff.; he is identified with the creator, i. 49. 10; 'like the moon,' or 'is the moon,' is a common comparison, i. 222. 9; ib. 49. 12; which, with the Indra comparison, may have given rise to the ultimate identification of the king with all the divinities, as in iii. 185. 26-30; xii. 68. 10 ff., 40 = M. vii. 8, etc., 40 ff., all the gods; 139. 103 ff., father, mother, *guru*, and all the gods. Compare R. ii. 122. 17 ff., and R. ii. 111. 4: *rājānam mānuṣam āhur devas tvam sam-mato mama, yasya dharmārthasahitam vṛttam āhur amānuṣam*. The deification thus portrayed was the king's reward for his exalting of the priest. For the priest did not scruple to deify the king so long as he could himself maintain the claim of being 'the god of the gods:' xiii. 152. 16 (M. ix. 315 ff.; Ag. P. 225. 16, 18 ff.).

† The whole chapter is an interesting one; part of it is a reflex from the law: thus, 8 = M. vii. 105, and 14 = M. vii. 106. Other advice given is that no mercy should be shown to refugees (*çaranāgata*). Verse 52 recommends that the Guru himself be killed if he be a traitor (usually only banished). Bribery, poison, and witchcraft are, further,

That a priest may be killed is in direct contradiction to the law. There a priest may on no account be slain, unless he tries (with a weapon) to kill another man. If that other then slay him in self-defense, it is pardonable. But the Epic gives, surely, even in late passages, a contradictory sentiment. A recreant priest may always be slain if he takes to fighting,* and Uçanas says that even a priest who draws on you may be killed with impunity, for the need of wrath is wrath;† but otherwise he ought, as highest punishment, to be banished.‡ In a chapter devoted to the life of the state officials it is said: 'The officer that lives at court shall not dress like the king; he shall not multiply royal edicts; he shall not when officially employed appropriate royal property; by so doing he incurs imprisonment or death' (iv. 4. 48 ff.). The priest is not expressly mentioned here, but would be implied, except we allow the general rule against killing to take precedence.§

The true basis of kingly power is the priest's power; of priestly power, the king's power. Their union is perfection. This, in a word, is the one view taken by the later writers; or, we may say, by the didactic writing even of ancient times; for the acts of the Epic descriptions are of older tone than the words of earlier homilies.||

recommended against enemies, while false devotees and heretics are to be employed as spies. Note here the didactic tone also: 'let thy speech be dull, let thy heart be as a razor'; 'the house of one who has been executed is to be destroyed by fire'; 'the beginning is the attainment of the fruit' (= ἀρχὴ ἡμισυ παντός, *phalārtho 'yam samārambhaḥ*, 21).

* *sa vadhyah*, vii. 160. 38.

† xii. 56. 29-30; in ib. 34. 18 attributed to Veda: cf. Vās. iii. 16; B. i. 10. 18. 12-13; etc.

‡ ib. 56. 31-34: *viprasya viṣayānte visarjanam vīdhigate na çārīram dādam eṣāṁ kadācana (klūbatvam āṛṣam, N.)*.

§ The best passage forbidding a priest's execution is found in v. 82. 16 ff., where it is also stated that a warrior may be executed by royal order (the following description of the courtier, *amlāno balavān chūrah . . . satyavādī mṛdur dāntah*, applies to the warrior). No one unacquainted with Revelation (holy scripture) ought to be admitted to the king's formal council (v. 38. 24). The ninth act of the *Mṛcchakaṭikā* has an amusing illustration of the difference in opinion in regard to killing a priest. The rule is quoted that a priest, as it is forbidden by Manu, ought not to be 'killed'; the Brahman is then carried out to be impaled!

|| *ubhayam eva brahma kṣatram cā 'varundhe rājū sann ṛṣir bhava(tī) ya evaṁ veda* (Jāiminiya-Brāhmaṇa, Burnell's MS., p. 562). *Samsṛṣtam brahmaṇā kṣatram kṣatreṇa brahma saṁhītam* (perfection), i. 81. 19; compare i. 75. 14: 'born of Manu were the priest, the warrior, and other men: then united the priestly with a warrior power'; compare also iii. 185. 25; xiii. 59. 24, 36. The oft-found allusion to the warrior as born of the priestly caste is explained by the legend that, when the earth had lost all her warriors in war, the priests united with the women of the warrior-caste and recreated warriors (i. 104. 5; 64. 5; vii. 70. 20).

When, however, distinction is instituted, the priest is best of all: 'From one divine body came the four castes; separate are their duties; separate their purifications; of these the priestly caste is best' (i. 81. 20). 'The king,' says the priest, 'is destroyed if he turn against the priest'; but the same was wise enough to say: 'there are three men that possess the earth, a warrior, a wise man, and a courtier'; and he made it his task to be both the wise man and the courtier, and so keep a double hold of earth.*

Especially sacred are always three priests: the Guru who has taught the king his 'sacred learning,' and whom we see, e. g. in the *Mudrārākṣasa*, as the venerable minister that supercedes the king himself in administering the kingdom; the sacrificial priest; and the family-priest (though the first and last may be identical). Now the later didactic Epic endeavors not only to insist on the time-worn rule of immunity for these sacred characters, but also to make the Guru and the family-priest the controllers of the king's mind and council.† Such a priest should be in authority. He should be as important as all the other ministers put together. As to punishing him, there are certain men infatuated enough to affect the *Çaṅkha-Likhita* school, and say a bad priest ought to be slain; but let not a king slay such a priest 'even if a great number of villages demand it'; even to revile him is a sort of treason (*pāiṣṇam*); those that demand punishment after the *Çaṅkha-Likhita* model (summary retaliation for slight offenses) are actuated by selfish motive; there is no Vedic authority for such a thing.‡

Such is the Epic view, as the later priests laid it down. And yet how different not only from the whole tone of the free early tale,§ but from the moral character of most of the priests themselves. For, except for the court-priests, the caste was one of pious if foolish, humble if narrow men. The hermitage pro-

* v. 15. 34=M. ix. 321; so v. 38. 13. Compare i. 137. 12; xii. 78. 21 ff. The last quotation ends *yaç ca jñāti sevītum*—reference lost.

† The person usually mentioned is the Purohita or family priest, who may or may not have been the Guru or tutor of his youth, but who is ex officio his Guru or venerable advisor *κατ' ἐξουίῃ*, when an appointed or inherited minister.

‡ xii. 132. 10 ff. The twenty-third section of the same book gives the reason of those that are *Çaṅkha-Likhitapriyāḥ* in a tale—extremists in their view of punishment.

§ It is this early tone that strengthens belief in the great antiquity of the original poem over against the acknowledged lateness of huge portions of the present Epic. The priest does not here represent the advance made even in the Brahmanic period by his caste; for there also we find the priest not only sharing the power with the king (*ubhe vīrye*), but superior. 'The king that is weaker than his (Brahman) priest is stronger than his foes,' is the epitome of this view (both from the *Çatapatha Br.*, Weber, *Ind. St.* x. 27. 30). In the last, *abalīyān* evidently implies 'assumes less authority' (v. 4. 15).

duced those whose moral uprightness and noble pride in learning and literature was imitated, and falsely stamped as genuine nobility of soul, by those whose servile life led only to desire of upward growth in material prosperity. What braver and morally loftier words could we seek than those of the priest (?) Mātanga: 'Press only up; bend not; for upward striving alone is manliness: break even; but bend not.'*

Such words as these were caricatured by the court priest's worldly mind to mean 'get as high up as you can in the world; get as much wealth, as high a social position, as possible; assert yourself as superior to everyone else.'

We have found negative evidence that the priest is not active in state-council except in didactic portions of the Epic. What does this didactic portion teach in regard to the chief-priest especially? Practically, the chief of the king's councillors, though private in office, stands the Purohita or family-priest. The king is advised to have ministers. He must have a Purohita. 'The king must have a good family-priest; this man must not only be just and upright, but he must understand the principles of desire and gain, and know the true essence of things.'†

Moreover, besides being conversant with sacred literature and possessed of moral virtues, this priest, 'in order to secure to the king victory and heaven,' must be eloquent and skillful, 'for his use is to gain (for the king) gain as yet ungot, and to guard what has been already got.'‡ For this purpose a king is directed to get his family-priest, and abide by his judgment. Observe his extended duties and simultaneous power. He became the confidant, the adviser of the king naturally. He must be so, said the later priest.§ Thence the transfer to the whole caste: 'A kingdom devoid of priests to help the king will

* This verse, attributed by N. to Mātanga in v. 127. 19-20, is given in ib. 134. 39 to 'the ancients,' i. e. a priestly proverb. In the original ('break at the knotted joints'), the metaphor is from the bamboo. Its application to a warrior (where 'bend to the priest' is added) is forced, though the warrior has his own oft-repeated verse, 'manliness I deem the highest thing': xii. 56. 15.

† The quotation is from i. 174. 14-15; the Purohita is insisted on, and required to be an astrologist and prognosticator in ii. 5. 40 ff. Compare xii. 72. 1, where he is to 'guard the good and suppress the bad,' etc.; and, to give pre-Epic authority, Ait. Br. viii. 24 (*puro dadhīta*); G. xi. 12; Vās. xix. 3.

‡ Compare iii. 26. 16 ff., and 11-14: 'the sight of the priest, the strength of the warrior—each is unequalled; the world is at peace when these are much together; then, to gain what is yet ungot and to increase what is gotten already, let a king seek knowledge among the priests.' We have the 'far sight of the priest' again in iii. 29. 16.

§ It is as necessary that the Purohita should know the art of polity (*dandanīti*) as that he should know the Veda. Compare e. g. Ag. P. 288. 16.

never conquer the earth through mere bravery';* and, again : 'even a debauched king, if he put a priest at the head of affairs, will conquer mortal and spiritual enemies ; therefore let kings employ family-priests in every act, if they wish to obtain happiness from it' (i. 170. 72 ff.). In fact, the knight is only a sham-hero ; 'the one and only hero is the wise man' (i. 232. 3) ; and 'the way in which the warrior obtained his power was by the priest's deputing it' ; for it was originally the latter's.†

But further, the assumption of a spiritual power greater than the physical might of the king is always maintained. The priest can destroy the realm by his magical power and through sacrifice : 'an archer's arrow kills but one ; the dart of knowledge slays a realm' ; 'neglect kills a cow, a (neglected) priest, when angered, kills a realm.‡ The combination of priestly and knightly knowledge in Droṇa is a combination of which it is said 'that is a union of which we have never heard in anyone before.§

The priest will always support the king if the latter does as the former wishes, and especially if he pays him sufficiently. There was an unfortunate king who tried to compel the priests to do as they ought in the matter of sacrificing ; he tried to compel them by his modesty, by his mildness, by his generosity. He failed. His gifts were not large enough (i. 223. 25). It is worth while to complete the picture of these latter-day saints, and show the real aim of the priestly courtiers. Cows and, later, land, the priest always covets. He demands them as a sacrificial fee. They are the key to heaven for the king. 'When the king dies, if he expects to gain future happiness, he had better bequeath considerable land to the priests.¶ 'By giving land and cows to the priests a king is freed from all sin ; whatever sins a king commits in acquiring new realms, he casts them all off if he makes sacrifice and large gifts to the priests'

* i. 170. 75-80 : compare the character of the Purohita, and the necessity for his being honored, in xii. 73. 5 ff. ; and the royal *ṛtvij* in xii. 79. 1 ff.

† iii. 185. 29 : power that is now concealed in the 'buttery heart of the priest' as compared with his razor-like voice ; while the knight's voice is buttery and his heart a knife, i. 3. 123.

‡ v. 40. 8 ; cf. ib. 33. 43 ; in 45, *mantraviplava* does the same. Those that hate the priests (the three castes are mentioned) become demons when they die (*rākṣasāḥ*), ix. 43. 22. The priest was not to sit on the same seat with a warrior : 'only these may sit down together : a father and his son ; a priest with a priest ; a warrior with a warrior' (v. 35. 16).

§ *nāi 'tat samastam ubhayaṃ kasmīṅ cid anuṣuṣṛuma*, iv. 51. 9 : *kṛtāstratvam* and *brahmavedaḥ* are meant.

¶ vii. 110. 50. Compare (xii. 12. 30) *grāmān janapadānḥ cāi 'va kṣetrāṇi ca gṛhāṇi ca, apradāya dvijātibhyaḥ . . .* (beside horses and cattle) *vayam te rājakaḷayo bhaviṣyāmaḥ* (29 : *aṣaraṇyaḥ prajānāṃ yaḥ sa rājā kalir ucyate*) ; on the other hand, *yo naḥ ṣaraṇadaḥ . . . bhavel* is a synonym of king, R. vi. 74. 41.

(iii. 33. 78, 79). In the latest portion it is pitiful to see the degradation of the priest. He grovels for gifts.* His rapacity breaks every barrier that morality, religion, and philosophy had striven to raise between his soul and the outer world. He becomes a mere *periculatorum præmiorumque ostentator*.†

Terrible tales are told of those that dared to brave the priestly power; but even in the stories most redounding to priestly glory there lies a germ of ancient contempt for the priest.

* The priest's attitude toward God is the same as toward the king: he looks on the divinity mainly as a means of wealth. In Ag. P. 121. 52 we find a characteristic verse illustrating this: *om̐ dhanadāya sarva-dhaneçāya dehi me dhanam svāhā*.

† The claim of the priest to higher spiritual power, ending in the assumption of divinity, precedes the growing claims of gifts. The one reached its highest point while the other was still behind its complete development. As early as the Brāhmaṇas the priests are deified, but the last extravagance of gift-claiming is to be found in the latest portion of the Epic. The priest in view of his own claim would even debar the king from receiving gifts. The priest stands in place of the fire-god; therefore it is the same as if one made offering to the god when the king gives gold to the priests (xiii. 85. 147-8). This is but one verse in a shameless chapter. The original duty (as preserved in xiii. 61. 4 ff.) is for the king to give the priest sustenance; but it is extended to wealth of every sort; for the king's 'horrible deeds' (*rāudram karma*: compare *āsurabhāva*, used of warriors) may be cleansed by sacrifice and gifts to the priests: 'the king is made pure if he sacrifice with rich sacrifice,' and 'gifts to a priest are better than sacrifice.' It is said that priests should not take from a bad king; but greed denies it; 'they may take even from a bad king' (ib. and 62. 11). Priests are of such sort that neither gods nor men can prevail against them; and, if not honored, they would make new gods and destroy the old (the parallel in Manu shows again the fact I pointed out in another essay, that the latter belongs to the period of this Parvan); all the mixed castes have become so through disregard of priests (33. 1 ff., 21; 35. 18-21; 47. 42, the priests are the gods of the gods). Cf. with this also 31. 34, and 62. 92: *nā 'sti bhūmisāmanam dānam*, etc., as in the Inscriptions. In the priests' gifts it is noted that the king should not give to an *apātra*, and not refuse a *pātra*; these are two possible errors in giving (xii. 26. 31) that destroy its worth. To confiscate a priest's property, or 'steal it,' brings down another imprecation often found on the land-grants in Inscriptions (the thief goes to thirty hells, and lives on his own dung, xiii. 101. 11 ff.). A list of tit recipients is given in xiii. 23. 33 ff.: cf. 22. 19 ff.-23. In xii. 321. 143 there is a story of a king who gave away so much to the priests that he broke his treasury; 'and he became a miserable wretch.' On the whole, there is a marked difference between the priest of this book and of the fifth, at least in impudence. Cf. the modesty of v. 33. 15 ff.: 35. 73, etc. It is only in a sort of spiritual exaltation that we find in the late portions a distinct abnegation of worldly benefits, in order to a proper 'deliverance,' and find that the receipt of presents is sinful, 'since the silkworm is destroyed by what it feeds upon;' where one is advised even to give up 'truth and falsehood,' and devote himself wholly to *nirvāna* (xii. 330. 29; 332. 44; 340. 60: a passage where the *ka* hymn is imitated; *ahimsā* is the rule of sacrifice; and Brahmaism is united with Vishnuism, 335. 4; 338. 4 ff.; 340. 115. 125; a pure *purāna* section, 340. 123; 348. 78; but even here gifts come again to their right).

The might of king Viçvāmītra availed little against the power of the priest Vasishtha; but the fact that the king in the story goes to the priest and demands his beloved Nandinī and (when she is refused) threatens, saying, 'If you do not give me Nandinī I shall not abandon the character of a warrior, but take her by force,' shows if anything disdain for the priest. So, too, in the Nahusha tale. His was an awful fate, because 'he harnessed the seers like horses' and made them drag him, exclaiming exultantly: 'No man of little power is he who makes the sages his steeds;' but that a legend survives to show that a king did such a thing is more useful than his legendary fate.* The king becomes so thoroughly docile to the priest in the ideal world of what should be (a great part of the Epic) that he receives the same approving epithet bestowed upon a well-trained horse or elephant, and is termed 'obedient' or 'governed.† Summarizing priestly functions as enjoined by the later Epic, we may cite the following: '(Priests) learned in revelation should be employed by the king in legal and business affairs (*vyavahāreṣu dharmeṣu*); one man cannot be trusted to control such matters; let the king, therefore, employ the learned priests (to see to these things); for a king is called "ungoverned," and sins, if he does not properly guard his subjects' interests, and claims too much from them, etc.; since he takes on himself the sins committed by his ill-protected people.‡

* Nahusha is mentioned by Manu also as an 'unruly king' (vii. 41). The Epic story is given in v. 15 ff.; and in i. 75. 29 it is added that he was a powerful monarch, who conquered the barbarian hordes, and made the seers pay taxes as well as harnessed them 'like cattle.' The seers (*muni, ṛṣi*) were probably the priests of his day. The oft-repeated Vasishtha story is told in i. 175; the quotation above verse 20, etymology being subverted to the purpose of the tale, *indriyānām vaçakaro vaşiṣṭha iti co 'cyate* (174. 6 (b) B. omitted in C. 6639 = 6 (a) and 7). The *vāsiṣṭham ākhyānam purānam* in regard to the famous *vāirañ viçvāmītravaşiṣṭhuyoh* closes as usual: (48) *brāhmaṇyatvam avāptavān apibac ca tataḥ somam indreṇa sahu*. The king became a priest. Such interchange of caste is not unique. 'A priest who has been a king' (*rājarsi*) is several times alluded to. Compare *munīputrān dhanurdharān* in xiii. 6. 33, 'priests' sons bearing bows;' and see the appendix to this section.

† v. 34. 12: compare ib. 39. 43; also M. vii. 39-40. The same expression is used of the people when properly subjugated by the king, xii. 131. 13. The Rāmāyaṇa remarks that the priest might desert the king if the latter did not obey him, just as Ricika did Çunaḥçepa (R. ii. 116. 10), implying of course a melancholy fate. *Vinaya* is used also in R. of a son's obedience to his mother (ii. 17. 10), but also of restraint imposed by wisdom: *rāmo vidyāvīnītaḥ ca vinētā ca parāri raṇe* (R. v. 32. 7; in 9, *vedāvīnītaḥ*, 'by wisdom governed and governing all in war'). Later still, compare e. g. Ag. P. 224. 21: *naçyed avinayād rājā rājanam ca vinayāl labhet*; also ib. 227. 3.

‡ xii. 24. 18 ff. The victories of a king depend on the advice of the priest properly followed, R. ii. 109. 11; he must attend to the words of the diviners and astrologers (G. xi. 15). The privy councillors in R.

What the effect of this yielding to the priestly ministers was, the priests are frank enough to tell us by a legend: 'There was once a king of the Māgadhās, in the city of Rājagriha, who was wholly dependent on his ministers. A minister of his called Long-ears (*mahākarnin*) became the sole lord of the realm (*ekagvara*). Inflated by his power, this man tried to usurp the throne, but failed solely because of Fate' (i. 204. 16 ff.). Scarcely an encouraging legend for those that are told to be 'priestly dependents,' as were the kings of this later age.* By an extension of their own importance, the priestly caste gradually represented themselves not only as worthy subjects for moneyed favors, but as the subjects *κατ' ἐξοχήν*; and when we read 'let the king be content with his name and his umbrella (royal insignia); let him pour out his wealth to his dependents,' we may rest assured that the priest means by dependents none but the priests. Almost ironically is added the proverb: 'a priest knows a priest; a husband knows his wife; a ruler knows his ministers; a king knows a king' (v. 38. 27-28). The teaching of the king's dependence is worked out with utter thoroughness; and lest any deluded king should fancy that priests, from their more theological studies, might be unable to understand special political matters, this broad doctrine is laid down: 'They that have made themselves closely acquainted with general principles, not with special topics, are the truly wise; special knowledge is secondary.† For these priests have now indeed become 'like unto the gods;' they are the 'gods of the gods,' and can destroy the king that does not believe in them.‡

And yet, side by side with such assumptions, we find, even in late passages, the old military impatience cropping out: 'the

are priests, and they precede in processions, etc. (R. ii. 124. 2; 127. 3). In council R. gives as the result of a debate *āikamatya* (unanimous vote), or 'adjusted divergence,' or 'no agreement': perhaps technical terms, R. v. 77. 7 ff. The expressions used of the king in the Epic quotation above are *durdānto 'rakṣitā durvinītaḥ*. For the moral compare xiii. 32. Compare R. ii. 1. 80, where the same words are applied to those whom the king should hold in control (*nīyantā durvinītānām vinītapratipūjakāḥ*).

* *Mantribāndhava* is the expression used of kings in v. 34. 38; they are as dependent upon their councillors as wives are upon husbands, and the priests are the king's 'protectors,' as the god Parjanya is the protector of cattle! This reduces the king to a *puruṣādharma* from a *puruṣa* (cf. v. 163. 3 ff.).

† *prayojaneṣu ye saktā na viṣeṣeṣu bhārata, tān aham paṇḍitān manye viṣeṣā hi prasaṅgināḥ*; or, reading *śaktā* with C., 'they that are capable in general principles' (ib. 44).

‡ Ib. 41; iii. 200. 89; xiii. 35. 21. More practical destruction than that by means of Vedic rites is often attributed to the priests. The king is now and then warned that they may destroy him by poisoning his food, by curses, etc. (i. 43. 28, 30; 182. 13 ff.).

place for priests is in the hall of debate; good are they as inspectors; they can oversee elephants, horses, and war-cars; they are learned in detecting the faults of food—but let not the (priestly) teachers be asked for advice when emergencies arise' (iv. 47. 28 ff.). And with this is the extraordinary position occupied by the Purohita in the next world, according to Manu—and in this, according to the oath of Viçvāmitra, where it is regarded as a curse to be the family-priest of a king.*

But the general tone of advice, especially in regard to the prince of priests, the king's Purohita, is far different. Whence arose this formidable personage? He is nothing but the last development of that singer of the king's praises whom, as we shall see, even the early Vedic age possessed. The king, or a priest, or even a man of the people, originally sacrificed, made songs to the gods, and also songs of praise for kings.† But gradually this practice became a right usurped by the priest. The family-priest of the king was now alone entitled to sing a proper hymn to the gods, whereby the king was glorified at a sacrifice. The Guru or teacher remained the tutor. He took care of earthly as well as of heavenly matters. The worldly portion was amalgamated with the spiritual. Both were claimed by the priest. In place of new songs at sacrifices, the old were ritualized, and became stereotyped, sacred. The king who had taken to himself a special man to sing these hymns and perform sacrifice for him found himself indissolubly ‡ united to a servant with whose service he at first could not and then afterwards dared not dispense. The servant edged ever nearer to the throne. He laid his hand upon it as if to uphold it; in reality, he made it a step-ladder to his pride. He became more arrogant as he became more secure; and, seating himself above the king to whose height he had mounted, he claimed control of the sceptre. He became a prime-minister; to disobey him was to imperil the soul; to obey was to imperil the throne. The king feared for his soul. He abandoned the throne. The servant ruled his master.§

* M. xii. 46; Mbh. xiii. 93. 130. Compare Muir, Sanskrit Texts, i. 128.

† Compare Muir, Sanskrit Texts, i. 280.

‡ Add to this that the office of priest was often hereditary; the prince's adviser is the adviser, perhaps, of his father; that adviser's father the adviser of the prince's grandfather. Thus a deeper veneration.

§ The scene (from the eleventh century) in the third act of the *Mudrā-rākṣasa* would lead us to suppose that the king did not dare to make his minister resign, but first waited for him to offer his resignation, daring to provoke him, but allowing him to offer back his badge of office, which is at once accepted (32). • We see from the same play (25) that the *açvādhyakṣa* and *gaçvādhyakṣa*, or officers appointed over the horses and elephants, are maintained in this period on a salary fixed not by the king but by the minister.

We can almost trace this development in the different layers of our poem. Set aside the didactic epigram, and look at the narrative. The priest, powerful even in the Vedic age, reflects that power in the stories of his unbridled insolence—but not at first as an adviser, only as a private, impudent fellow. The Epic Purohitas of the story are servants, not masters, of the king. The assembly is still comparatively free from priestly influence. The family-priest is a private admonisher when his opinion is requested, not a public holder of state polity.

We may, perhaps, sketch his growth somewhat thus. His influence began in the secret council. As his power grew, he ruled the king's thoughts, and persuasively governed the assembly. His next step was to restrain the speech of the assembly, through inspiring fear of contradiction. When the meeting of the people passed into a conference of warriors and priests, and the king sat at the head of the deliberative assembly, he was still a humble auditor. But he was a declaimer, a trained speaker, a skilled logician. He defeated the knights in argument; he overawed the king by his religious lordliness. The people's assembly became a priestly conclave. The secret council became a whisper from priest to king. So the discrepancies between the early story and the late teaching become reconciled. Only thus can we understand the grotesque difference between the different parts of the Epic.*

9. *The Ambassador*.—Beside the Purohita stands in military importance the commander-in-chief of the army. His duties will be explained below. A third high officer on whose position the text spends much care is the ambassador.† He may be either a priest or an officer of military caste. In the former case, the Purohita is chosen. Thus, Drupada sends his Purohita as ambassador to Hastina (v. 6. 1 ff.). But if not priest, any high military hero standing near the throne is sent. Thus Dhritarāshtra sends his charioteer as ambassador (v. 22 ff.), or his younger brother (ii. 58). The allied forces send Krishna as ambassador from Upaplavya. In the Rāmāyana, however, it is assumed that the ambassador will be a wise priest (*pandita* :

* The view here given of what the priest's position really was, in the time when the story of the Epic was the main poem, is based on what the Epic narrative shows us to have been the ruling power in council and debates, and this is not the priestly power; the view of what the compilers and redactors thought it ought to be is based on didactic statements and tales woven into the narrative (earlier) portion, and the claims made by the priests in outside literature. This latter includes, indeed, as acknowledged above, pre-Epic works; but there is no reason to suppose that the kings of the Brahmanic period were so 'under the thumb' of the priests as the latter asserted to be desirable. In this, as in many other points, the Epic narrative is older than its literary form.

† The threefold division of the Niti, Kām. Nīt. xii. 8, is not yet known.

R. ii. 109. 44). This officer is, of course, a temporary one, whereas the ordinary herald is generally the charioteer, as if this were a fixed duty connected with that profession. To the perfect ambassador eight qualities are assigned as needful. He must be active, manly, speedy, compassionate, clever, faithful, of good family, eloquent.* That is to say, he must be a clever man of the world, with ability to conduct the affairs entrusted to him; and especially a good speaker. Such we find him practically represented. Internationally of interest is the rule that to slay an ambassador is (bad policy and) the height of impiety. 'He that slays an ambassador shall go to destruction; and his ministers also.† The treatment of the war-ambassador sent by the Pāndus to Hastina shows the state and ceremony accompanying such occasions. The ambassador is received with gracious words at the gate of the city, and escorted to the palace. No word is said of the object of his coming. Greetings and familiar conversation being over, he is assigned an apartment, and goes to rest. Not till the next day does he deliver his message. At sunrise, ushered into the council hall, he reports to the assembled court of prince and nobles the substance of what he had been charged to say. In another case, however, the ambassador gives a verbal report.‡

A verbatim report of the message entrusted to the ambassador is attempted now and then; but when the communication is very long, either the text fails to reproduce the poet's intent, or a certain latitude is permitted to the speaker. We find, for instance, almost an exact reproduction of a lengthy

* v. 37. 27: *astabdhā* may mean 'modest,' rather than 'active.'

† xii. 85. 26. In this passage seven qualities are given (28)—good morals; aristocratic family, eloquence, adroitness, agreeable speech, 'speaking exactly as was told,' and good memory (cf. vs. 7; further rules in the following verses). Compare M. vii. 63 ff. The official title of the ambassador is *dūta* 'messenger.'

‡ The description is from v. 89. 1 ff. The hospitable reception ought to come first (*kṛtātithyah*, v. 89. 25; compare ib. 91. 18, and the fact that the ambassador had already been the guest of Vidura). But this formality is sometimes passed over. So in the case of Drupada's priestly embassy, and the visit of Sanjaya to the Pāndus. The latter goes rather as a friend, and the etiquette of high life is shown first on his return, when, although anxious to deliver his message at once, he is obliged to send a formal notice of his arrival to the king, and announces himself ready to deliver the answer he has received (v. 82. 1 ff.). Although the ambassador is by his office secured from harm, yet we find evidence that his rights in this regard were not always maintained; for Drupada thinks it necessary to encourage his ambassador by calling his attention to the fact that, 'being an old man and a priest,' as well as a formal legate (*dūtakarmani yuktaḥ*), he will not be injured by those that are to hear his message; the weight lies on 'priest' and 'old man,' rather than on 'legate' (v. 6. 17). The rule of safety is, however, implied in v. 88. 18 (*dūtaḥ . . . apāpaḥ katham bandham arhati*), and is often expressed.

message, but toward the end certain variations occur in our text. The case of Ulūka seems to show that the ambassador was more afraid to return than to go, if the answer he carried back was likely to raise his lord's anger. Those to whom he is sent give him a rough message to take to his king, but personally treat him kindly, and grant him formal permission to stay with them, if he does not wish to return with such a report.* As a general thing, the ambassador differs from a mere repeater like the herald in being permitted to exercise judgment and skill in treating with the enemy. As a resident ambassador I find no examples of the use of the *dūta*, who seems intended to go and return at once; but who probably was often retained regularly in the capacity of state-agent, liable at any time to be sent on such errands. From the use in the Epic I should doubt whether this office was not also a later creation, meant to complement other needed offices in a great realm; for the description would apply as well to an occasional messenger as to a stated officer, and the persons employed in the Epic are, as shown above, relatives or the family priest. In the case of Vidura we find an ambassador who, chosen for a message distasteful to him, goes through the form of delivering it as an officer of his king 'appointed against his will' (*balān nāyuktah*), and first gives the message 'as told' (although in his own words), but then remains silent until questioned, and thereupon explains that, for his own part, he does not approve of the object for which he was sent.†

10. *Social relations of the King.*—The didactic chapters tell us much on the subject of the 'king's friends,' social as well as political. But not much information can be gleaned respecting the real private social life outside of war. The allies of four sorts (obtained by sharing, by love, by relationship, by artificial means, i. e. bribery; and fifth [!], by virtue, xii. 80. 3, 6) are mirrored in the private circle. Good friends are those gotten by blood-relationship, love, and virtue. Doubtful are those that are friendly as a result of bribes or sharing wealth.

The king may have no private friends, except among the better classes. 'With poor or miserable men high kings can

* Compare, for the nearly accurate report alluded to, v. 161. In ib. 163. 5 ff. come the answer and permission to the ambassador to remain.

† ii. 58. 1 ff. : we must interpret *yathoktavādī*, 'speaking as was told,' rather freely, to mean sense, not words. So the ambassadors in the Rāmāyaṇa have this epithet without repeating literally what they were told to say. Compare R. ii. 109. 44 : *yathoktavādī dūtas te kṛtaḥ paṇḍitah*; ib. vi. 16. 78 : *sa tad rāmavacaḥ sarvaṃ anyūnādūhikam sāmāyān śrāvayāmāsa*, 'he told him all Rama had said, without addition or deduction.' Family is also demanded by R. (*kule mahati co 'tpannaḥ*, R. v. 81. 47).

have no friendship. The unlearned loves not the learned; he that drives a chariot is no friend to him that has none; friendship is the fruit of similarity.* So in war kings are not allowed to contend with low persons.† So it is urged (xii. 56. 48 ff.) that a king should not joke with his dependents, or be too familiar with them. 'The dependents,' it is said, 'really hate him, being envious of a supporter. They do not like to be dependent; they betray his secrets; they multiply his wishes by bribing and deceiving; and if a king is too gracious, he will find that the subjects divide his realm and corrupt his women; they will even yawn and spit in his presence, and shamelessly make known his private words; and when he has entered the assembly (*pariṣad*), they will mock, saying "thou hast done ill;" and when he is angry, they will laugh; and when he is generous, they will not be thankful; they will mount elephants and horses without regard to his presence; if he is fond of pleasure and adornment, they will blame him; and they will play with him as they would with a bird on a string.‡

Of social rule but little is said. The king, though leader of society and state, may not do just as he pleases; 'he may do as he pleases if he does not offend against public opinion (the world).' Precedent should always be a main factor in his movings. Actively, he should be 'enterprising'; passively, he should 'avoid un-Āryan ways.' Let him not hesitate to sin for the sake of conquest or for the sake of his realm—such in brief should be his private social code as ruler. In the first rule we note the Āryan conservatism; in the last, the influence of the later sophistic priest.§

The more common side of the king's life has been discussed above under the head of vices. A word or two more on the subject may here be added. The king may not associate with common people, but in strictness this refers to men; he is surrounded by common women all the time, such as dancers and singers and half-respectable prostitutes, with whom he has what conversation he pleases. We have further evidence that the inner

* *sāmyād dhi sakhyam bhavati* (similes similibus), i. 131. 5, 11, 67; cf. ib. 131. 66, 71; 138. 69, *arājū kila na rājñah sakhā bhavitum arkasi*; cf. also ib. 166. 15 and 23, repetition.

† *vṛthākulasamācārāir na yudhyante nṛpātmañah*, i. 136. 33; xii. 96. 7.

‡ So Brihaspati says that a too merciful king would be beaten as an elephant's head is beaten by a trainer, xii. 56. 37-39, B.

§ xii. 56. 41 (compare M. xii. 105); 58. 1-20. The statement elaborated in this passage, to the effect that a man of enterprise (an active king) is 'better than a voice-hero' (*vāg-vīra*), is ludicrously offensive to the commentator, who rightly supposes a priest to be meant by the latter epithet. He therefore wrongly interprets the 'man of enterprise' as 'one having great priestly wisdom,' and therefore better than a 'voice-hero,' who is an ordinarily wise priest (one is a *pandit*; the other has *mahāpāṇḍityam*)!

palace was full of such women, and even guards of the king were sometimes constituted of women in later tales.* Although the lower classes (slave-caste, people-caste) naturally do not share in the royal revels when these are of a private nature, they do form a background to the public social displays. At great feasts, coronations, weddings, and the like, and even, as we have seen, at a public religious service, the common people are present, as it were on the outskirts of good society. They flock about and see what is done. They are represented by their singers and musicians, although these are probably the only representatives of the real plebeian classes in actual contact with their superiors. Their like, the artisans and workmen, the small people in general, look on and admire.

In only one case have we the upper and lower castes on a social plane for a moment, and this incident seems more a reflection of an old custom than one practiced at the time it is described. I refer to the very interesting annual heyday that occurs at the 'branding of the cattle.' What we have in the legend is simply an account of such a picnic (for such it was) as explanation of a king's stratagem. Nevertheless, the description is valuable and unique; and it is to be remarked that, though the crown-prince used the fête as a ruse, it yet appears to have been an actual celebration. The prince wants to get out of town with a large number of people, but without his father's knowing for what he goes. To explain the departure of a force of men from the city, he hits on this plan. Feigning an interest in the proceedings of the ranchmen, he goes to the king, and says that he wishes to attend the 'marking of the cattle,' as it is now the time for this work. The reply of the king shows that this appears a natural request. 'Certainly,' he says, 'one ought to attend to the cattle-marking; go, if you wish.' The prince leaves the town with the large escort he desires to take, and accompanied by the ministers. They go to superintend the counting and branding of the cattle. Each head of cattle was branded at the age of three years. At the ranch there is great gaiety. All the cattle are counted, and the proper head are marked. The cowherds dance and sing at the close of the work. The little court looks on, and patronizes the pleasure of the laborers. I mention the scene because it is a rare idyl in our Epic, and corresponds to court-and-country

* In *Vikramorvaçī* (Act iii.), lamp-women, but respectable, are attendants on the king; in *Vāyu P.* ii. 26. 178-9 is mentioned a king *Çataratha*, son of *Mūlaka*, 'always girt with women through fear of *Rāma*:' (*nārikavacaṁ*) *trāṇam icchan* 'women were his breastplate. *Çata-*, *Daça-*, and *Nava-ratha* occur as names of kings. The last is the father of *Daçaratha*, according to *Kūrma P.* xxiv. p. 255 (Bib. Ind., *çlokas* not numbered).

relations more primitive than the position generally assumed for the king in the Epic would make possible (iii. 240).

11. *Royal Marriage*.—Having thus examined the recorded ideal life of a Hindu monarch, and tried to discover, as far as legendary history helps us, the real character of the ancient king as contrasted both in moral parts and public functions with that ideal, we have now to note briefly some of the events in the royal life that are of a more personal nature—though in these also we see the king always as an inseparable part of the whole kingdom.

Marriage was permitted to the warrior-caste in general either in accordance with a received ceremonial, or without any rite whatever. The legal rite by which the actual wedding took place differs according to caste. In the case of a warrior, the bride holds in the hand a bunch of arrows, and the two walk around the fire-altar, while a marriage hymn is sung. At the seventh step they become man and wife.* The preceding ceremony consists, in the case of a king, either of a joust where the maiden elects her lord by adjudging her hand to the king who carries himself best in the lists, or who best fulfils some stipulated condition (as when Arjuna, the chief hero of the Epic, performs a difficult feat in shooting, and so wins his wife from many royal competitors); or, as in legendary accounts, there is no joust, but the royal maid to be given in marriage is conducted into a hall where the assembled suitors† are, and, having been led about from one to the other and having had all their names and virtues explained to her, makes on the spot her choice. This latter was the real and only ‘self-choosing’ (*svayamvara*)—a term, however, loosely applied to the decision by tournament as well; though there the maid had, it would appear, only the privilege of excluding from competition such as did not suit her. The Epic mentions casually several cases of *svayamvara*, but describes only one of each kind with any fullness.

The much simpler method of marriage, which appears to have obtained largely among knights or kings, was for the knight to find the girl and run away with her. Thus Bhishma ran away with three girls at once, and challenged any to recover them. So Arjuna, when he found that his brother the king had absorbed his first wife’s existence (such is the real interpretation of the Krishnā relations between Arjuna and Yudhishtira), stole another, in accordance with knightly laws. In fact, this method is especially approved, as an evidence of prowess and survival of the ‘good old warrior custom;’ though

* In the ritual the steps are pro forma; the wedding is performed by rites, verses, symbolic movements, etc.

† The *saciva* attends the wedding also, in R. vi. 40. 18.

such approval is generally registered as an exculpation and defense of the foregone deed, rather than as an impartial decision between different modes of marriage. In the case of rape of this sort, no religious rite initiatory to connubial connection was regarded as necessary; but if the deed was condoned, the adventurer returned with the girl, and the marriage ceremony was gone through with.* In these cases caste weds caste. With the lower classes, the king had what connection he pleased; and though he is advised not to succumb to sensual pleasure, there is no restriction on the extent of his harem.† Even with high-caste girls—that is, with girls of the priestly caste—the king is fond of connecting himself without formality. Such are generally represented as the innocent daughters of ascetic priests who live in the woods. The usual thread of the love-story is, that the king hunting sees the hermit's hut, finds the girl, who at once falls in love with him as he with her, and persuades her easily to a marriage without rite or delay. The old priests, too, were continually doing the same thing; and thus, as legend says, arose most of the best families in Hindu society. Out of the mass of formal law and very informal legend we may gather this. The early king, at a time when his chief occupation was cattle-lifting and pillaging from his neighbors, such as the growth of Indraprastha and the records of cattle-raids preserved in the live Epic show to have been the primitive royal means of life, was accustomed to take his wife or wives as he did his cattle, from whomever he wished and however he wished. As an exhibition of strength, an additional excitement to his own pleasure, and a means of getting what he desired without tedious formality (there is no trace of real exogamy), he ran across the border, ravaged a petty principality, annexed it, drove the cattle home, and took the woman that pleased him for his wife. When political life became complicated, and peace was the present condition of the land, a king with a daughter to wed made a feast, invited the neighboring kings to it, and bade such as chose to contend for the honor to be assembled in his hall. When all were collected, in came the king and his daughter, who had had no formal acquaintance with

* In the case of Arjuna. Here note that the girl's brother connives at the deed, but the people do not.

† But the lowest classes are formally forbidden. Some of the great sages are, however, the sons of slave-women. For some reason or other, the formal law is particularly severe on the Vṛṣālī (a low woman of the mixed castes). Her touch is contamination for the priest, and is forbidden to all the twice-born. The Vṛṣālā is so much a synonym for the Çūdra or slave that in enumerating the castes it is sometimes substituted. Compare Vāyu P. ii. 16. 29: *brāhmaṇāḥ, kṣatriyāḥ, vaiçyāḥ, vṛṣālāḥ cāi 'va* (see just before, *vṛṣa*).

men, and, scanning the number assembled, she bashfully picked out a husband. She testified her choice by kissing the hem of his garment. Rejoicing, feasting, and the religious rite then followed. Such is the pretty tale in the Nala story.

More ceremonious is the pseudo-self-choice, where the maid's 'choice' is conformed to stipulations made by her guardian, or at the most is a choice not of an individual but of the conditions on which she binds herself to accept anyone among several. At a tournament or joust, where the election depended on the strength of the aspirants, there was really no choice left.* Besides, at this time the affair was practically settled by arbitration. The marriage of Virāṭa's daughter and Arjuna's son is a pure marriage of convenience. Virāṭa wants to bind the two nations together. He offers his daughter first to Arjuna, who declines. Virāṭa is somewhat disappointed, but says that perhaps Arjuna's son would do just as well, and offers his daughter again to Arjuna for his son. Arjuna consents to this, and the two parents tell the two young people that they are to be married immediately; and they are. It is to this period, I think, that the jousting election (*svayamvara*) belongs. There is nothing primitive about it. On the contrary, it is modern throughout. Arjuna's rape of Subhadrā is the only form of 'primitive marriage,' except it be such accidental connubial connections as form the basis of his 'adventures.†

As matter of formal preference, the *svayamvara* is declared to be the proper marriage for warriors;‡ but this is only a general rule, as 'rape is also recommended.§ We read of a king reaching the age of thirty-six without marriage.¶ Usually the age is about half of that, as Abhimanyu marries at the age of sixteen, and the Pāṇḍu brothers could not have been much older when they wedded Krishnā. The wife's 'legal' age was from three to twelve; but this modern view does not correspond with the early accounts of marriages (see below on women).

The sub-wives of the king were not wives but concubines. A later marriage with a woman of higher caste should reduce

* Compare the self-choice of R. iii. 4. 30: *ya idaṃ dhanur udyamya sajam ekena pāṇinā, kariṣyati sa sītāyā bhūvi bhartā bhaviṣyati*, 'Sītā's husband shall be the man that can draw this bow with one hand.' In this ceremony a messenger was sent to issue invitations (ib. 31).

† These are also late, as adventures. The Citragupta incident is a peculiar application of levirate laws in their final evolution into a substitution of a daughter's son instead of the true son of the levirate.

‡ *svayamvaraḥ kṣatriyāṇāṃ vivāhaḥ*, i. 219. 21.

§ *prasahya haraṇaṃ cā'pi kṣatriyāṇāṃ praçasyate*, ib. 22.

¶ 'Sixteen and eight summers, and four and eight also, he had not enjoyed pleasure of women:' i. 100. 20.

the former wife of lower caste to the position of a menial. This is probably true only for the period that originates such a formal rule. The law-codes require in all marriages that the husband should marry his highest wife first. Afterwards he may marry 'down.' Thus a warrior should marry a girl of the warrior-caste first. Then he should marry a girl of the people-caste.

Marriages were celebrated by general public rejoicings, where music is a predominant feature. In regard to these constant descriptions of festival processions, we may say that by reading one we know all. Like exhibition of joy celebrates the return of a conqueror to his native city.*

For further details of marriage, see the general appendix on the status of women. Polygamy with the king and royal family was the rule. Polyandry is unknown except in legends and in the case of the Pāndus themselves, who all married one wife. 'The law of having only one consort'† is in the case of women respected, but it is evident that no man of warrior-caste was thought the better of on account of its observance. As far as sentiment went, a devoted husband is praised for fidelity; but if he grew tired of his wife, he 'over-married' her as a matter of course. The law demands a second wife if the first fails to bear a son.‡

12. *Royal Burial*.§—Of the two old methods of disposing

* A charming account of this sort is given in iv. 68. 24 ff. The king hears of his son's victory and immediate return. He bids the courtisans and heads of the army go out and meet the victor. The bell-man mounts an elephant and proclaims the victory at all the cross-roads (*ṣṛṅgātakeṣu*). The daughter of the king puts on her holiday clothes (*ṣṛṅgāraveśā bharaṇā*); and when the city had heard the proclamation, all the people, to greet the prince, go out before the king with their hands crossed for good luck (*sarvam purāṇi svastikapāṇibhūtam*), accompanied by the sound of drum and flute and shell (*vārija*), and they are all dressed in their best clothes (*veśāḥ pārārdhāḥ*). And with them go the praisers and the singers and the encomiasts, who also play on the drum and the flute (*sūta, māgadha, nāndivādya*); and they rejoicing welcome him home. Compare further the account (in xii. 37. 41 ff.) of a procession advancing to Hāstinapur. The women drove in front on lofty cars; the king was praised by clapping of hands as well as music. The city was adorned with white wreaths, flowers, and flags. The main street was ornamented, and incense was burned in it. Flowers, incense, and waterpots also adorned the palace. In iv. 71. 33 the king offers his whole kingdom to the Pāndus just before the marriage ceremony (cf. ff.). The *sūta, māgadha*, etc., are professional players. Compare the section on music, below, and xiv. 64. 2, 'praised by *sūta, māgadha*, and *bandin*.' They are generally accompanied by wrestlers, boxers, mimes, *granthikas*, and those that ask how one has slept (*sāukhyaçāyikāḥ*). Compare, too, v. 36. 55 ff.

† iii. 205. 5, *ekapatnyah* . . . *striyah*; R. v. 2. 21, *ekapatnīvrata*.

‡ Ap. ii. 5. 11. 12; M. ix. 81.

§ Compare Roth, *Todtenbestattung*, Z. D. M. G., viii.; Müller, *Ueber Todtenbestattung*, etc., ib. ix. 1 ff., and India, p. 238 ff., on the ceremony for the dead; Zimmer, *Altind. Leben*, p. 400 ff.; Rājendralālamitra, *Indo-Aryans*, ii. 114 ff.; Caland, *Über Totenverehrung bei einigen der indo-germanischen Völker* (1888).

of the dead, the perhaps later form, cremation, had in the Epic age superseded earth-burial. The king was burned in the midst of his sorrowing subjects, who came together to witness the pageant. Only children of not more than two years of age were buried in earth. These two forms, earth and fire, are the only ones recognized. Embalming is not described. The remarkable trick of the Pāndus on entering Upaplavya in disguise would imply a monstrous imitation of Persian exposure to birds, were we able to imagine that the pretext suggested could really have been preferred. It occurs in a late book that the Pāndus hide their arms in a tree, and agree to say, if any one should try to investigate the spot, that it is holy and must not be touched, because 'according to the family custom, practiced by our ancestors, we have hung up in yonder tree the body of our old mother, recently deceased at the age of one hundred and eighty.* The formal death-procession is for the king alone, or, if slain in battle, for the king and his dead comrades. When the royal household goes forth to mourn for the king, we find that his old father and the women of the city proceed to the battlefield, followed by all the artizans, the merchants, the people (agriculturists and cattle dealers), and, in short, all the laborers. Then arises the sound of lament, each wailing his lost. And they sing the songs of praise above their slaughtered heroes.† Or, again, in another scene, the king dies, and the four castes go out in procession and watch the burning of the king's body. After the royal funeral, the people mourn twelve days, priests and all lamenting the dead king and sitting upon the ground.‡ Then follows the ceremony for the dead (*grādha*). A short abstract will describe the funeral. The body of the king is covered with flowers by relatives and friends. The bodies of the king and his wife are carried on the shoulders of friends.§ All the royal insig-

* iv. 5. 32-33. I find not the slightest trace of such a mode of burial elsewhere, though it was an extraordinary statement to invent, if the custom appeared as peculiar to the writers as to the historian. This book is late—but so late as to be infected by Persian custom? Yet 'family custom' could cover any oddity in India.

† xi. 10. 16. The dead are heaped by rank on piles (pyres) and burned. Compare ib. 26. 30: *citāḥ kṛtvā prayatnena yathāmukhyān narādhipān, dāhayāmāsur avyagrāḥ śāstradr̥ṣṭena karmaṇā*. Compare R. ii. 88. 80. Arrian recounts that the Hindus have no tombs, but 'sing songs' over the dead (*τίθενται τοῖσιν ἀποθανούσι . . . καὶ τὰς ψῆδὰς αἱ αὐτοῖσιν ἐπέδοντα*, c. 10).

‡ i. 127. 20, 32: compare xv. 39. 16.

§ i. 127. 9: that is, in a litter, as I suppose in a similar case to be the meaning of *yānena nṛyuktēna bahumūlyena mahatā* (a large litter, costly, drawn by men); as elsewhere, *yāna* may refer to anything that carries, but is different from the common palanquin (xv. 22. 19 ff.), unless here we have really a wagon drawn by men (xvi. 7. 19).

nia (*cāmara*, *vyajana*, and the umbrella) are borne along.* Music accompanies the procession. The members of the court and the royal officers with the sacrificial priests lead, dressed in white; and honey and butter are carried in a sacred fire-vessel. All the castes follow, grieving. Gifts are strewn among the people by the courtiers and members of the royal house; they repeat always the mourning refrain ‘alas! whither goeth our king!’† Men of the people and slave-castes take part in the procession. Also the wives of the warriors join the crowd. They come at last to the Ganges, and the body of the king is bathed in the holy river. It is then clothed anew, and adorned with sandal-paste and white robes ‘made in that land.’ The bodies are then burned with sandal-paste, and the people show their grief by sleeping upon the ground.‡ The religious ceremony in memory of the dead is called the *āurdhvadehika*, and must always be accompanied by gifts to the people and to the priests.§

The question of widow-burning implied above resolves itself for Epic usage thus. *Mādrī* burns herself with her royal hus-

* The burial-hymn of the *Rig-Veda* (x. 18) assumes a time when each man bore the bow, and had it broken on his funeral pyre. The Brahmanic rules make a distinction of caste, and keep the bow for the warrior, while a goad (*aśtrā*) is laid in the hand of a man of the people. Compare Weber, *Ind. Stud.* x. 25.

† To answer this question very literally, we may refer first to xvi. 7. 23, where in burying a king we find the place chosen for his body was ‘the place that was dear to him when he lived;’ and as to the destination of his soul, compare the list of places where dead heroes go in xv. 33. 13 ff.

‡ The burning of the bodies is here represented as having already taken place! The king died in the forest, and the wife mounted the funeral pyre and was burned with him (i. 125. 31). After this the bodies are brought to *Hāstina*, and the ceremony takes place as described above—where, from the description of the anointing and dressing of the ‘king’s body,’ it is clear that no former burning is imagined, and that the queen is only brought in as an appendix: once when they bear the king ‘with the queen,’ and again at the end, where they place the ‘bodies’ on the fire. Evidently two accounts are here confounded. After the king had been burned with *Mādrī* on the pyre, there could not have been much corpse left, or not enough to dress and smear with sandal-paste.

§ xii. 42. 7. Such gifts free the soul from sin. A list of them is given in the late books. The recipients in these descriptions are the priests. Compare xiii. 136. 10, etc. Here ‘shoes and umbrellas’ are added after other gifts, though generally they are to be of great value, cattle, gold, gems, land, tanks, etc. Compare also xiv. 14. 15, where ‘great gifts’ are bestowed. In xiv. 14. 4 ff. the religious ceremony lasts ten days, during which time the king makes presents to the priests: the ceremony being a general warrior-funeral for kings and knights fallen in the war. The surviving king, for whose sake the war was fought, becomes by this means ‘free of debt.’ Even villages are given away by him (compare also xv. 11. 10; 13. 11; xiv. 62. 2 ff., where ‘thousands of priests’ are feasted, and garments, gold, and cows are given away).

band. Four wives are burned with Krishna. Çantanu's funeral shows no such custom. Elsewhere in the didactic portions the custom is enjoined (see appendix on women). Lassen says (*Ind. Alt.* i. 592) that absence of widow-burning is found in the Rāmāyaṇa alone. This is, therefore, not quite correct. Moreover, the mention in the Rāmāyaṇa of a woman 'adorned and wanting to die and obtain final happiness,' and the heroine's own remark that she is not *satī* (the technical word denoting a woman willing to undergo *suttee*) shows the custom known here, although not taking place in the case of the chief characters.*

The royal burial in the Rāmāyaṇa is, except in unessentials, the same as in the Mahābhārata. At sunrise all the people assemble; the perfumes, oils, etc., are used as described above. The king's body is borne on a palanquin (*çibikā*), and is carried, adorned and clothed, in procession, while in front the praisers go, chanting the usual eulogy. After ten days' mourning, on the twelfth and thirteenth days, the *çrāddhu* or funeral feast is given.† The non-Epic but legal code gives us the statement

* Both the warriors' widows being provided for by the king (see above), and the Rāmāyaṇa's word a 'woman is called (scornfully) "a widow" just the same, though she be rich' (R. iv. 22. 17), show that in general the widows of warriors, both in the Mahābhārata and in the Rāmāyaṇa, are not thought of as dying with their husbands. On the other hand, acquaintance with the practice of not allowing women to live when deprived of their husbands seems to me to be implied in the above-mentioned quotations. In the first case, a woman parted from her husband exclaims: 'fie upon me, un-Aryan and bad wife that I am; since I live even for a moment when separated from him, and (in so doing) live an evil life' (R. v. 26. 24-25). Compare the like words in the following quotation from our Epic, where the reference is (without any doubt) to widow-burning: *patihīnā tu kā nārī satī jīvitum utsahet, evam vilapya . . . pativrataṁ sampradīptam praviveça hutāçanam* (xii. 148. 9). In both we have, it will be noticed, the same exposition of the *satī* (Anglo-English *suttee*) or 'good wife.' The practice touched probably only the chief wife of a king at first, and was afterwards extended to the wives of warriors not royal. It appears to be a southern custom. In Bali, according to Friederich, widow-burning is confined almost entirely to princely families, and here *satī* is distinguished from *bela*, the latter being a separate fire for the wife without the crease (which was used in *satī*), J. R. A. S., N. S., ix. The second quotation given above contains a reference to the same subject, and reads: 'then they saw in astonishment the (doomed) city of Laṅkā, adorned like a woman that wishes to die and obtain final happiness' (*dadarçus te tadā laṅkāṁ vihasanto hy alamkṛtām, paçcimāṁ çriyam āpannāṁ narīm iva muṁrṣatīm*) R. vi. 15. 27. (Perhaps *paçcimāṁ kriyām* is intended as in R. vi. 96. 10, meaning 'the death-ceremony.') Compare Mbh. xvi. 5. 4: *dadarça dvārakāṁ viro mṛtanāthām iva śṛiyam*. Final happiness is a wife's portion when she dies with her husband. A late work like the Pār. G. S. both allows re-marriage and praises the *satī*, since she saves her husband from hell, and dwells in heaven as many years as she has hairs on her body (three and a half *crores*): iv. 28, 30-31. Compare also R. vi. 68. 33 ff.

† R. ii. 83. 1 ff., 26; 86. 1 ff. Compare ib. ii. 68. 47-56 (three days of mourning).

that at the king's death all interest on borrowed money stops, and Vedic study is suspended. Both are resumed on the consecration of the new king.*

13. *The Imperial City*.—There is no part of Hindu literature so old that walled cities are not mentioned in it.† There are, on the other hand, no purely Hindu ruins antique enough to prove that stone-walled cities were known before Alexander. From each fact arises a contradictory theory. Investigators have been prone to lay weight on one or the other of these proofs, and discredit the force of the other. The archaeologist stands opposed to the literary student. Native scholars have naturally preferred to make the Vedic allusions to walled towns over-reach the negative evidence of lack of remains. They also lay stress on the frequent mention of walls, ramparts, gates, etc., in the Mahābhārata and Rāmāyaṇa.‡ Giving due regard to both claims,§ it seems to me that a fair and middle possibility presents itself. Since the Vedic literature names, we may assume that the period represented knew,

* Vās. ii. 49; G. xvi. 32. But see Bühler's note to Vasishtha.

† Compare the castles of the Dasyus, etc., made of iron and very numerous, a list of which is given from the Rig-Veda in Muir, Sanskrit Texts, ii. 378 ff.

‡ One point in the latter quotations has, I think, not been brought out: it is the standing epithets applied to the towns in the Rāmāyaṇa. Strictly speaking, we have no descriptions here; we have one set of phrases constantly repeated with slight variations. Compare *sapṛākārā satoranā* in R. vi. i. 34, 40; 2. 14; 16. 57; 25. 33; *sāṭṭapṛākāratoranā*, ib. v. 35. 35; 51. 24; 56. 142 (*sāṭṭatoranā*). A slight variation occurs in ib. vi. 14. 19ff. (the *prākāra* is of iron, ib. v. 72. 11). These walls shake with a noise (*sapṛākārāṭṭālakā*, *satoranā*, vi. 16. 53–54; so *prākārās toranāni ca*, vi. 46. 136; notice *sapṛākārā satoranā* in 16. 53, in 57, and compare 22, all in one section), and shake with the pounding of fists (*prākāra* and *toranā*, ib. 17. 8). Now this phrase occurs in various ways in the Mahābhārata, as in iii. 284. 2 (describing Lankā), *dr̥ḍhapṛākāratoranā*; viii. 33. 19, *gr̥hāṭṭālakasam̐yuktam bahupṛākāratoranam* (describing the city in the sky); xv. 5. 16, *puram̐ ca te suguptam̐ syād dr̥ḍhapṛākāratoranam, aṭṭāṭṭālakasambādham̐ śatpadam̐ sarvatodiḥam̐*; xvi. 6. 23–24, *imām̐ nagarim̐ . . . prākārāṭṭālakopetām̐ samudrah̐ plāvayisyati*, etc. But it occurs in all cases in places which would otherwise be thought late—as here, in the Rāma legend; in a fanciful tale woven into the battles; in the didactic recommendations of one of the latest books; in the prophecy of the flooding of Dvārakā, a still later addition; even the commentator takes the inner defense to be of barbed wood (*upaçalya*, iii. 15. 6). It seems, therefore, as if without prejudice we might affirm that walled cities are known in early times; strong stone walls and battlemented towers belong, however, to the late Mahābhārata-Rāmāyaṇa period, and are there predicated of cities in such a way as to lead us to suppose that the poet even then did not describe what often existed, but what had been set as a poetically correct method of description, and preserved as a model. Thus also Ag. P. 238. 28 describes a town as *uccapṛākāratoranam*. Compare also Vāyu P. i. 88. 13; 39. 36, 51; 40. 6, 10, 14, 16. In all these cases we find the same standing epithet.

§ And to the Greek account, Arrian (c. 10) saying that coast cities are of wood, inland of brick. He describes also the size of the moats, etc.

walled towns. But it is not at all necessary to assume that these walls were of more permanent material than hardened earth, protected perhaps by ditches and palisades. Such is the *vapra*, a wall of earth flung up for fortifications, and often spoken of, even in the Epic, and amid the pompous descriptions of 'iron walls' and other highly improbable latenesses. Such too is the *caya*, which is found in the Mahābhārata as a city defense, a mere bank of earth. These two are sometimes joined in one description.*

But if the accounts of full fortifications must be regarded as foreign to the first form of the poem, this is exactly what, in accordance with a reasonable theory of the origin of the poem, we should expect to find. Descriptions of cities belong to the latest amplification of the original.

With full consciousness, then, that the city described belongs to the imperial, not to the regal, period of the poem†—that is, to that period when the acts of the heroes were finally exalted as much as possible by the last revisers—we may examine the general plan of a Hindu city, as it is represented perhaps not earlier than the fifth century after the Christian era. It had high, perhaps concentric walls about it, on which were watch-towers. Massive gates with strong doors,‡ protected chiefly by a wide bridged moat, the latter filled with crocodiles and armed with palings, guarded the walls. The store-house was built near the rampart. The city was laid out in several squares.§ The streets were lighted with torches and

* Compare R. v. 9. 15: *vaprāḥ śvetacayākārāḥ*, 'by walls of earth and heaps of white earth'; and Mbh. iii. 160. 39: *prākāreṇa . . . śāilād abhyucchrayaavatā cayāṭṭālakaḥbhinā*. The commentator on the last explains *caya* as the foundation-bank of the real wall; *ṭṭālaka* is the house on top of the wall (cf. *nirvyūha*): a necessary explanation, as the wall is here mountain-high and golden. I imagine such heaps (*caya*) and banks of loose earth (*vapra*) were first used. Then came the defense of palisade and watch-tower. Long after came solid masonry. In fact, all the Epic descriptions of solid walls are late. Neither *Indraprastha* nor *Hāstina* could have had stone walls in the earliest account. It is evident, too, that in Mbh. i. 185. 6, where the Pāṇḍus come to *Pañcāla* and 'see the town and headquarters (*skandhāvāra*), and live in a potter's house,' outside the town, only an open unwallled town is thought of, lying like a camp, round a fort (*pura*), and with headquarters: though at once the place of tournament is elaborately described as built with walls.

† We find later rules for building *prāsāda*, *nagaravāstu*, etc., in Ag. P. 104, 105; and careful estimates and rules for houses in Br. Saṁhitā, 53, not comparable with the Epic. See further reference below.

‡ In xv. 16. 3: 'the king left *Hāstina*pur by a high gate' (*sa vardhāmānadvāreṇa nirvyāyau gajasāvayāt*); and, as usual, the people ascend the roofs to look at the procession.

§ The Mbh. recommends six, but I find only four mentioned in the *Rāmāyaṇa*, ii. 48. 19. Compare *puram śatpadam sarvatodiṣam*, Mbh. xv. 5. 16. N. thinks that this implies seven walls: not necessarily.

watered.* The traders and the king's court made this town their residence. The farmers lived in the country, each district guarded, if not by a town modelled on the great city, at least by a fort of some kind. Out of such forts grew the towns. Round the town, as round the village, was the 'common land' to some distance (later converted into public gardens, as we see in the *Mudrārāksasa*). In the city special palaces existed, for the king, the princes, the chief priests, ministers, and military officers. Besides these and humble dwellings (the larger houses being divided into various courts), there were various assembly-halls, dancing-halls, liquor-saloons, gambling-halls, courts of justice, and the booths of small traders, with goldsmiths' shops, and the work-places of other artisans. The arsenal appears to have been not far from the king's apartments. Pleasure parks abounded. The royal palace (see above, p. 118) appears always to have had its dance-hall attached.† The city gates ranged in number from four to eleven, and were guarded by squads of men and single wardens.‡ Doorkeepers guarded the courts of the palace, as well as the city gates.§

In the well-hid inner court the king's secluded life, as represented in the later luxury, enabled him to pass the time 'on soft couches and lulled by music' (v. 36.55). Interesting is the fact that, with all its extravagance, the city does not seem to be that of the time of *Varāhamihira*. Where all, as in these descriptions, is explained minutely down to small detail, we miss the *vāṭhikā* and *alinda* terraces, so carefully described by the *Brhat Saṁhitā*, and find for the exact statement of many-storied houses in the latter only a vague allusion to stairs or ladders in the Epic (*sopāna* : i. 185. 20); just as we miss the *nṛājanā* ceremony, and any allusion in the life of the charac-

* R. vi. 112. 42 : *siktarathyāntarāpaṇā*. As the watering of the streets is rather unique, it may be well to give a special reference for this point : *Indraprastha* is described as *sumniṣṭasiktapanthā*, *Mbh. i. 221. 36*.

† *nartanāgāra*, iv. 22. 25 ff.

‡ *Ṭaṭha Up.*, v. 1, speaks of a town with eleven gates as a possibility ('the body is like a town with eleven gates'). Nine gates are given to a town in *Varāha P.* 52. 5 : *navadvāram . . ekastambhani catuṣpatham*. *Lankā* has four bridged gates (eight in all, and eight walls : see R. vi. 93. 7, and note below). Four gates are implied in the sixth act of *Mr̥cchakaṭika*, where the men are told to go to the four quarters to the gates. The joke in *Mr̥cch.* (Act v.) on the guard of the town being *senā* implies a large military force resident in the town, this being the real guard instead of the nominal protectors, the squads of military police.

§ These courts have mosaic pavements of gold in R. vi. 37. 27, 58 ; see *Mbh. i. 185. 20 ; ii. 33 and 34 (kuṭṭima of gems)*.

ters to dramatic entertainment other than dance and mime-shows (as in ii. 33. 49, *paçyanto nañanartakān*).*

The imperial city is represented as supplied with everything necessary to withstand a siege, from elephants and horses, in case of arming at the last, to doctors for the wounded; as well as with all kinds of food, grain, etc.; and combustible material, such as resin, pitch, etc., which is to be furnished to the soldiers for army uses. The gates have two doors, and cross-bars, while loopholes are mentioned in the walls. They are defended by heavy machines placed over the gates, probably for projecting large shafts at the foe, or dumping rocks upon them, as they cross the moat. It is recommended that kings should suppress drinking-shops, bawds, peddlers, sodomites, and gamblers: which seldom appears to have been done. On the contrary, he is also told to have stores of liquor, and dancers and actors to amuse himself with.†

* Although a kind of drama is known to the latest lists of literature (see above, p. 112, and below on music). This would fix the *terminus ad quem*, including as a whole the pseudo-Epic, but not necessarily the following books or even earlier sporadic religious outcries, the insertion of which latter might be put at any date without much affecting the poem. The Harivaṅṣa shows its posteriority to the Epic in many ways (as e. g. *nirājanā*), and this was known in the seventh century.

† Besides xii. 86. 4 ff., and 69. 14 ff., compare for descriptions of cities (although they all agree closely, and differ mainly in extent of description) the short but comprehensive account in iii. 15 (Dvārakā); i. 207. 30 ff. (Indraprastha); iii. 173. 3 (floating city); 207. 7 (Mithilā); 283. 3 and 284. 4-80 Rāvaṅṣa's Lankā); viii. 33. 19 (skytown); xv. 5. 16 (ideal town). In the Rāmāyaṅṣa we find nearly the same descriptions as those in this later part of the Epic. The strong gates, machines, etc., with lighted lamps and other modern features, in R. i. 5. 8; ii. 5. 11 ff. Lankā has four gates, with four iron bridges crossing the moat, each gate consisting of two doors. Drinking halls (*āpānaçāla*), flower-stores (*puşpagrhāni*), etc., abound (R. v. 72. 8, 13; 15. 8; ii. 103. 12 ff.). The broad streets (*pratolī*), mansions, and palaces (*harmyaprasāda*) are generally described as profusely decorated with flags and protected by machines (ii. 87. 22; 94. 19). The walls here are furnished with battlements (*prākāravaḍabhī*, vi. 14. 22) on which the defenders stand. Squads (*gulmāh*) are placed above the city, vi. 31. 3 (all R.). The countersign (literally 'seal') given at the city gate is alluded to in Mbh. iii. 15. 19 ('no inhabitant goes in or out without the seal,' *amudrah*); and in i. 42. 15 we have the *dvāhsthā* or palace door-keeper (*dāvūvārika* in the drama) at each *kakşyā*, court. Several of these courts in one palace are mentioned, even as many as seven in the Rāmāyaṅṣa, where they are guarded by young men armed with knives and bows (R. ii. 13. 1). The *antaḥpuram* is behind the third *kakşyā*, and contains a play-ground (*ākriḍam*) with flowers and fountains, where the women amuse themselves (*pramadāvanam*), xii. 325. 29 ff. The enterer must be announced (*niveditaḥ*). Compare with this iii. 133. 13, where a new-comer says to the porter: 'I want to see Bandin in the assembly room (*rājasamśadi*); take my name to the king at once, door-keeper' (*nivedayasva mām dvāhsthā rājñe*). Compare R. ii. 3. 5, *dvāsthēnā* 'vedita, and R. vi. 8. 37, etc. The keeper of the gate, R. ii. 73. 26. The land around the town is full of farmers and artisans: that is, in peace, they live outside as well as within the great cities (i. 109. 4). In

I believe the relative size of buildings and width of roads is not, as in Puranic literature and the *Bṛhat Saṁhitā*, established by any rule. Absence of such rule, where all is so carefully defined as in the *Çānti*, should have weight in discussing the age of the latter.* Not unworthy of notice in connection with these almost modern towns is the older statement concerning a king's proper 'forts' or defenses, incongruously welded into the late portion of the Epic. They are six-fold: viz., a defense consisting of a desert, of water, of earth, of wood, of a hill; or of

attacking the walls, elephants were employed, hence *purabhattārah* or 'town-breakers,' ii. 61. 17. So the Greeks say. Compare Aelian, xvii. 29 (strong walls! perhaps evidence of lack of stone). The 'four kinds of physicians' employed are for cases of poisoning, arrow-wounds, sorcery, and general practice (xii. 69. 50-60). Wealth of a palace is described ii. 34, and 51. 3 ff.: blankets, skins, cloth of wool, catskin, ratskin, gold-thread, mantles, as well as gems and jewelry of every kind. Trees of all sorts are kept in town, especially the edible milktree (xii. 89. 1). It is interesting to note that besides regular spies the king has unmilitary, in fact priestly squads stationed in outlying towns, as a refuge in case he has to flee his capital (xii. 86. 29; 140. 40). For vices to be cast out, compare xii. 88. 14-16. In case of siege (for fear of fire), the thatch-covered houses are to be mud-plastered. The list of weapons in xii. 69 is unexpectedly simple; but we note, what has often been denied (M. vii. 90: see below), that poisoned (*digdha*) arrows are recommended; just as we saw above, p. 111, that the king is told to be acquainted with 'use of poison.' In regard to the 'battering rams' and 'catapults' generally understood by the machines (*yantra*) spoken of in the text, compare more particularly below; note here, however, from the *Rāmāyaṇa*, that these machines are not battering rams and probably not catapults, but are primitive and awkward contrivances placed over the city gates and in other parts of the town (which should be full of them) for the purpose of casting arrows of great size and stones. They are 'strong and firm,' but appear to be of little use; for, though carefully adjusted at the beginning of the conflict, they do not do harm enough to be mentioned in connection with actual damage inflicted: over the gates, R. v. 72. 8; town full of them (*yantrādhyām ūrdhvaprākāratoraṇām*), R. vi. 16. 22; to cast rocks (*yanthroktṣiptopalāiva*), R. v. 64. 24; strong and firm, R. v. 73. 1-12; carefully adjusted, R. ii. 109. 52. That they cast arrows or heavy shafts is plain from the fact that, like bows, they are furnished with (bow) strings, *sajjayantra*, R. vi. 14. 20, to be literally translated: compare the 'strong bows' (*yantrāḥ . . . dṛghadhanvibhīḥ*), R. v. 72. 13. (Compare R. v. 9. 19, *sāyudha*.) There is not a single indication that they could have been worked by explosive powder. I have purposely taken all these citations from R. alone, as the later work. Even the Purāṇa era knows *yantras* as general projectile weapons, the best being the bow. Compare the laud: *yantrāṇām dhanur eva ca* in *Vāyu P. i. 30. 234*.

* The Puranic rule is found further in *V. P. i. 6*; *Vāyu P. i. 8. 96 ff.* (distance of *kheṭa*, etc.). The Puranic city may be illustrated by *Varāha P. xi. 32 ff.*, a city built by a priest much like these of the later Epic. Of great historical interest are the 'stories' in the house described in the *Pañcadaṇḍachatraprabandha* (*ekadvibhūmī atikramya*, etc., ch. 3, as compared with the eight level courts described in a courtesan's house in the *Mṛcchakaṭika* (Weber's note, 153 a); though I doubt if this description (*dvitīyabhūmyām jagāma*, etc.) warrants our assuming a seven-story house, with the bath-room on the sixth floor. Perhaps the *bhūmis* sloped up-hill.

men.* A reference to the Manu-statute shows that the six are understood of the best places where a capital city might be. 'He should live in a city fortified by a desert, by an earth (wall), by water, by trees, by men, or by a hill; but best of all, let him occupy a hill-fort (town set on a hill).' This would imply that stone walls were not known. It is the commentator who adds to the wall 'of earth' the words 'or of stone or brick.'

14. *Note on Caste-exchange.*—In the last act of the Vikram-orvaçī and first of the Uttara Rāmacarita, we find the king preparing to desert his throne and become a hermit, leaving the crown-prince to rule. This is a legitimate imitation of the old stories. But in the Epic the right to do this is not conceded without a strife. The desire of King Yudhishtira, mentioned twice in our Epic, to give up his royal life and become a hermit like the old sages, leads to an interesting discussion, the more so as his own father did the like. Here the propriety of the act is called in question, and the arguments advanced on each side are worth quoting. They show that Pāndu either did not give up his throne, as generally assumed, or did so for other than simply religious reasons: perhaps because he was fond of hunting, or perhaps because he was a leper, though the latter supposition is from many points of view improbable. The proposal to leave the throne is especially disagreeable to the priests, as a king pious enough to renounce his kingdom would be just the one they would prefer to have on (their) throne. They admit that in ancient times a few cases of kings doing this are recorded: such, for instance, as that of Viçvāmītra and others, who being kings became priests; † but to resort to a hermitage is the duty of a priest, and not of a king; for protection is the duty of a king, and is so recorded by the ancients; but by doing penance in a wood he wins no worlds (hereafter); for he whose soul is given up to nothing but (religious) duty does not conquer the earth. Begging (another mark of the priest's vocation) is no more his business than living like a farmer or a slave; his duty is to be strong. ‡ Again: § 'all the orders say that a warrior should not practice (priestly) begging.' Although the king of the Pāndus is aware of this rule, he is equally familiar with the tales, alluded to above, of kings who have provided a precedent for him by becoming hermits: that is to say, practically Brahmins (one of these even gaining priest-

* xii. 56. 35; from the legal literature, M. vii. 70-71; Āp. ii. 10. 25. 2-3.

† *ye jātā kṣatriyebhyaç ca brāhmaṇās te ca te çrūtāḥ*, i. 137. 14: cf. ix. 39. 36 ff. Sindhuvīpa, Devāpi are among the few. Another account of Viçvāmītra is in xii. 4 (see above, pp. 73, 159).

‡ iii. 52. 14 and ib. 33. 72 ff., with ib. 51.

§ v. 73. 3: compare xv. 4. 5. •

hood 'by force').* That the act was really common is shown by the fact that it is the first thing of which a king weary of reigning thinks, as in the case of the reigning king in the ninth book. In this passage, the kingdom Yudhishtira desires is freely offered him, the reigning king proposing to 'enter the wood, clothed in deer-skin,' i. e. as a hermit; but Yudhishtira replies: 'To receive presents is not permitted to a knight; I will fight for your throne, not take it as a gift.'† Having fought and conquered, he too grows weary of the kingdom and desires to become a hermit. The following summarizes the argument, conducted on the one hand by the pious king and on the other by (the priest speaking through) Arjuna, his warrior brother, and Drāupādī, the queen. The king: 'So far as I can see, there is no such good for a man as renouncing the world; for revelation says that such a man can not sin again.' Arjuna: 'What a weak and unmanly idea! what is a king if he renounces the world? He is a worthless man. He has no property; and what is life without wealth? Love, happiness, heavenly joy depend on wealth. Wealth is necessary for the glory of the family; yes, even for the increase of religious and other duties; in fact, it is the chief duty of a king to have wealth; a man without wealth possesses neither this world nor the next; he that takes a man's wealth takes away his religion (means of right acting). Do not the gods themselves seek to slay their own relatives to get their wealth? Why, even robbery is approved of in the Veda. What do the priests teach and make sacrifices for? To get wealth. Kings must have wealth in order to provide sacrifices. Do not therefore give up your throne and wealth.' The king: 'Is wealth needful? All wealth is not good: for instance, a man would not be happy if he were to steal the property of the gods.' Arjuna: 'Not every one that goes into the wood is a true renouncer of the world; but he that lives a holy life is the true hermit; moreover, it is a priest's business to be a hermit; the sages say so. The priests ought to have gifts from the king; but if the king becomes a priest, there will be no one to enrich the priests. Besides, a king that has conquered the earth and then gets no enjoyment as fruit of his trouble lives a fruitless life.' The queen: 'a warrior that cannot inflict a blow is not splendid (*na bhāti*, non fulget); he does not get land; to be mild to all creatures, to take gifts, to study, and to do penance, ought to be a priest's duty, not a king's; for a king ought to protect people, and punish people. Punishment wakes when men sleep, and raises his staff; he (Punishment) guards three things: gain, piety, and desire.

* i. 71. 29.

† ix. 31. 52, 57. His victory was, however, already assured.

Therefore a king that cannot punish is guilty of sin in regard to gain, piety, and desire. You call it doing penance to renounce the world, but a brave king's renunciation of the world is dying on the field of battle.' The king: 'I know the ordinances; I know the double opinion of those that say on the one hand "act," on the other "forsake the world." I know all the (radical) arguments thought out by the roots, and I know the divine rule; thou, my brother, hast no need to quote the sages' law to me. Thou knowest only weapons. The delicate meaning of the law thou canst not see; thou hast learned to fight, but not to think; some saints go into the wood; some go north, and some go south; but no one yet can show the one road that goes to deliverance, though the priests point out many ways of salvation. Some revere and some scorn; some inflict corporal pain upon themselves; some rely on ceremonies; others deny the efficacy of such things, and they are logical and hard to convince. Moreover, there are scorners that speak much in assemblies and are fond of talking; they run over the earth to persuade men. But at the end the wise, the learned, the great, the best knowers of the law are in doubt.*

The final view as adopted by the king (xii. 21. 11 ff.) is that 'some men slay, and some philosophize; but Manu says that one should be mild and do no harm; consequently even a warrior may pursue such a life and yet gain heaven with its fruits; although *nirvāna* is very hard to win.†

IV. THE MILITARY POSITION OF THE RULING CASTE.

1. *Philosophy of War.*—It has long been popular to dwell upon the religious and meditative nature of the Hindus. We think of them as priests, not as soldiers. In general, this is not wrong; but in so doing we ignore an important element in the constituents of the Hindu character. This theosophic vein

* xii. 7. 37 ff.; refutation, ib. 26. 25 ff.; also ib. 12. 14 ff.; 14. 14 ff.; 19. 1 ff. Much of this section belongs with Manu. Except for 'punishment,' birds and beasts would devour men; the pupil would not study nor milk the beautiful cow (for his teacher); the girl would not marry,' etc. (15. 45 = M. vii. 21); *daṇḍa* from *damanāt* and *daṇḍanāt* (*adāntān damayaty aṣiṣṭān daṇḍayaty api*); the rest compare with M. vii. 25 ff. Concise end of caste-argument is given in 15. 23: *yathā sṛṣṭo 'si tathā bhavitum arhasi*, 'be what thou art created.' The 'double opinion,' *ubhayam vacanam*, of 19. 1 ff., is expressed thus: *kuru karma tyaja (iti) ca*, 'do acts, forsake acts.'

† The last shows the Buddhistic influence not more than the *ahiṃsā* doctrine preceding. The Manu-quotations (M. iv. 2) is perverted: see my paper on Manu in the *Mahābhārata*. The whole passage is of course late; but the later it is, the more interesting from the point of view of the modern castes.

was neither original nor universal. Our earliest literature is indeed religious, though with but little mysticism. But the religious element did not penetrate deeply into unpriestly classes. One is too apt to dispose of the general Hindu as Max Müller does with the words: 'To the Greek, existence is full of life and reality; to the Hindu, it is a dream and a delusion.' (Ancient Sanskrit Lit., p. 18.) If we mean by the Hindu the Hindu philosopher and priest, this is true; but if we apply it to the Hindu at large, it is as misleading as to interpret the spirit of our earlier Europe by the writings of a Thomas à Kempis or a Molinos. The priest certainly came to believe in life as an illusion, and his doctrine has had its great and bad effect upon the Epic poetry; but if we study the coarse, sensual, brutal, strife-loving, blood-hungry Hindu warrior; if we revert to the Vedic ancestor of this ferocious creature, and see what joy in life as life is portrayed in battle-hymn and cattle-hymn, we shall be ready to admit, I think, that through the whole history of the Hindu, from the early Vedic until the pseudo-Epic period, there reigned the feeling, in the larger class of the native inhabitants, that existence is full of life and reality. I would not cavil at Müller's distinction, because it is plain he means that in general aspect such a difference is perceptible. But this is a difference that would fall to pieces, were we to eliminate the literary class, from whose works we form such a judgment. The Hindu soldier's view of existence must be got mainly by inference, for the priest has done his best to inspire the knight with the thoughts of the priest; but if we study even priestly delineations of military life, we shall see that philosophy and even religion lay far from the soldier's heart. His life was bent on the material things of this world, as was the farmer's. He was no dreamer, till the priest retouched his portrait.

I turn now to a study of this warrior feeling. To subdue an enemy, three means are popularly quoted. Of these, the first is conciliation, the last is war. This introduces us fitly to the theoretical as opposed to the practical side of the military sentiment. As a matter of fact, 'conciliation' has little part to play in the early story; but in the later development of the Epic drama, the first means of attaining political ends is faithfully carried out.*

* Brihaspati, in xii. 69. 28, gives only conciliation, bribery, and dissension as the three legitimate means. But elsewhere we find other lists, making the 'means' four in number, or even more—five, or seven being adduced (compare ii. 5. 21, and ib. 61; Kām. Nit. xvii. 3; x. 10; viii. 70). 'Polity' is made a means, as in v. 132. 31-32, where a king is thus exhorted to recover his kingdom: 'to beg is not allowed thee; to till the soil is shame; a knight thou art, and livest by might of arms alone; then take again thy kingdom, by any means thou canst—by

Peace is the ultimate goal of a happy kingdom ; but throughout the Epic peace is presupposed as an anomaly in life. Constant strife, with insidious citizens and with open foes, must always be carried on. 'Through force and punishment is peace attained ; no coward can do right ; no coward does his duty. On the king depends all virtue ; on virtue, heaven ; on heaven, the gods ; on gods, the rain ; on rain, plants ; on plants, men—that king who (by completing the causal nexus) is the creator of men is equal to ten learned priests. So says Manu' (i. 41. 28 ff.). For this oft-given reason the king is enjoined to recover a lost kingdom, or defend a threatened one, in any way he can. The kingdom belongs to him by hereditary right (*vançabhøjyam*), and he must never despair (iii. 78. 9 ; v. 136. 1). We find of course a number of platitudes against vengeance : 'The good think not of vengeance, but to do good to their enemies ; the highest sort of men are patient' (ii. 73. 6 ff.). But the Epic heroes are (as Duryodhana is described to be) 'razor-hearted,' and let even their friends, as Vidura sadly remarks, be punished in their wrathful folly (i. 128. 46 ; ii. 64. 12). Vengeance is the mainspring of the whole drama. If the king is unable to subdue his foes openly, he must be a hypocrite and pretend love till the time is ripe for vengeance. This is the essence of royal polity in 'cases of distress' (xii. 140. 9 ff.). 'He must be suave and agreeable till he can crush his foe ; he must pattern himself after the tricks of animals ; like a cuckoo should he watch, like a boar should undermine, like a mountain be steadfast, and in all cases possess impassibility (*anullanghanāyatvam*), anxious to get good luck like an empty house ; capable of many disguises like a player ; now drawing himself in like a turtle, or being fierce as a wolf, swift as an arrow, etc., as occasion shall demand ; trusting no one, but keeping himself informed by means of spies. No dry enmity, but fruitful hate, should be

kindness or dissension, by bribery, force, or guile' (*kṣatriyo 'si kṣatāt trātā bāhuvṛjopajīvītā*, etc.). The five are here *sāmnā bhedena dānena daṇḍenā 'tha nayaena vā* ; and *naya* is political intrigue. But in vi. 3. 81 we find pacification, dissension among foes, and open war quoted as the 'three means,' where, since 'numbers do not give victory, the two first should be tried before the third. The regular three appear in v. 82. 13, and seem implied in v. 33. 62, where we read : *trayopāyāḥ . . . grūyante . . . kanīyān madhyamaḥ cṛeṣṭhaḥ (iti vedavido viduḥ)*, if we permit the commentator to read *upāyāḥ*, and to resolve into war, dissension and bribery (as one), and conciliation ; but *apāyāḥ*, referring to desire, duty, and greed, may be the meaning, or *trayo nyāyāḥ* may be read (N. 7). Three means appears the oldest form ; four means is a later idea, as kept in xii. 356. 6 (conciliation, dissension, bribery, force), and M. vii. 107-109. The pseudo-Epic also employs the *caturvidham* or 'four-fold means,' in a loose way, for means to any accomplishment, and makes the group refer thus to doing anything 'by sight, thought, voice, or act.' xii. 291. 16,

his; let him not use his arms when he can have a boat; let him not attempt the impossible, for it is no use trying to eat a cow's horn; but when he can, let him go straight to killing men, destroying houses, spoiling roads, and ruining his foe as best he may. Let him corrupt his foe's ministers, appeal to his own people's weaknesses, win the confidence of the heads of guilds, and endear his ministers by favoring their families. Only a learned priest he had best avoid to quarrel with, for long are the arms of a wise man; but otherwise, whatever foe he has, for that foe's destruction let him toil.*

This mode of procedure is particularly for outward foes; but like means must guard against inward discontent, since the worst condition of 'distress' is where weak and low men have power in a kingdom (iii. 35. 17). No respect whatever is due to a king that does not somehow or other subdue his enemies. He sinks like a cow in the mud, and is helpless as an ant (iii. 35. 7; ii. 15. 11). With such teaching, the motto 'Peace I think the best thing' (ii. 15. 5) is a superfluous addition. There was no peace till all were crushed.

2. *The general fighting force and military sentiment.*—The whole business of the whole warrior caste was fighting. Members of other castes fought also. 'Except in some wildly supernatural legends,' says Wheeler (Hist. Ind. i. 77), 'the Brahmaus are not represented as warriors.' He refers to Droṇa, the priestly warrior. But the legend is of great importance, and shows us plainly that it was conceived as possible, even if extraordinary, that a priest should be a leader in war. Another legend points to the fact that priests were only in the later time regarded as unfitted for martial practices. When the Pāndus go disguised to Krishnā's self-choosing, they assume the dress

* The allusion to the empty house is explained by the fact that a house not yet occupied is glad to have its first inmate make a lucky entrance; so the inception of his plan he should strive to have done under favorable auspices. The reference to the boat is drawn from an antique law forbidding a man (avoiding toll) to swim a river where a ferry has been placed. So a king should wait for the proper means to convey him to his goal (Compare Vās. xii. 45, *bāhubhyām na nadīm taret*; M. iv. 77, etc.). The Manu code has also many of the comparisons drawn from the acts of animals. Compare vs. 24 with M. vii. 105; 25(a) = M. vii. 106 (a), etc. The spies are here recommended as usual for parks, halls, and places where priests meet. Compare above, p. 152. The allusion to the cow's horn (*anarthakam anāyusyaṁ govīṣāṇasya bhakṣaṇam*, 56) is explained by the addition 'the teeth touch it, but no food is obtained.' Compare with these mottoes Kām. Nit. v. 1; Ag. P. 224. 27, etc. The heads of guilds mentioned in vs. 64 are the same as those already discussed above, p. 82. With vs. 69 ff. compare Böhlingk's *Sprüche, mahate yo and na tat taret*; with the last proverb, 68, compare v. 37. 56; 38. 8.

of priests. As a priest Arjuna steps out and performs wonders with the bow? The warriors present are incensed that a priest can surpass them in shooting; but the incident shows the not impossible attitude of the priestly caste in respect of handling weapons. It is only after the deed is done that the angry and defeated warriors make a rule that no priest henceforth shall enter the lists to contend in feats of arms with the knights. In spite of Wheeler's cutting dismemberment of the poem, there remains nothing wildly supernatural or even improbable in this legend. Again, compare a king's universal challenge: 'Is there one that bears a weapon and is equal unto me in fight, either slave or farmer or knight or priest' (v. 96. 7). Even the son of Drona, who was one of the bitterest warriors in the Epic, retains so much of priestly character that he is reproached for using a weapon, and called a 'priest but in name:' an indication of the soldier-priest's rarity, but a proof of the circumstance that the priest still as priest (as member of the caste) fought on the field (see below, § 4). Further, it was the formal law that any priest might serve as a soldier if unable to support himself as a priest. In view of legend and law it seems wrong to say that 'priests are never represented as soldiers save in wildly improbable legends.' That one of the law-givers disputes this law shows again that, while not universal, it was not uncommon.*

The mass of the army, the despised conglomerate array useful only for a wall, is composed of all the lowest castes, mixed with barbarians and foreigners. Among these too fought the men of the people-caste, when necessity called them into the field, as the quotation from a battle-chapter given below shows: where it is also stated, were the proof needed, that the slave too obtains heaven by fighting and dying in battle. In general, therefore, we may say, reverting to the earliest period, that first of all the whole people fought on the field; that in the Epic period the knights fought as the main soldiers; that some reminiscence remains even of the priests' use of arms; that the agricultural caste rarely but really fought in battle (against the statement of the Greek historians), and that the slave-caste with other un-Aryan elements of the state went to make up the projectile force as mass in the battle array, but were without individuality. No low man gets a reputation for bravery or even for cowardice. He is but a brick in a row. The common warriors, however, those unable to bear the expense of cars or good arms, were retainers of the kings and lords, and (probably according to their wealth or bravery) were appointed to the positions of under-officers, or led the van in charges.

* Compare G. vii. 6 (but see Bühler's *Intr.* p. lii); Vās. ii. 22; M. x. 81.

'The essence of warrior duty lies in fighting' is the hundred-times-repeated axiom and motto of all the castē. A few of their own expressions will show how deep a moral hold this law of their fighting caste had on the Hindus. It is indeed no ill to die in battle when one has been challenged to the fight; but forever noblest is the death of those that fight straightly and turn not aside.* Not a pleasure only, but the highest duty is it to die in war: 'Fight now, be firm; no other duty has a king than slaying foes' (v. 160. 71). No matter how challenged, the warrior must respond. So a suddenly challenged king answers at once to a peremptory challenge by speedy preparation: 'Mindful of the warrior's duty, he laid his crown aside and braided up his hair,' the formal beginning for the fight.†

In fact, it makes no difference whether one expects to kill or to be killed in the contest, he must fight; and in either case he gets his reward; for 'crooked is war always; who strikes, and is not struck again? But it is the same if one be slain or not, for he that dies in battle wins victory from death;‡ for 'death in battle is the womb of heaven' (ii. 22. 18). Even the punning etymology of the word warrior is called upon to defend this view. Not to kill the foe is a sin; the warrior is called 'he that saves from destruction;§ therefore he lives by destruction.' All a warrior's superiority lies in force, as does the priest's in texts, the farmer's in wealth, and the slave's in his age alone (v. 168. 17). The same idea is often repeated. || 'Boldness alone is the hero's own law.'¶ 'There is,' it is said again, 'absolutely no rule but conflict for one of the warrior caste' (iii. 35. 35). 'To escape is a disgrace; to die in battle is best; to ask for mercy is a sin; sweet is it to die in battle; the path to heaven lies in fighting.'** Wherever we find the topic touched, it is handled in the same way.†† One should fight

* iii. 83. 16-17; *āhave*, so the verb *āhvayad dvāirathenā 'jāu*, xii. 5. 1 etc., 'called out' to a duel (see below in battle).

† *kecān samanagrhya*, ii. 23. 5 ff.

‡ v. 72. 58, cf. ff. Compare R. vi. 98. 24-25; *parāir vā hanyate virah*

parān vā hanti samyuge, iyan hi pūrvanirdiṣṭā gatih kṣatriyacācīvati, ff.

§ *kṣatatrātā kṣatāj jīvan*, vii. 197. 4, 88; 143. 66; above, p. 114.

|| Compare ii. 21. 50 ff., and with 52 cf. v. 132. 7, the 'arm-power' of the warrior against 'voice-power' of the priests.

¶ *svako hi dharmah cūrāṇām vikramah*; and if the 'three means' fail, conquer by boldness, i. 202. 18.

** iv. 86. 29; v. 8. 20 ff.; 185. 11; viii. 98. 55 ff. = ix. 19. 63 (ib. 59 = ib. 64).

†† The exhortations just before the great war opens are not more expressive than those in mid-fight. They all breathe the same spirit, that it is pleasant and holy to die fighting, and that this assures heaven hereafter. 'The best death is on the field of battle;' 'either victory or a battle-death—this is the eternal law proclaimed by the creator,' (v. 51. 51; 78. 4; ix. 81. 84). Compare also v. 75. 23: 'a warrior does not own what he does not win by his strength' (*yad ojasā na labhate kṣatriyo*

strongly and unselfishly (*nirahamkāra*), for fighting is the eternal law; and one may slay an elder and a better who comes to attack him,* for one should 'show no mercy to the foe.' Such determination in warfare naturally gave rise to proverbial expressions embodying the comparison with others less bloody by nature.† It was even regarded not alone as a disgrace, but as a sin, 'for a warrior not to die (as we should say) 'in his boots.' 'To die of disease in a house is a sin' is more than once emphatically said (vi. 17. 11; xii. 97. 14-23). As a consequence of the necessity of battle, all caste-rules were laid aside. The knight might kill anyone that attacked him. Not even the priests were sacred.‡ The psychological reason added to this rule might have applied to other cases, had the priests seen fit; for 'the soul is not killed; it seeks a new home;' and, after all, 'it is not the slayer that slays, but fate.'§ So it is said distinctly 'if one sees a priest among those raising arms against him, a priest acting just like a warrior, and kills him when he is thus fighting, that is not 'priest-murder' at all: that is the decision in the works on duty.¶ This is a clear indication that the rules on duty found it necessary to provide for a very possible contingency by exculpating the slayer of a priest in advance.

So overwhelming appears to the Epic poet the moral force back of the warrior's physical might that we have one sad statement in respect of that might: 'Right is that which a strong man understands to be right.'¶ Above all, the natural mourn-

na tad aṅgute), for what he does win belongs to him, except for the share deducted for the king. Compare M. vii. 96-97 and G. x. 20-23: the victor has all the spoils of battle except cars and riding-animals, which fall to the king; as does also a special share of all the booty saving what a knight has thus gained by a duel; all other things won in battle are divided among the army; compare also Kām. Nīt. xix. 21. Death in some holy spot is particularly desirable, such as 'kurukṣetra, the all-holy' (v. 141. 53). 'To fight as long as life shall last, to bow to priests and duty' is the summary of a warrior's code (v. 184. 40; 127. 15 ff). Sometimes the priest comes after duty, as ib. 127. 20. This is a perverted quotation.

* vi. 122. 37; 107. 101 ff.: the Divinity speaks.

† xii. 14-15; 22. 4; iii. 22. 23; 27. 37, 39; 28. 7; v. 38. 29: conversely we find 'tender-hearted as a priest' (iii. 35. 20).

‡ For 'wrath obtains wrath' as its reward. This is the proverbial *ātātāyin* doctrine kept in the law-codes, of which different forms exist: xii. 15. 55; 34. 19; 56. 30; iii. 29. 27; M. viii. 351; Āp. 1. 10. 29. 7, quoted from a Purāṇa; Vās. iii. 17; B. i. 18. 13. It refers to a secret assassin or an open foe. Curious is *manyus tam manyum rchati* = ἐπις δ' ἐπιν ἀντιφρεβει, Pseudo-Phocyl. 78.

§ 'Fate I deem the highest thing; manliness is no avail,' ii. 47. 36, etc.; v. 159. 4, 14, 'man is worked by fate like a wooden machine' (*dāru-yantravat*).

¶ v. 178. 51; note the conclusion: one may act toward another as that other acts toward him (53).

¶ ii. 69. 15: said by Bhīshma.

ing for the dead is forbidden. Formal mourning with appropriate rites is fit service at the funeral of a warrior; but one should not lament long in his heart for those that are slain in battle. First, because he that does so 'gets only woe on woe,' since fighting and being slain is to the warrior what penance is to the priest and service to the slave, and the dead have obtained happiness; next, because one should console himself by himself, and not allow useless grief to cloud his mind; naught is better to the warrior than war; to avoid it is to lose place on earth and in heaven; to flee is un-Aryan, ungodly.*

So, in spite of some melancholy objection to death, and the thought that posthumous fame is no better than 'a wreath

* xi. 2. 20; 9. 21 ff.; 26. 4 ff.; xv. 31. 4; ix. 31. 24. These passages are easily multiplied. I select but a few of epigrammatic or special moral interest: 'We know not whether death comes by day or by night; but this we know—that nothing immortal lies in peace' (ii. 17. 2). 'The palace of Indra is for them that seek their death in battle' (ii. 12. 21). 'For war was the warrior born, victor or vanquished he goes to Indra's heaven' (v. 135. 13). 'A knight's rule is "the weapon forever;" he should not seek to be a priest; for Indra was a warrior, and slew his sinful kin' (xii. 22. 5 ff.: although in the same book Vasishtha has to exhort Indra to 'make up his mind like an Aryan and slay his foes,' ib. 282. 24). 'A pious priest and a warrior dying face to the foe both (attain the same end, and) split the disk of the sun' (v. 33. 61). 'Face to the foe—who dies thus, endless his heaven' (iii. 54. 18). 'Do not grieve, my friends,' says even the sinful Duryodhana, 'for if the Vedas be any rule to you, I have conquered the world to come, in that I have not swerved from knightly law' (ix. 65. 28 ff.: cf. iii. 52. 25, *yadi vedāḥ pramāṇāḥ*) So it is said (xi. 26. 12 ff.): 'They that die slaughtered (by chance) go to worlds of gods and kings; they that die with the thought "I will die" join the angels; they that hold out against all odds, these go to the home of Brahma; while even those that have begged for mercy, if they still die with their faces to the foe, go to the *guhya* world; moreover, those that die anyhow on the field of battle, even if killed by accident (not slaughtered by the sword), go to the Kurus of the North after death' (12: *hutāni çarirāni* B., *hatāni* C. 767: cf. xii. 98).

The hero-king of the Epic is told that he may make his mind easy for the slaughter of so many human creatures by performing a penance — 'even a little penance,' it is contemptuously added. The whole passage shows disdain for the weak sorrow of a king who could grieve for the deaths caused by his glorious wars, and adduces the constant argument that a king should 'protect:' or, as here applied, should 'protect his rights;' for the king's duty is to slay anyone that turns right into wrong, even if it be a son or a priest; the axe is not the slayer of the tree it is the woodman; the king is not the slayer of the men that die in battle, it is fate; even the gods once filled the earth with bloody oceans, when they fought with the demons; if it lies on the king's conscience that many have been slain for his sake, let him do penance; or, if he will, let him perform the great horse-sacrifice, which will certainly relieve his soul of all evil (xii. 32. 2 ff.—33. 25; 97. 1 ff.: cf. ib. 23, 'it is a sin to die in bed,' and, therefore, a virtue to die in battle). The metaphor of the ocean of blood is elsewhere fully carried out. Compare the battle-scenes below, or e. g. xii. 55. 18: the bodies are islands; the flags, the sea-foam; one waters earth with blood; grasses it with hair; hills it with corpses.

adorning a dead man,* the usual and effective spurs to courage are duty and glory. 'I elect glory even at the cost of life,' says the Kurus' chief hero;† for 'victory is the root of right, and death is better than lack of fame.‡ But fear inspired courage also; for according to the Epic rule a deserter is killed, and may even be burned to death.§

The question naturally arises, how far the formal expression of opinion reflects here the true spirit of the soldiers. To this the answer is, as it seems to me, that the chiefs are rightly represented as preferring death to defeat, and as delighting in the fierce shedding of blood; while the masses need these exhortations to encourage them. Every hero, of course, because he is a hero, exults in the battle; only the king of the Pāndus, by what in each case appears to be interpolation, is made to grieve and sorrow over the result of war; and the greatest knight, Arjuna, is made to feel a moral fear of killing before the fight begins.

But the common soldiers, for the most part mercenary troops, are supplied with these sentiments as exhortative pills to stimulate their slower valor; and, too, oftentimes in vain. That almost Mohammedan outburst referred to above ('sweet it is to die in battle; the path to heaven lies in fighting,' viii. 93. 55 ff.) is the last desperate call of a great chief seeking to rally his frightened troops. But the call has absolutely no effect; it does not stimulate the churls behind him to love of glory at the expense of life. They run away. As we shall presently see, this is no exception to the general order of events. The true warrior by caste is really indoctrinated with these sentiments to such an extent that he willingly dies for glory's sake as well as for duty's; but the mass of the army was cowardly, trumped to battle at the outset, and eager to avoid danger whenever it arose.¶

Interesting as the exhibition of *morale* given by the quotations above may be (and it seems to me that the poets have enabled us to get a tolerably clear idea of this, and portrayed the fighting force with what we may assume to be a true imitation of

* iii. 301. 7; *mṛtasya kīrtir martyasya yathā mālā gatāyusaḥ*.

† iii. 300. 81: *vṛṇomi kīrtim loke hi jīvitena'pi*.

‡ xii. 100. 39-40.

§ xii. 97. 22. The same kind of punishment with the same kind of fire is here decreed for the deserter as that which the law-codes enjoin for a warrior or man of the people-caste that has dishonored a woman of the priestly caste. Compare Vās. xxi. 1-3; M. viii. 377 (*kaṭāgninā*).

¶ As I have already observed, the common soldiers are led into the battle on the principle that quantity is more important than quality. 'An army with a mass of foot soldiers becomes solid' (*padātibahulā senā dr̥dhā bhavati*), xii. 100. 24 (or *catrūñ jayati* in Ag. P. 227. 7): cf. Epic, ib. 99. 18, *na hi cāuryāt param; sarvañ çūre pratiṣṭhitam*.

the actual conditions obtaining in Hindu warfare), it only brings out the more strongly our lack of information in regard to the real war-life of the king's common soldiers. What we do know may be briefly recapitulated here, before we proceed to the subject of military tactics. As to the primitive Hindu soldier of the pre-Epic period, how he was supported, what he did in peace, etc., we know next to nothing save by inference, and by works too late to be considered as valid for the Epic period. We judge that his pay was a part of the booty; that at first he was a fraction of the common folk, and in peace was not different from his neighbors; tending cattle, offering sacrifice, repelling assaults, making forays, as times and wishes twirled his inclination. But gradually the cattle were left to others that preferred a quiet life; agriculture arose, and caste gratings separated thenceforth and forever the hired soldiers from the ranchman and the farmer. Now he belonged wholly to the king, and drew his pay from his valor, or, later still, from a regular stipend, plus what (with certain exceptions) his individual bravery enabled him to seize as private booty on the field of war. In the Epic period (and the reports of the Greeks support the native authorities) he lives a life in part beautifully resembling that of the German soldier. In war he fights as he is bid. In peace he amuses himself, and does nothing else. He receives a regular wage (which ought to be paid in advance), but is not employed by the king on the strength of this support to attend to civil business. His life must be free from business affairs, and his wife is supported by a pension when he is slain. His position theoretically is inferior only to the priest's, and in social practice inferior also only to his aristocratic superiors of the same caste.*

* These points, incidentally touched on already, may be illustrated by the following: 'the daily allowance and (monthly) wage of the army to be paid as stipulated and at the time agreed upon' (*kaccid balasya bhaktam ca vetanam ca yatho 'citam, samprāptakāle dātavyam dadāsi na vikarṣasi*, ii. 5. 48, and the same in R. ii. 109. 41); 'support the wives of those that for your sake have gone to death' (ii. 5. 54: cf. xii. 86. 24; cf. also Nītipra. vi. 106-107); 'one must not engage in business affairs with a king's soldier' (*rājadhīrtyaḥ . . . senājīvi ca . . . vyavahāreṣu varjanīyāḥ*, v. 37. 30). The rules for booty have been given above. Ease and pleasure were the fruits of peace. Compare the Greek's account (Diodor. xli. : πέμπτον δὲ στρατιωτικόν, εἰς τοὺς πολέμους εὐθετοῖν, τῷ μὲν πλήθει δεύτερον, ἀνίσει δὲ καὶ παιδιᾷ πλείστη χρώμενον ἐν ταῖς εἰρήναις Τρέφεται δ' ἐκ τοῦ βασιλικοῦ πᾶν τὸ πλῆθος τῶν στρατιωτῶν καὶ τῶν πολεμιστῶν. ἰππων τε καὶ ἐλεφάντων. Arrian, Ind. xii., fills this out a little: πέμπτον δὲ γένος ἐστὶν Ἰνδοῖσιν οἱ πολεμισταί, πλήθει μὲν δεύτεροι μετὰ τοὺς γεωργούς, πλειστήθι δὲ ἑλευθερίῃ τε καὶ εὐθυμίῃ ἐπιχρεόμενοι· καὶ οὗτοι ἀσκηταὶ μόνων τῶν πολεμικῶν ἔργων εἰσὶ. He adds that they make their own arms and have servants to attend them in camp, and proceeds: αὐτοὶ δὲ εἰσ' ἂν μὲν πολεμῆι δὴν πολεμέουσιν, εἰρήνης δὲ γενομένης εὐθυμῶνται· καὶ σφιν μισθός ἐκ τοῦ κοινοῦ τοσούτῳ ἐρχεται ὡς καὶ ἄλλοις τρέφειν ἀπ' αὐτοῦ εἰμαρέως. Compare Strabo, above p. 134.

3. *Military Tactics.*—The formal account of possible military manœuvres given in the Manavic code is, as compared with the Epic, both redundant and deficient. Enough remains of exact similarity to show that the code speaks of movements well authorized by tradition as by precept. Probably both the Manavic law and the Epic are indebted for their full facts to the military codes published by the two greatest authorities on such matters, Brihaspati and Uçanas. That is to say, the completing Epic supplied itself with descriptions from the usually recognized possibilities of warfare, and the Manavic code copied the current military rules (*yuddhadharma*) ascribed to these men, and which may well have been existent in some form or other (as a manual) before our present Manu was composed.

If the king is resolved on going out to attack a neighboring kingdom, he should make the expedition, if he can select his time, either in the moon corresponding to the time from the middle of November to the middle of December, or during the two moons from the middle of February to the middle of March.* These are the months most suitable for a campaign; but he should not regard this as a rule. He may go, adds the pseudo-Epic, at any other time, if it suits his purpose better.† In what way the line of march is to be taken up we are not particularly told. The army advances in an irregular body, led by the chief generals, the king being in the middle. The baggage-wagons and provision-wagons and the women

With this account from Megasthenes it is interesting to compare Tacitus: *Quotiens bella non ineunt, multum venatibus plus per otium transigunt, dediti somno ciboque. Fortissimus quisque nihil agens delegata domus et penatium et agrorum cura feminis senibusque et infirmissimo cuique ex familia; ipsi hebent; mira diversitate naturæ, cum iidem homines sic ament inertiam et oderint quietem* (G. 15). Holtzmann (Epos, s. 5, with notes) has compared many of the points wherein the Hindu Epic 'is often the best commentary on the Germania.' There are so many points of contact between the ethnographic description of the Germania and the life of the Hindu, both in the original texts and in what remains of Megasthenes, that the question has risen in my mind whether Tacitus, in representing an ideal opposed to the rank life of the Roman Imperial period (as some have assumed to be the cause of his writing), did not fill out his lacunæ of information with the reports of an equally foreign and more unknown folk, and help himself from the descriptions of Megasthenes (of which we have now but part). The position of the great chiefs, the fondness for dice, the description of the soldier-life, all correspond. What information concerning the Germans the writer really had would supersede the worth of imagination or of borrowing. Where he had none, he might have borrowed.

* The Pândus sent their embassy to the Kurus in the month *kāumuda*, after fall. It was seven days before the new moon when the ambassador, failing to procure terms of peace, agreed that hostilities should begin when the seven days were over: v. 83. 7; 142. 18.

† xii. 100. 9 ff.: cf. ib. 69. 20; M. vii. 182; Nītiprak. vii. 51; Ag. P. 227. 6. The passage here quoted from the later Epic gives details on roads, the suitable ground for horses to fight on, etc.

follow. The headquarters of the king are guarded by troops stationary and movable. Behind come other generals.* On arriving at the place where the conflict is likely to take place, the king or commander encamped the army (*niveṣam kārāyāmāsa* or *niveṣayāmāsa senām*) upon a level place of broad extent, and the soldiers pitched their tents (*veṣā*); while the headquarters of the general commander (*skandhāvāra*) were guarded by squads of men (*gulmāḥ*), as on a march. The first care was to clear the ground, and for this purpose, any outlying posts of the enemy (*sāinikā gulmāḥ*) having been driven off, the commander with the help of his generals had the camp limits marked out (*ṣibiram māpayāmāsa*), and a trench dug about it (*khānayāmāsa parikhām*), which, for the sake of greater protection (*guptyartham*), was guarded by troops. The camp itself (*ṣibira* or *senāniveṣa*) consisted of separated tents stored with arms.† Such a camp is described as looking like a city; and if, as is probable, the

* v. 151. 50 ff. In the abstract of this portion of my paper as already reported (Proceedings, May, 1887), I have suggested that the Manavic orders of march really refer to battle-arrays. They do, but I should have put the case differently. What is described in the Manavic code is a series of battle-arrays and at the same time of march-arrays. In other words, the law-book implies that, from the time the king leaves his capital, he shall draw out his forces in full preparation for conflict. Thinking of long marches, I overlooked this possibility, and was thence led to believe that the 'battle-arrays' of the code were only for the field of conflict with instant prospect of fighting. And in fact the fighting is supposed to be immediate. All is here described as on a battle-field. Hence an imminent foe must be intended, and the 'march' is from its beginning an advance against a possibly instantaneous attack. *Vyūha* is, I think, not used for a long march. *Senāyoga* or *yātrā* is the proper term for that (or *yātrikam*, xii. 100. 10; 69. 20; 103, 40). Thus, in v. 151. 56, we find an irregular body of the Pāndus advancing (*prayātānām*) toward Kurukshetra, their only care being to keep the king in the middle. But when they arrive on the field, they are spread out at once in a *vyūha*, which is not the case before (*āsādya tu kurukṣetram vyūdhānikāḥ prahāriṇāḥ, pāṇḍavaḥ samadṛṣyanta nardanto vṛṣabhā iva*, ib. 68). So in xv. 7. 12 ff. the king is first to march (*yātrām gacchet*), and then to set his army before the foe in proper order, using the 'wagon,' 'lily,' or 'thunderbolt' array, as explained by Uçanas. Compare also R. ii. 90. 12, 19; 87. 1, 4, where the general-in-chief goes in advance on a march; and roadmakers, ditch-diggers, machine-makers, etc., etc., go before the army to facilitate the journey. I said that *mārga* was manœuvre in the Manavic passage. I was wrong; it is the route; used as e. g. the word appears in the story of Rāma, Mbh. iii. 288. 40; 291. 60, and in R. ii. 90. 32, *castradr̥ṣṭena mārgena*. But here, too, the route is taken by the army arranged as if for battle; for such is the meaning of the following words: *bṛhaspatinayena ca*, 'according to the rule of Brihaspati' (explained below).

† Bows, bowstrings, corselets, swords, honey, butter, lac, fodder, arrows, axes, spears, quivers, besides ponderous machines, are prominent among the stores of the camp. The use of some of these will be described below. Chariots, armed elephants, etc., are in all parts of the camp.

poet does not exaggerate in saying that, besides the fighting men, all the artisans, bards, traders, and prostitutes deemed necessary had also their residence inside the camp-limits, we may well believe the comparison corresponds to truth.* Watch-words and secret signals by which friends may be recognized are given out before the battle begins (*abhijñānāni* or *sanjñāh*, vi. 1. 11 ff.). Fighting does not begin till morning. The array for the day is decided upon, and the troops advance, being in general stationed in such propinquity that each soldier shall feel himself surrounded by his own relatives: that is, as far as possible, the clan and family divisions are to be observed. 'Death in a house is not approved of in the case of warriors; that would be destructive of the pride of proud heroes; that would be wrong and pitiable indeed; . . . such a death ought no hero (*vīrah*) to endure. But a warrior ought to die causing destruction in the ranks of war, surrounded by his kin, hewn down by sharp weapons. . . . Fired by love and pride, a true hero dies thus, and goes to Indra's heaven.† It is also worthy of note that, before the advance to the field of conflict, a religious fire-service is performed. This ceremony is doubtless the same on the part of the Kurus as that alluded to as performed by the Pāndus: viz., a devotion of the foes to destruction over a war-fire. Probably we are to understand a formal rite, in which the gods are called upon to destroy the foes of the sacrificer. The ceremony is performed by the family-priest of the Pāndus.‡

The special tactics employed on entering the field will now be given, and then the use of arms. These subjects should be studied solely by the light of the military movements described

* v. 151. 58; 152. 1 ff.; 161. 1; 195. 12 ff. Five *yojanas* is the size of the Kurus' camp (ib. 15).

† *raṇeṣu kadanam kṛtvā jñātibhiḥ parivāritah, tikṣṇāḥ castrāir abhikṣiṣṭah kṣatriyo mṛtyum arhati*, xii. 97. 28 ff.; *cauṣṭira* (25), *vīra* (27), *çūra* (29). In vi. 94. 37 also *jñātibhiḥ parivāritah*.

‡ v. 195. 1 ff. Compare v. 126. 2; and *purohitāḥ çatruvadham vadan-tah*, in vi. 22. 7. The first passage represents the Kurus marching out to the field against the Pāndus, adorned with garlands and clothed in white (verse 2). Like the Spartans, the Hindu soldiers were careful to attend to their hair before a battle, binding it up about their heads. As a further preliminary, they arrange their beards (or shave, *kṛptaçmaçru*), viii. 58. 88. Compare the ceremony (repeating Vedic verses) enjoined in *Āçvalāyana* (G. S. iii. 12. 1 ff.) for the Purohita to perform when the king goes into battle. I may mention in this connection that the king instead of the priest may say the verses (ib. 20); and that the only *vyūhas* known are those of Aditi and Uçanas (ib. 16), if this lies in the words *ādityam āuçanasam vā 'vasthāya prayodhayet* (*āsthāya* is the Epic word). The Ait. Br. has directions for consecrating the chariot as a means of victory (viii. 10; Weber, *Ind. Stud.* x. 31). In later times compare Ag. P. 125. 49 ff., a fire-sacrifice at the beginning of battle to insure victory, where animals are sacrificed (*juhuyān (nṛ-?) māṅsam*, 50).

in the Epic.* The 'arrays' mentioned by the earlier code of Manu, however, correspond so closely to the Epic usage that for preliminary understanding of the term the legal forms may be here mentioned.† The army may be formed into an oblong column; a wedge; a rhombus; a body like two triangles with apices joined (the bases forming the van and rear); one long

* And not by the darkness of later formal codes on war. The materials for Hindu antiquities must, it seems to me, first be drawn exclusively from the classical or older literature, and not from the late didactic works until the Epic has declared itself. Such modern explanatory books as the 'Polity's' form, on account of the difference in age and the wholly theoretical character of the contents, rather an obscuration than an elucidation of the facts we seek. They are instructive only as illustrating the Epic, and help us when they confirm the data drawn from real literature; but when they contradict such data, they are to be ignored—unless one seeks to form a continuous chain from the Epic period to the latest age, and to do so will arrange the didactic material after that drawn from the Epic. But to confound and mix the two, to quote a Nīti on military matters as if entitled to like consideration with the Epic, is to allow a succeeding age to interpret a former, and ignore a possible development bridging the two. Thus, besides the simple Epic sprinkling of the king at the consecration, the universal 'sprinkling' of all the king's arms, the *nirājanāvidhī* (Ag. P. 267 ff.), the raising of the *danḍa*, so elaborately described with the triumphal arch and lustration in Brh. Saṁh., chap. 43-45, have no meaning for the Epic period, interesting as they are for that of the Harivaṅṣa and following epochs. Thus also it is from no wish to exclude outside aid that I here put aside the technical divisions of the Nītisāra of Kāmandaki and of the Nīti-prakāṣa; but a glance will show the Epic student what false guides these are. Everything is here on a modern footing. The older order has been not only increased but changed. The formal divisions of arms, arrays, employments do not accord with the more ancient records. I regard such works (including the Agni Purāṇa) as useful solely for giving us light on a later period; and, while thinking an interesting parallel to the Epic to be worth noting, do not consider the statements of such literature, when more detailed, as explanatory of the Epic; nor, when opposed, as authoritative. The four great divisions of the Nīti's *vyūhas* have no parallel in the Epic; and e. g. the *cyena* as a subdivision of the *danḍa* is misleading; nor are the names of the divisions, *danḍa*, *bhaga*, *asāmhata*, *maṇḍala* (Nītiprak. vi. 3 ff.), known as such to the Epic; while the relegation of the *varāha*, *makara*, *gāruḍa*, *krāuñca*, *padma* to an extra class not contained under any head is merely a reflex of the fact that these are among those established by Epic tradition. Details, like those on the size of the *danḍa* (Ag. P. 61. 85 ff.), do not necessarily oppose the Epic, but may be quoted only as modern specifications. So, too, of the Brhat Saṁhitā. My objections to this class of literature I explain rather fully, since it might well be asked what need, in the light of Wilson's work and the texts published by later editors, we have of another investigation on military matters, especially on arms, etc. It is sufficient to say that, if we follow even Wilson's results, who has based his researches on the imitative Purāṇas, we obtain many statements contradicted by the usage of the Epic. It is the latter that is most important. Still greater discrepancies occur in comparing the formal war-codes with our poem. In each case the codes reflect a later period, although they have of course inherited much that is old and common with the didactic parts of the older work.

† M. vii. 187 ff. For later works, compare Ag. P. 235 (*raṇadīkṣa*) ff.; Kām. Nīt. xix. (seventeen forms are given); and Nītiprak. vi. 3-9.

slender line; a rhomboid with extended sides;* one long heavy phalanx. One should encamp in a circle, with the king in the center.†

To return to the Epic: At sunrise, or before, the king holds a short conference with the commander-in-chief, and either selects a battle-array himself, or directs the commander to do so. There is of course at times a doubt as to which form is preferable; and we find in one instance that the king himself insists on the long and slender line, while his best knight recommends the solid phalanx; for the chief officers are present at the conference. There seem to be no party or national orders. Each side selects one of the current forms, occasionally choosing one day the form that defeated them when chosen by the other the day before. If anticipated, the commander scrutinizes the foe's orders before deciding his own. After a selection has been made, the troops advance in different companies and regiments.‡ We must pause here to ask what is the assumed distribution of the forces. We have, according to tradition, two different arithmetical progressions in differentiating the number of forces in the various bodies. According to a report which seems entirely theoretical (xii. 100. 31), the men are subdivided into groups of a thousand with a general at the head; of a hundred with a captain; of ten with a sergeant. This bears a close resemblance to the distribution of royal officers throughout the realm, the names being similar. In the one case we have 'a lord of a thousand villages,' 'lord of one hundred,' and 'lord of ten;' in the other 'lord of a thousand men,' etc. This distribution is not known in the fighting scenes, but neither is the following; and we can draw no definitive results as to the antiquity of division in either case. Vasishtha's division (see the note below) would imply that a decimal arrangement was the base of the army's make-up. The other arithmetical progression is mainly by three, instead of ten. Here we also find that the names designating the different bodies are not known as such, technically speaking, in the battle-scenes. What is called a company may mean a whole division or a whole army. Moreover, the numbers are in quantity absurd, when we remember that the Kurus

* Bühler's translation of the Manavic verse.

† *Danḍa, cakāṣa, varāha, makara, śūci, garuḍa, vajra, padma*, literally 'staff, wagon, boar, sea-beast, needle, huge bird, thunderbolt, lily,' are given as names of arrays, and the last of camp order.

‡ The commander 'draws up the order' (*vyūham cakre*), or draws up 'a counter-order' (against that of the foes, *prativyūha*). Drawn up, the foe is *vyūdhānika*, 'with face (acies) in battle order.' It is usual to 'counter against the foe' (*catrūn prativyūhya*), though the verb absolute is also common (cf. vii. 6. 8; 19. 38). One draws out the different acies: cf. v. 164. 4, *anikāni vyakarṣata*.

are said to have put upon the field eleven times the highest number in the list, which should make an army of more than two hundred thousand chariots, as many elephants, more than a million men, and over half a million horses. Such exaggeration is, however, common in the Epic; and, by comparing several accounts of the numbers wounded in different cases, it will be seen that we often have to divide by a hundred or a thousand to reach a reasonable limit. The same absurdity is repeated at the end of our war. After almost countless hosts had been slain, the poor remnant on each side was as follows: On the Kuru side there remained eleven thousand chariots, ten thousand seven hundred elephants, fully two hundred thousand horses, and thirty million men.* The Pāndu army (originally seven 'whole armies') now consisted of six thousand chariots, as many elephants, ten thousand horses, and ten million foot-soldiers. Such was the *balam̐ gēsam*, 'remnant,' on the morning of the last day (ix. 8. 41.). The opening forces are found in as extraordinary sums; where, to instance only one case, the number of *vaçavartinah̐* (or soldiers brought into the field by one ally) implies one hundred thousand chariots (vi. 17 and 18). The systematic scheme of what an army is to be can, therefore, be looked upon only as a very late attempt to make technical divisions of which the true Epic knows nothing. The list may, however, be of interest. The name of the force stands to the left.

| | | Chariots. | Elephants. | Foot-men. (cavalry-men) | Horses |
|------------------|---|-----------|------------|-------------------------|--------|
| <i>patti</i> | = | 1 | 1 | 5 | 3 |
| <i>senāmukha</i> | = | 3 | 3 | 15 | 9 |
| <i>gulma</i> | = | 9 | 9 | 45 | 27 |
| <i>gana</i> | = | 27 | 27 | 135 | 81 |
| <i>vāhinī</i> | = | 81 | 81 | 405 | 243 |
| <i>pṛtanā</i> | = | 243 | 243 | 1215 | 729 |
| <i>camū</i> | = | 729 | 729 | 3645 | 2187 |
| <i>anīkinī</i> | = | 2187 | 2187 | 10935 | 6561 |
| <i>akṣāuhini</i> | = | 21870 | 21870 | 109350 | 65610 |

Each division is thrice its preceding, except in the last example, where the *akṣāuhini* or complete army is ten times the *anīkinī*. Other authorities make *gulma* the same as *gana*, and *senāmukha* also thrice its present size. But even the Epic itself formally contradicts this division, and makes one army-corps (*senā*) consist of five hundred elephants and the same number of chariots; while ten of these make a *pṛtanā*; and ten of these, a *vāhinī*; the *patti* has five and fifty men; the

* Literally, 'three *koṭis* of foot-men' (*pattikoṭyas tathā tisrah̐*): cf. R. vi. 4. 56, *çataṁ çatasahasrāṇāṁ koṭim āhur manīṣiṇāḥ*. *Patti* must here be the foot-soldier. There would thus be more men at the end of the war than at the beginning.

gulma, one hundred and sixty-five; three *gulmas* make a *gaṇa*; and there is no difference between a *patti* and a *senā-mukha*.* We have here a mixture of three and ten multiples. The earliest mention of formal army-divisions in the codes appears to point to a squad of ten factors as the unit of measurement; these factors being perhaps, as above, cavalrymen, foot-soldiers, war-car, and elephant: though no explanation of the 'ten' is given in the rule of Vasishtha containing this division.†

The Epic proper has, however, no definite terminology for divisions of the army. The same force has different names. Certain appellations denote a relatively large force; certain others, a relatively small one. Any of the names of the larger divisions may indicate the whole army without distinction. The only formal division recognized is that of the four-fold array; not a quantitative, but a qualitative distribution. 'The four-fold army,' everywhere alluded to as such in the early Epic, consists of an army divided according to kind into four groups: of foot-men, horse, chariot, and elephant (the last three

* v. 155. 24 ff.; the table above is from i. 2. 19 ff.

† I do not understand how 'one elephant, one chariot, two horsemen, and three foot-soldiers' make 'ten parts,' and, as I have not the text of the commentator, must suppose a clerical error in Bühler's note to Vās. xix. 17. While the first-mentioned method of dividing the army into groups of regiments, companies, and squads (of one thousand, one hundred, and ten men respectively), each with its commander (*adhīpati*); the commander of one thousand being also called *çūra*), appears a late invention, it may, nevertheless, be based on an old unit of ten. If we compare the words of Vasishtha (*saṅyāne daçavāhavāhinī dviguṇa-kārīṇī syāt*) with the late Epic distribution of officers, in which all those that can divide the foe's force and re-establish their own disbanded force are counted equal and worthy of eating and drinking together, and receiving double pay (*dviguṇavetanāḥ*), as applicable to all officers; and then find certain special officers called 'leaders of ten' (*daçādhipatayah*), 'leaders of a hundred,' etc.—we might almost be tempted to transfer the meaning here to Vasishtha's words, and translate *vāha* as 'dux': 'in an attack (*saṅyāne*), the army led by its leaders of ten shall be employed in the double (duty of breaking the foe's ranks and holding its own).' But this may seem far-fetched, and leaves no better meaning for the next verse than we had before; whereas, if we take *vāha* as squad (= *patti*), with Bühler, we may give a better sense to 18 (*pratyekam prapāḥ syuḥ*) by reading (instead of *prapāḥ*) *pragāḥ*, authorized by Pāṇini, and a natural error in writing, and rendering 'and each squad shall have its fore-fighters,' which was the practice in actual battle (compare *purogama*). The following verse of Vasishtha (*puṁsām çatāvarārdhyaṁ cā 'havaçet*) I take as an indication that the division of one hundred was the next to the division of ten in his system. I ought to add, however, that *prapāḥ* is authorized by the like Epic text, xii. 69. 53. The passage above from the Epic gives us the word (*bala-*) *mukhyāḥ* 'captains' as the general term for officers, and shows us in the following verses that the king ought to call these men together (*mukhyān sannipātya*) and exhort them before the battle (xii. 100. 30-32).

implying those that ride on them). Further characteristics of these groups will be spoken of below.*

* The four-fold army (*balam caturaṅgam* or *vāhinī caturaṅginī* or *-sāinya*, e. g. i. 69. 4; v. 5. 17; ib. 19. 1; vii. 164. 9; iv. 68. 13; in iv. 52. 17 *caturbhāga* is merely a quarter of the army) is composed of all the men making the day's battle-order: *vihito vyūhaḥ padātyaḥ varathadvipāḥ* (vii. 20. 14, cf. 9). In later portions the army is spoken of as 'six-fold' (*ṣaḍaṅginī*), where to the fighting force is added the 'treasure' and 'machines,' brought to the camp (*koça* and *yantra*, M. vii. 185; Mbh. v. 96. 16; xii. 103. 38), although the two additions are by some commentators explained as the 'general and workmen,' or even 'carts and camels;' thus showing the lateness of the change (compare the commentators on Manu, loc. cit.) In the Puranic literature we have four- or six-fold indifferently (Var. P. 10. 61; 27. 12; Ag. P. 10. 7; 14. 9; 241. 2, etc.), but generally four-fold. In the battle-scenes (below) the army is assumed to be four-fold. An eight-fold division of all the forces is given in xii. 121. 44 (compare below, and above p. 103). A three-fold division (*trivīdhambalam*) is only found of force, not forces (i. e. the realm's resources in council, wealth, and officers: ii. 5. 57). Unexplained by our text is 'the army of four-fold forces composed of eight members,' but the commentator thus explains this *aṣṭāṅgasamyuktā caturvidhabalā camūḥ* (ii. 5. 63, with which compare xv. 7. 7; *māula, mitra, aṭavibalam, bhṛtam, crenībalam*): 'the "four-fold force" means the native veterans (*māula*), the allied troops (*māitra*), the hired men (servants, slaves, etc., *bhṛtya*), and foresters (who help clear the roads, etc., *aṭavika*). The army, again, is distributed into eight parts, chariots, elephants, horses, fighters (*yodhāḥ*, i. e. all but the foot?), foot-soldiers, workmen, spies, and topographical leaders (those that can tell about places, *dāvīkamukhyāḥ*).' A comparison of the epithets given to the army in the Rāmāyaṇa shows that the 'four-fold' army is here also the more common, if not the only term employed (*caturaṅgabala*: R. i. 23. 14; *aṅga* or *aṅginī* also ib. i. 71. 3, 6; 76. 6; 78. 3; 79. 26; ii. 33. 7; 36. 2; 48. 7; 73. 11; 78. 22; 86. 13; 94. 9; (100. 54, *camū*); 106. 9; iii. 42. 18; v. 78. 12; 81. 23; in 83. 2 defined *ṣaḍaṅginī*: i. 52. 21, v. 1. Bomb. 51. 21; *varūthinī*). Comparing M. vii. 185 and Kām. Nīt. 18. 2, 23, we see that this last division of 'six' is not unknown to late Epic and later literature; but it is very rare against the common use of 'four.' The comparison points again (as I have shown on another theme) to the synchronic completion of the Manavic code and the Čāntiparvan of the Epic. The commander's proper title is *senāpati*; his office is *saināpatya*. The title *vāhinīpati* is, however, common. The whole army is designated by *camū* ('four-fold') as well as by the proper name. Thus, Dhritarāshtra's whole force of eleven *akṣauhīnī* is called *vīratamā mahācamūḥ* (viii. 60. 92; ix. 64. 9). Other irregular names for the whole army are found vi. 72. 34 (*vāhinī*); vi. 112. 2 (*pṛtanā*); vi. 73. 22 (*varūthinī*). For *camū* compare further vi. 86. 50; 100. 24, 34; 105. 15 (*pāṇḍavī camūḥ*); vii. 161. 18; 168. 1 (*mahācamūḥ* and *camūḥ* of Kurus); *pṛtanāpati* is the same as *akṣauhīnīpati* (viii. 73. 15; vi. 87. 15). Poetical names abound: *dhvajinī*, vii. 92. 5; vi. 54. 91; *ripuvāhinī*, vi. 109. 10, etc. The 'lines' deserve notice, although, as far as I have observed, no use or effect of orderly lines is perceivable in the battle-scenes. The rule that fighting must cease when a priest appears between two lines of battle (*anīkayoḥ*) means of course only the opposing acies (xii. 96. 8); *anīkavelāyām* (where a brave should fight) is 'on the van of the front line' (ib. 97. 18). The real unit of battle-order is not the line, but the group, *creṇī*, viii. 73. 16. The battle itself is called *saṅkhyā*, *saṅgara*, *saṅgrāma* (collision, conflict) or simply 'fighting' (*yuddha*, or *yudh*, e. g. i. 19. 14; cf. R. ii. 94. 12, *çakyaḥ soḍhum yudhī*, etc.), but has also its poetical side, and is termed *āhava*, *ākṛanda*, *āmarda*, 'challenging,' 'advance,' 'crush;' or, still

The troops having started with a blare of drums, trumpets, and conch shells, the hosts stream out 'like flamingos crossing a great lake,' each chief making for his particular adversary, against whom he has been pitted by the commander before the fight began.* The crowd follows the leaders. Each hero plunges into the fray, scattering the base herd with a commotion 'like that caused by a huge sea fish leaping into the sea,'† and is soon at arrow's point with his chosen adversary, or is doubling and twisting about for position, or rushing any whither at need of a friend. His base-born adherents and his high-born following keep close to his heels.‡ The proceedings at the end of the day (for with sunset the armies generally stop fighting) depend on whether the commander-in-chief has been slain or not. If not, the forces are simply drawn off the field, the men going to bed as soon as they can—sometimes eating and going at once without conversation,§ although stopping to salute each other, care for their wounds, see to the sentinels, or even, in the case of the knights, taking a bath and listening to some music (*gītavadītra*) while eating before sleeping.|| The singers and praisers always welcome them back, however, if merely as a sign of good luck, as they also open the day with their music; since not to have glad music in the morning shows fear, and is a sign of ill-luck.¶

But if the commander-in-chief is killed, the officers collect at headquarters, and elect a new commander for the following

prettier, *dyūta*, 'gambling,' vi. 59. 39 (93. 42, 'they fought as if in a *svayamvara*'!); vii. 85. 27; *raṇe prāṇadyūtapane*, viii. 160. 43. The warrior not only looks on the battle as 'gambling for life,' but goes 'playing' and 'dancing' to his sport (*kriḍann iva nr̥tayan*, iii. 280. 64-65; vi. 114. 26, et passim). I do not pretend to have exhausted the vocabulary, but these are the terms chiefly employed.

* v. 164. 5; the knights are pitted 'by force and courage' (*yathā-balam yathotsāhan rathinaḥ samupādīcat, arjunam sūtaputrāya*, etc.) † *praviveṇa mahāsenām makaraḥ sāgaraḥ yathā*, i. 138. 30; viii. 77. 10; compare ix. 18. 10, *kṣobhayanti sma tām senām makaraḥ sāgaraḥ yathā*; and R. vi. 77. 6, id.

‡ The Homeric figure of the goose or flamingo is often found, vi. 46. 20; 90. 19 (*utpetuḥ sahasā . . . haṁsā iva mahodadhān*); 110. 45-45 (*nyamajjāṁs te . . . yathā haṁsāḥ*); but the hero 'stands like an island,' ib. 46. The glance and shimmer of arms makes the army look as if it were 'a wheel of fire' (*alātacakravat balam* vii. 7. 53; 39. 6, etc.: used also of a single bow, vii. 119. 32). Compare *lohītakardame saṁgrāme*, viii. 27. 40.

§ 'Then in a twinkling it grew still as heaven, for they did not talk about the fight,' vi. 86. 56 (*nā hi yuddhakathām kām cit tatrā 'kurvan*).

|| *pūjayantaḥ parasparam . . . rakṣyām kṛtvā curā nyasya gulmān yathāvidhī*, ib. 53 ff. (bath and bandin).

¶ Thus 'the sound of the bowstring and sacred song' being absent betrays fear in vii. 85. 19. A night conversation is recorded in vi. 80, and a council is held (*mantram cakruḥ*), vi. 97. 2; the chief knight has his own council, although he is neither a king nor commander-in-chief, vii. 75. 31 (*mantrajñāḥ sacivāḥ*).

day. At this time also formal vows to slay are given, and conspiracies are formed against any prominent hero on the other side. A detailed description of the election of commander will be found below. The chiefs and common people alike, it may be observed, all appear to sit up and wait for the decision, and hail the new commander—as it is somewhere said, ‘thinking no more of their commanders slain, they greeted with great joy their new commander.’ That the post of commander-in-chief was much coveted is seen throughout the play, and is emphasized by the fact that Karna is so jealous because another is chosen in his stead that he will not fight at all at first, but sits sulking in his tent till his rival is slain and the post of honor then offered to him.*

The time of beginning the fight is not always the same. Sometimes the hosts rise at daybreak and wait for the sun to rise in order to (pray and) begin then the battle; sometimes they do not rise till the sun does.†

The time for closing battle is not always the same. If nothing prevents, the soldiers fight till sundown; but if they are badly beaten, they retire early in the day; and once they light torches, and fight right on into the night.‡

It may be said in advance that guards accompany each knight into the field as escort, and that sentinels watch the tents at night.§

* v. 156–168. The commander-in-chief in the Epic is of course a warrior actively engaged in battle. The same title (*senāpati*) given in Ag. P. 220. 1 to an officer to be appointed by the king and designated as of military or of priestly caste must indicate rather a minister of war than a general. Likewise the rules Ag. P. 235. 32–33, that a king must not fight, and that one-third of the force is held as a reserve, are entirely un-Epic.

† vi. 19. 36–9; but 16. 4, *udatiṣṭhat (sānyam) sūryodaye*. Getting up as late as the sun was always thought too late (R. ii. 97. 2), if not wrong, as it was proper to greet the sun with prayer.

‡ See below. The absurd scene in vi. 107 (cf. 43. 11 ff.) is too palpably an interpolation to permit its use as usage. Instead of going to bed, the Pāndus march over to the enemy, and interview their dearest foe (who is at the same time their uncle and the leader on the other side) as to the best means of killing him. This inartistic blot is due to the horror felt by the later compilers at the idea of the Pāndus killing their especially holy uncle without his permission (Holtzmann).

§ Individual guards are called *raksin*, a *statio* or squad for guard (*āraṅga*) is called *rakṣyā* or *gulmaḥ*. Thus, *duryodhano niveṣya balaṁ sam-mānayitvā nṛpatin nyasya gulmāns tathāi’va ca, āraṅgasya vidhīm kṛtvā yodhānām* just before he assembled his council (v. 160. 2). The spies, always part of a camp, and frequently sent across (early in the morning, v. 194. 2), may have made part of the ‘protection.’ Sometimes an advance squad is meant by *gulma*. Thus *utkṣipta-gulma* is a squad sent on ahead (iii. 15. 11). The tent-guards appear to be of little use (x. 8. 2). Some technicalities may be mentioned here. The word for ‘make an attack on one’ is generally *apasavyaṁ karoti* (vii. 187. 51, etc.; *anyonyam apasavyaṁ ca kartuṁ vīrau tad eṣatuḥ*, vii. 188. 27), or

The position of the commander depends on the array. He has not a fixed position, as has been asserted (on Puranic authority). Generally he fights in the van; but he may be more needed rearwards, as in an early battle-account before the great war, where the leader says: 'and I of all the army will stand and guard the rear' (iv. 52. 22 ff.). Or, again, the commander goes ahead, fighting, but is soon left behind by one of the knights.*

The van, rear, flanks, wings, center of the army in the field (*ranājira*, e. g. xi. 16. 4), all have their proper names. Fore wing and back wing (or flank) are also described.† Worth noting is the fact that the nominal commander-in-chief is displaced by some of his friends, never with contempt, but by his own consent. Thus, it is Yudhishtira who gives to the Pāndus the final order to array at the opening of the war; and he is here, though the leading spirit, not the commander, nor even the chief of the allied forces (v. 154. 17). So Karna, though not commander, sends to the Kurus the order to 'harness before sunrise' through the camp by a herald.‡

To return to our orders. Only one distinct quotation seems to be current from the wisdom of antiquity in regard to the best occasions for applying the different *vyūhas* (battle-orders). This rule, that a small force, in order to compete with a large force, should charge in one long narrow column, concentrating all its strength at one point, is applied at the opening of the war, but afterwards only in a hastily made-over array, when another had failed. Of the other battle-orders mentioned, the double triangle with apices joined (*makara*) is employed by the Pāndus once, by the Kurus twice; the wedge (*çakata*) twice by the

samprahāram (*pracakrire*, vi. 99. 21; *pradharaṣaṇa* and *abhipradharṣaṇa*, iii. 243. 3, are personal attacks). 'To withdraw to camp' is regularly *avahāram kurute*, with *sānyānām* sometimes added (vi. 49. 58; 96. 79; 107. 5, etc.). The subject is the commander-in-chief (vi. 74. 37-39). In this case there was an orderly retreat, although both sides were 'badly broken up' (*te sene bhṛṣasānvigne yayatuḥ* [sic] *svaniveçanam, tataḥ svaçibiraṃ gatvā nyaviçan*; *niveçana* is the camp, *çibira* here tent or camp, as in vi. 86. 46 ff.; vii. 17. 1). According to rule, each general protects his own troops in a retreat (vi. 79. 64; 80. 2). The sentinels are set after sunset through the camp (*gulmāḥ paritrastāḥ sūrye cā 'stāmite satī*, ix. 29. 64). A distinction is to be observed between the technical *paritrāya* or *trāyasva yoddhān* 'come to the rescue' (vii. 158. 5, ib. 2), and *parivārya* 'defend' or 'attack by surrounding,' 'surround' being the literal meaning of the last (vi. 79. 23; 94. 37; vii. 135. 35).

* ix. 8. 30-36. The commander's title of honor is *agranīr nṛṇām*, 'fore-leader of men,' sometimes applied to any chief: ix. 61. 37.

† *purato 'pi ca pṛṣṭhe ca pārçvayoç ca*, vi. 90. 37; the flank and fore-flank, *paçça* and *prapaçça*, are common (see below), also called *kakṣa* 'border' (*senākakṣaṃ dadāha samare kakṣam agnīr yathā vane*, viii. 55. 28); the same figure is thus applied in R. v. 85. 24.

‡ v. 163. 56-57: *yogaḥ prāg udayāt*.

Kurus (found again later in the fifteenth book), once with a wheel- (*cakra*) addition; the *krāuñca* (*garuḍa* † rhomboid) is used by Pāndus and Kurus, once as a reserve; the *maṇḍala* (circle) is not only the Kurus' choice, but oddly enough (considering the relative numbers) the Pāndus', though it may be only a 'crescent' here. The difference in forces makes no difference in choice, apparently, except at the outset. It is to be remembered that the Pāndus have only seven 'whole armies' (*akṣāu-hinīs*); the Kurus, eleven.

A word here on the military authorities. Manu (in spite of his code's military advice) is unknown as a military adviser. That is to say, the seventh book of the *Mānava-dharma* was expanded to its present form after the battling parts of the Epic were written, as other portions of the Epic show that no slight was intended to this authority. The main sages are Uçanas and Brihaspati. With the latter Manu has many a question of priority to settle.* Another authority (celebrated later) mentioned in the third book, Çālihotra, as 'wise in the knowledge and pedigree of horses,' appears to have confined himself to this specialty, and is not quoted as a guide on broader military affairs. But the rules of the two inseparables, Brihaspati and Uçanas, are quoted often enough to make us certain that a military code must have been composed by them. The one military strategy formally cited (as given above) is from Brihaspati; † and the same author invented the impregnable *vyūha* called *krāuñcārūṇa*. ‡ Again, the 'king of battle-orders' is declared to come from the same sage. § The first of these is probably meant in the Brihaspati-naya of the *Rāmāyaṇa*. || I have already spoken of the rules of Brihaspati and Uçanas, ¶ and these occur again as a manual of instruction in the war-part of the Epic.** Their names have become typical of military and philosophical learning. †† But, although Uçanas shares the name and the honor, his friend appears to have been, if we may so speak, the more inventive genius in the science of war: as the citations

* The quotation from the former's *çāstra* in xii. 138. 193-194; 139. 70-74, etc., are not devoted to this topic.

† *sañhatān yodhayed alpān kāmān vistārayed bahūn, sūcī mukham anīkām syād alpānām bahubhiḥ saha*, 'if you have a small force, make them fight all together; you may extend a large number as you please, but if a few men have to fight with a great many, they ought to present a needle-front' (vi. 19. 4; xii. 100. 47, confirmed by vi. 43. 102: cf. M. vii. 191; Ag. P. 235. 27).

‡ vi. 50. 40; 51. 1.

§ *vyūharāja* in viii. 46. 27 is *bārhaspatya*.

|| ii. 90. 32; see above, p. 192.

¶ Page 115 (iii. 150. 29).

** *brhaspater uçanaso no 'padeçaḥ çrutās tvayā*, 'have you not heard B. and U.'s instruction?' (ix. 61. 48).

†† *naye brhaspatyūçanoḥ* (sic), viii. 37. 20: compare iv. 58. 6.

already given and to be given show. The battle-orders called *śakata*, *padma*, *vajra* are explained in Uçanas' code, according to xv. 7. 15.* The science of the battle-orders was opposed as a special study to all other branches necessary for a warrior to know: 'I am wise in military affairs, and in the battle-orders,' says a chief; 'I can make the mercenaries and those not mercenaries do their duty; in respect of marching, fighting, etc., I know as much as did Brihaspati; I know all the battle-orders of gods and of men,' etc. (v. 165. 8 ff.). The special points of an officer's knowledge seem to be these: how to break through into the foe's advancing battalion, and how to maintain order in his own; as the passage quoted above enjoining double pay for officers able to do this well would indicate. Though we should antecedently assume this as the greatest need in a general (given the Hindu troops and a battle under way), it deserves to be emphasized, from the negative evidence it furnishes that generalship was regarded mainly as fighting-ability confined to the actual conflict; or, in other words, no strategic ability in choosing position, hemming in a foe, preserving free passage to the base of supplies, and other such matters, is lauded. Only knowing how to act when springing at the foe is praised; though universal directions for suiting the ground to the kind of force employed are casually given.

* In the account of Rāma's war, compare iii. 285. 6, 7, (*rāvaṇaḥ*) *yud-dhacāstravidhānājña uçanā iva cā 'paraḥ, vyūhya cāu 'çanasam vyūham harin abhyavahārayat; rāghavas tu viniryāntam vyūdhānīkam daçānanam, bārhaspatyam vidhīm kṛtvā pratyavyūhan niçācaram*. As to Vālmīki's own account of military arrays, owing to the nature of the war we obtain very little information in regard to the *vyūhas*. The first arrangement appears to have been a mass drawn up in order (R. vi. 16. 2, reading *vyūhya*), and we find the *garuḍa* mentioned before this (ib. 6. 11; *padma* is a cognomen of Rāma, 3. 19); but the war is mainly a siege, and the battle-arrangements amount to nothing. The military proverb preserved in (*phalgu sāinyasya yat himcin madhye vyūhasya tad bhavet*) 'put the weakest force in the middle of the general array' shows us the technical sense of *phalgu* as distinguished from the *sāra* or picked troops, as the term is employed in describing the forces in the Mahābhārata (see below). The technical meaning is of course current. Compare R. vi. 31. 33 (*vyūhena ghoreṇa*); ib. 39. 28, *vayā devāḥ prati-vyūdhāḥ . . yudhi*; ib. 71. 16, *balavyūhena mahatā pūlitaḥ*. It may be parenthetically remarked that a number of impossible and inexplicable 'orders' are alluded to in the Epic, under the titles 'mortal,' 'godly,' 'angelic,' and so forth, usually called (e. g. vi. 21. 4) 'impregnable,' and usually without reason (45. 4). They are not used definitely, nor explained, but are current on the lists of possible orders (e. g. v. 57. 11; 165. 10 ff.; vi. 19. 2, 18 ff.); and the officers are expected to know them. They are probably merely the ordinary orders in relation to their origin; thus, the common order called 'thunderbolt' is called 'the unshakable,' and was invented by the Holder of Thunderbolts. This then would be a 'godly' order (vi. 19. 7), *acalam nāma vajrākhyam*, the usual boast: cf. ib. 34, *vajro nāma . . vyūha nīrbhayaḥ sarvatomukhaḥ*; 21. 2, *abhedyā*; 4, *akṣobhya* massed against this. The irresistible force was always meeting the immovable body on the Hindu battle-ground.

I pass now to a detailed examination of the devices employed in the actual battles of the great war, the stratagems (in narrow sense) used in the field.

The first battle began in the first hours of the first day after each army had arrived at its respective camping-ground.* The Pāndus are encamped in the West; the Kurus, in the East. The battle-field lies near the city of the Kurus, Hāstinapur. The latter stand on the defensive. Each force, with its general soldiers (*yodhāh*, *sāinikāh*) and officers (*bala-mūkhyāh*, etymologically equivalent to 'captains,' *mukha* meaning here *caput*), has its grand commander-in-chief (*senāpati* or *vāhinīpati*),† under whom stand the generals that command the different 'whole armies,' or hosts, complete in themselves and so considered, brought by the allies. Such an army within an army was called the *akṣāuhini*, and its general was the *pati* or lord of that division, a term sometimes applied to the commander-in-chief himself. The commander-in-chief was in fact nothing but an 'army-lord' raised to the position of general superintendent, and temporarily exalted over his equals, the 'lords' of each special army. For the special generals were usually simply the kings who had come as allies, and each commanded his own home force, which he had brought with him.‡ An honorary title of either a king-general or of the commander-in-chief was also *yūthapa*, 'guardian of troops,' indicative of the fact that the army was parcelled into generic troops, the elephants apart from chariots, the foot-soldiers by themselves. This is often the arrangement made; and the more artificial combination, by which each car was surrounded by so many men, and so many cars were distributed to so many elephants, each squad of this sort containing all the fighting elements and making no longer troops in kind, I think a later as a more artificial formation.§

* The whole of the Bhagavadgītā, the absurd scene following, vi. 48. 12-102—in reality, from the end of section twenty to the beginning of the forty-fourth section, where the question asked after the close of the nineteenth section is repeated—all this is an interpolation unnecessary to prove. The position of the forces is given in vi. 20. 5.

† Dhṛishtadyumna is *saptānām netā senānām pravibhāgavit*, v. 151. 7.

‡ When we read, therefore, that the Pāndus' commander-in-chief was the 'leader of seven complete armies,' we must take this literally. The Pāndus' force, as a whole, comprised seven distinct armies. But for the sake of convenience we may term those armies in relation to the whole 'army-divisions.'

§ In regard to the title *yūthapa* compare vii. 193. 49, *rathayūthapa-yūthapah*; and v. 167. 14, *rathayūthapayūthānām yūthapo 'yam*. The one hundred and sixty-fifth section of the fifth book begins the list of *rathi* (*ratha*), *atiratha*, *mahāratha*, terms applied loosely to denote, not technical distinctions between the generals, but their comparative ability in leading the forces and slaying foes. The terms mean that such a one is either a 'good charioteer,' or a 'superior charioteer,' or a 'surpassingly good charioteer.'

The Pāndus, being the smaller force, wait (in spite of Brihaspati's rule) to see what order will be taken by the Kurus. Those on the defensive are thus obliged to take the initiative. The Kurus' commander-in-chief now masses his troops in heavy bodies. He himself takes his place in the van.* Various chiefs and princes of high rank, ten of whom are especially named (16. 17), aid him; these guard the van of the different battalions, or act as 'wheel-guards' to others. Each greater chief has commonly a pair of these wheel-guards (*cakraraksāu*): an indication that the chariot had not four but two wheels in the earlier time. They are often the younger princes, who are thus winning their name of hero by useful service under some renowned knight. They drive in chariots, and are really independent knights, but their strategic position was close to the war-car of the leader whom they were first bound to protect.† The Kuru commander, Bhīshma, was recognizable by his standard, a golden palm-tree,‡ and colored flag, each leader having some such ensign. Bhīshma's general appointments were white, and even his war-car was silvered (vi. 20. 8; 16. 23). Besides the wheel-guard, a special band of fore-fighters (*purogamāh*) went in advance with the leader and 'protected' him.§ The king of the Kurus is stationed in the centre, and enters the fight, not in a war-car, but on an enormous white elephant with net-armor. Him guarded thousands of war-cars in front.|| His maternal uncle, the great villain, Çakuni, was especially charged to look after the king, and accompanied him with hosts of Gāndhāras and mountaineers.¶ The too careful arrangement of the troops spoken of above is given (in a passage that appears late) as follows: one hundred cars support each elephant; one hundred cavalry, each car; ten archers, each horse; one hundred shield-

* *agranīh*, vi. 16. 21; 20. 18; *agratah sarvasāinyasya*, ib. 20. 9.

† vi. 19. 17; for position see the whole of this section, and 43. 102; 44. 1 ff.

‡ *hematāla*: cf. vi. 17. 18, *tālena mahatā . . pañcatāreṇa ketunā*.

§ As this term has been occasionally misunderstood, it may be well to point out that in Hindu warfare the protectors drove before the army in general, but behind the protected leader, and were really supporters (vi. 17. 23, seven kings take this part: cf. 18. 10, *pr̥sthagopāh . . bhīshmasya putrās tava rarakṣuḥ pitāmaham*). Of course the whole line is 'protected' by the chiefs ahead as well as behind. This is *anīkam pālītam* (vi. 22. 4).

|| vi. 17. 26, *dhvaja*; 20. 7. In the following, until the end, or unless the book varies, I shall quote by sections only, the book once introduced being understood.

¶ 20. 8. The presence of this man of Kandahar (*gāndhāra*), and his origin in the north-west country, is one of the indications of the Aryans' original locality. Dhritarāshtra, the king of the Kurus, took his wife from the old family country, and her brother lived as a courtier in Hāstinapur, in accordance, perhaps, with that rule which makes it necessary for a king to support all his wife's relations.

men, each archer.* Such altogether was the Kurus' order of battle. No special name is given to it, but I fancy it was the 'circle.'

Opposed to this the Pāndus, under the direction of Arjuna (for we notice here, as said above, that the king or one he selects is practically commander, while the *sāināpatya* consists less in ordering than in arranging forces), to whom the king, Yudhishthira, has appealed for advice, form in a *prativyūha* or 'counter-array,' by making themselves, on the general principle referred to above, into a 'needle-shaped' modification of the 'thunderbolt' or long column (19. 34, 35). At the head (*agre* '*granīh*') was Bhīma, 'swift as wind,' and Dhṛishtadyumna, the official commander, who, strange to say, is neither chief leader nor director. The king for whom the war was undertaken was behind, or rather 'in the middle' (19. 24), surrounded by elephants; while his younger brothers and his chief ally, Virāta, stood just behind the leaders Bhīma and Dhṛishtadyumna. Bhīma's special wheel-guards were his younger twin brothers, and his rear-guards were his nephews, to whom in turn Dhṛishtadyumna was 'protector;' and there behind this van was Çikhandin, 'protected by Arjuna,' who was the chief knight of this side. Others stood still further back. The right van was guarded by Yuyudhāna. According to the position shown in 22. 3, Dhṛishtadyumna was ahead, guarded by Bhīma; and Çikhandin was in the middle, guarded by Arjuna.

It is interesting to note that, as the rule enjoins, a short encouraging speech is really made by the leader to the chiefs before they go their respective stations, wherein they are reminded that death in battle is the door of heaven, and that they are treading the path of warriors, 'the path trod by your forefathers, and by their fathers too' (17. 6 ff.); as well as the fact that the Pāndu king is much discouraged at the sight of the vast array before him, and has to be cheered by his brother, with the words: 'often the few conquer the many; where the right is, there is the victory.'†

When the battle really begins, it is not the real commander, but Bhīma, one of the Pāndus, that leads (44); and at once (45. 8) Bhīshma makes a dart at Arjuna; whereupon the battle becomes, almost immediately, irregular, and shortly fades into

* See section 20; the anachronism of the 'conspirators' condemns this passage. The *dhānuṣke çataṁ carmināḥ*, 'hundred shield-men to each archer,' is absurd. Mention of 'mortal,' 'divine,' 'angelic,' 'devilish' orders occurs 20. 18. The Puranic literature gives rules for keeping one third of the army as a reserve, but no reserve is kept in the battle as described; all the troops march into the field (except when, as in Karna's case, a special personal feeling prevents). See Ag. P. 235. 32.

† *yato dharmas tato jayah*; emended to 'where Vishnu is,' etc.: 21. 11-14.

a confused fight (*tumula*, tumultus).* The first day, after many duels and much 'tumult,' ends resultless at sundown.†

The second day: At the Pāndus' suggestion, their commander forms his forces into the array of Brihaspati (50. 40) already alluded to, called *krāuñca* 'great bird'—a battle-order apparently new to the warriors. The Pāndus thus take the initiative, and the Kurus make a counter-array that is not more nearly defined, but described as 'huge.'‡ The Kurus' leader is in front, but surrounded on all sides, as he leads the great array.§ In this encounter the Kuru king is stationed in the middle; the Pāndu king, in the rear. The metaphor of the bird-order (*krāuñca*) is kept up in the details. Thus, the Pāndus' commander with one of the Pāndus make the back-wings (*pakṣāu prsthatah*); the twin Pāndus are on the left wing; Arjuna's son, with others, on the right wing; while other heroes were on the 'neck,' and still others made the 'eyes'; the king of the Pāndus in the back (*prsthā*, though 'tail' is often used), surrounded by Nishādas; the father of the commander-in-chief is on the 'head.' The elephants are here disposed, not at all in the artificial order spoken of above, as centerpieces to war-cars, nor yet, as the Greeks describe, as a line in front, but on the tips of the wings.||

Before the Kurus advance, the king makes them an encouraging speech,¶ exhorting to courage and care of the leader. Then the Kuru commander, with the help of Droṇa and the princes, 'drew up a great (counter-) array,' to which no special name is given; but right and left flank and the king's position in the middle are mentioned (51. 10; 52. 3). The battalions are massed one behind another. Sign that all is ready is given by drum and shell. Again the description becomes one of 'fore-fighters who led the van,** with a general 'horrible tumultuous battle' as the ranks meet (52. 5); but here Arjuna singles out Bhīshma for a first attack. The second day ends, as before, with no decisive result.

The third day: On this day (56. 1 ff. to 59) Bhīshma leads off with the rhomboid array called the *garuḍa*, a mythological

* Bhīshma, considering their relative position, must have flung everything into confusion by his direct onslaught upon Arjuna. Çikhandin has suddenly disappeared.

† *prāpte cā 'stañ dīnakare, avahāram akurvanta*, 49. 52-53.

‡ 50-55: the *krāuñcārūṇanāma*, or simply *krāuñca* (51. 1), was unseen before this (*adr̥ṣṭapūrva*, 50. 41). The Kurus' array is simply *mahāvṛyūha* (51. 10).

§ *prakarṣan mahatīm vāhinīm*, 51. 11.

¶ *pakṣakoṭiprapakṣeṣu pakṣānteṣu ca vārañāḥ, jagmuḥ parivṛtāḥ* (50. 55).

** *prāhe 'dam vacanañ kāle harṣayoñs tanayas tava*, 51. 4.

** *praharatām creṣṭhāḥ samprahāram pracakrire*, 52. 1 ff.

bird, whose outstretched wings give the name. Here, too, the metaphor is preserved. The commander is on the beak (*tunde*); two chiefs on the 'head,' two more make the 'eyes,' others are on the 'neck.' The king is in the rear, surrounded by hosts. The allies are on the 'right wing' and 'left flank'—the metaphor failing, as it often does.* Against this, Arjuna and the commander draw up an array made in the shape of a crescent (*ardhacandra*), on the 'right horn' and 'left flank' of which stand Bhīma and Arjuna, while the commander with other great knights is in the center, as is the Pāndus' king. The day ends undecided. Each commander fights in front, as we are told (57.31). The counter-array is quite interesting. It will be seen that, as the Kurus' *garuda* advanced, the van, being the apex of a triangle, was met by a semicircular enclosing host (crescent) on the part of the Pāndus, so that the Kurus' leader, standing on the apex, met the Pāndus' leader, standing half-way between the two horns of his own army. But the attempt of the seven-armed Pāndus to enclose the eleven-armed Kurus seems ludicrous.

The fourth day: No especial description enlivens the dreariness of the irregular combats. 'An array like a cloud' and 'an array unseen before' (60.7, 11) explain themselves but vaguely. Sections sixty to sixty-nine, embracing this day, are largely interpolated (65-68) with religious passages.

The fifth day: After the Vishnu interruption, the array of the fifth day is described (69.2 ff.). Bhīshma now employs the exact reverse of that used on the third day, namely the *makara*, or array consisting of two triangles, with apices making the centre; bases, rear and van. The Pāndus 'made their own array' against this; each side drew out all its forces, chariots, foot, elephants, and cavalry. Beholding the great double-triangle-array of the Kurus, the Pāndus brought against it the *gyena* or 'hawk,' another bird-order, 'a very king of battle-orders:' on the front of which stood Bhīma; the eyes of which were the commander and Çikhandin; on the neck Arjuna, etc. The king is again in the rear, and various allies on the wings. Bhīma makes the first onslaught, plunging into the *makara*. Again on the part of the Pāndus we find a clever attempt to pierce the broad oncoming van of the foe, as they had before tried to enclose the sharp van. Arjuna's position on the neck enables him to rush at once to the rescue of Bhīma, whose onslaught upon Bhīshma is sudden and direct, showing that the 'hawk' order was intended to facilitate a sharp attack at the centre of the foe. The king of the Kurus urges Droṇa on, and appears to be near the front soon after the battle begins. All

* *dakṣiṇam pakṣam āsādyā vāman; pārçvam avasthitāh*, 56. 8-9.

details are passed over. The contest ends undecided. This fifth day ends with section seventy-four.

The sixth day: The Pāndus now imitate the array of their foes chosen on the preceding day, after they have all 'drawn out again for battle as soon as night had passed' (75. 1 ff.). The commander is again told by the Pāndu king what to lead out, the latter recommending the *makara*, which is got ready just before sunrise.* Drupada and Arjuna are near the van of this array; the latter's younger brothers stand beside him; Bhīma is again the 'mouth,' and, passing over others, the commander and Virāta, the chief ally, are here found in the rear. 'Two guards of the battle-array' form the 'right flank, and five other allies occupy the left. Two others are on the feet, and Arjuna's son with Çikhandin are on the tail (*pucche*). The *makara* is, therefore, here imagined to be weakest at the middle flank, which has special guards. Noticeable is the especial valor of Bhīma, who incites his commander to follow him (77. 32). The Kurus, to meet this, their own array, come out in the *krāuñca* (already adopted by the Pāndus on the second day, and not needing here another description, but that the Kuru king is on the neck, while in the corresponding position of the second day the Pāndu king was stationed in the rear). In the further description we have a mixture of technical terms, whereby appears that this *makara* was of a 'thunderbolt' pattern: that is, probably, that it was as solid a body as the phalanx.† It is stated here that the soldiers all fought with their like (in accordance with the formal law): that is, each horseman fought a horseman, each footman a footman. This law practically held good, however, neither for the lowly nor for the exalted. Every knight kills footmen; every footman attacks knights. A very interesting making-over of the array diversifies this day. At noon, when, as usual, everything is in confusion, a portion of the Pāndus make themselves up into an entirely new array, with reversion to their first principles; and, forming a 'needle,' they charge the heavy phalanx of the foe, successfully break it, and rescue their imperiled leaders, who have allowed themselves to become caught in the enemies' centre (77. 59). The sixth day ends with the seventy-ninth section.

* The commander has his orders from Yudhishtira again in 87. 16, when told to get up a *prativyūha*. In fact, though 'commander' is better than 'leader' as a translation of *pati* here, this generalissimo is constantly commanded by more experienced knights and kings. The king tells what to do; the 'commander,' how to do it. Thus the commander 'directs the knights' (*vyādideça rathināḥ*, 75. 5) how to form, and this appears to have been his chief business.

† *vyūhanāṁ tam makaraṁ vajrakalpam praviçya*: compare the regular 'thunderbolt' on the seventh day.

The seventh day: Bhīshma, still commander, 'skilled in battle-orders' (*vyūhaviçārada*), draws out now a complete circle, filled with fighters, elephants, foot-soldiers and chariots.* This array is 'very hard to break,' being bordered by war-cars, spear-men, and knife-men. The king is here on a chariot, as he usually is; the first day's elephant-riding for a king appears anomalous and late. Against this the king of the Pāndus brings the 'thunderbolt,' not further described (*vajram akarot*, 81. 21, 23). The attack of the thunderbolt succeeds. The fight again becomes almost that instant a mêlée. Droṇa's son attacks Çikhandin, and 'all the chiefs' attack Arjuna (25 and 27). Here also ten horses are said to accompany one elephant; ten archers, one horse; a hundred shield-men, one archer (81. 14). The day ends with the eighty-sixth section. One must again admit the correctness (I speak as one unlearned) of the tactics said to be used by the Pāndus. Against an advancing force formed in a circle bordered with war-cars and spear-men (it will be observed that here the elephants are not on the flank) they placed a solid phalanx deep enough to break the line (of equal strength throughout) opposed to them, and yet broad enough to maintain their ground without danger of being surrounded when once an entrance had been effected.†

The eighth day: Again a new array appears, but without enlightening name. The Kurus (87. 1-13) make an array 'like the sea.'‡ At the head of this huge body stands the commander, surrounded as usual; the king with his brothers far behind. On the Pāndu side, their king directs the commander to make a counter-array, but does not suggest the form. The latter disposes the troops in an entirely new order—I am doubtful whether to call it a triangle or a square. Its name is *çrñ-gātaka* 'the horned array'; of the horns, the two mentioned are filled by Bhīma and Sātyaki, with their 'several thousand war-cars, steeds, and foot.' Arjuna's position is between them; the king also occupies the middle position, while brave warriors who know the statutes on arrays fill the battle-order.§ Others are in the rear. From the commentator this would seem to be an array in the shape of a Greek cross (*catuspathā-*

* The circle complete is called *maṇḍala*, distinguished from the half-moon above described, but not from the synonyms of *maṇḍala*, viz. *padma* or *padmaka* (lily), *cakra* (wheel).

† My temporary contemplation of these battle-arrays as if historical formations, instead of poetic fancies, is of course a mere matter of convenience. The much added-to and long elaborated descriptions of the war-scenes are betrayors of their own non-primitive character: underlying which we have, however, certain ancient battle-orders preserved, and many *κλέα ἀνδρῶν* from an earlier period.

‡ *sāgaropama* or *sāgarapratīma*, ib. 5 and 13.

§ *vyūhaçāstraviçārādāh*, 87. 19, 20.

kāra), but the description would more imply a triangle-array with the base as van. Immediate confusion prevents further analysis of this order. The eighth day ends with the ninety-sixth section.

The ninth and tenth days : These present no technical names, but the ordering of the array is instructive. After a conversation and dispute between the Kuru king and commander (97), the former describes to his brother the Pāndu array. Two heroes form a left and right wheel-guard as protectors of Arjuna; he in turn is the protector of Çikhandin.* The king now bids his brother see to it that Çikhandin shall not kill Bhīshma. Accordingly the prince puts Bhīshma before him, and so advances (*bhīṣmam pramukhataḥ kṛtvā prayayāu*, 50); on which Arjuna calls out 'put Çikhandin before Bhīshma, and I will be his protector' (*goptā*, 51). The Kuru commander had refused to kill Çikhandin. This being arranged, the array is completed on the Kurus' side, and met by one on the part of the Pāndus. The position of different forces is given, but no name of the arrays is mentioned. The Kuru king is in the centre, the Pāndu in the van, of his array (99.1-10). With section one hundred and seven this day ends; and on the tenth day (108.3 ff.), after the extraordinary interpolation of the night visit to Bhīshma, the Pāndus put Çikhandin ahead and make the battle-order. Bhīma and Arjuna are his wheel-guards. The commander is here in the rear, but not so far back as the king of the Pāndus and Virāta. The Kurus, anxious to protect Bhīshma, after putting him in front, follow him close. He appoints the infernal battle orders,† not explanatory through their names. Arjuna is as usual the fore fighter, except that he guards the wheel of Çikhandin.‡ Arjuna has to encourage Çikhandin by shouting 'do not fear, I will kill Bhīshma' (110.2). The Kurus all attack Arjuna as he seeks to kill Bhīshma: 'He was wounded often, but was not afraid,' it is said; and again: 'Arjuna alone, warding off many, routs the Kurus.' It is he who 'makes the king of the Kurus fly and crushes his army' (111.56).

The end of the tenth day closes the sixth book. The first decided victory is gained by the Pāndus. The Kuru commander is slain. This evening, therefore, the Kuru king selects a new commander in the person of Droṇa, the old teacher of both the families (but pledged to support the Kurus, and the natural foe of the Pāndus' allies).

* The last is *rakṣyamāna*; Arjuna is *goptar*: 98.47-48.

† *Bhīṣmah . . āsurān akarod vyūhān pāñcācān atha rākṣasān*, 16.

‡ Compare *arjunapramukhāḥ pārthāḥ puraskṛtya çikhandīnam bhīṣmah yuddhe 'bhyavartanta*, 18.

The eleventh day: This is the first day of Droṇa's generalship, and begins with the seventh book—which, as the elder Holtzmann said, is replete with repetitions and additions. The new commander usually discards the arrays used by his predecessor, and shows considerable skill in combining different orders. The Pāndus, however, from now on strike out nothing new, but either use old forms or imitate those of Droṇa. The latter's novelties are the wedge, and a combination of the wedge and wheel. Besides these he uses the rhomboid, under the technical name of *suparṇa* (for *garuḍa*), and the circle, here called *cakra* (wheel).* On the first day no new details of warfare appear. Droṇa makes the wedge array, and it is met by the *krāuñca*, 'bird-array,' already described. This day ends with the sixteenth section of the seventh book.

The twelfth day (conspirators' day): The warfare of this day is diversified by the conspirators (who have sworn to kill Arjuna) making their own 'battle-order' in the shape of the moon, and advancing with this 'array' of a comparatively small number of men.† In like manner, after Droṇa has suddenly advanced 'drawn up in full array' (*vyūdhānīka*), the Pāndus as suddenly (20.4) make up a counter-array in the shape of a semi-circle (*maṇḍalārdhā*), probably the same as the 'crescent' that they used (to meet a similar attack) on the third day. The Kuru king is in the van with his brothers. Droṇa's order, so suddenly brought against the Pāndus, is incidentally mentioned under the name of the 'bird' (*suparṇa*), employed by Bhīṣma long before. This scene is probably an imitation of the earlier one, as the seventh book as a whole is later. We are told that a whole *aksāuhinī* guarded the right flank (9). It is rather remarkable to find the important position of the 'neck' taken by Çakas, Yavanas, and Kāmbojas. The whole day is rather tumultuous (*tumūla*, *sukalīla*, 32.75), though an attempt at order is pretended. This day ends with the thirty-second section.

The thirteenth day: Another 'circle'-array is formed, noted as especially hard to penetrate.‡ The king here is in the middle, the commander in the van (*pramukhe* or *agre*). The 'followers' (*anugāh*, *socii*) as usual attend the princes. The Pāndus have no mentioned form. They seem especially to dread the circle.§ The princes royal guard the king's chariot-wheels on the Kuru side, and make much ado about it.|| The day ends with the eighty-third section.

* The *cakravayūha* is prophesied for the war: e. g. i. 67. 118.

† *vyūhyā 'nikam candrākāram*, 18. 1: compare 7.

‡ *durbhida*, *abhedya*; *cakravayūha*: vii. 33. 14, 19; 34. 13.

§ Compare the hurried colloquy of the chiefs before Abhimanyu's death, and Arjuna's remark in 72. 20.

|| *arāsthāneṣu vinyastāḥ kumārāḥ*, 34. 14.

The fourteenth day: This begins with the eighty-seventh section. The night has been spent in grief on the part of the Pāndus, the son of Arjuna having been basely killed, for which Arjuna swears revenge. This day alone continues into the night. Torches take the place of the sun. The battle-array is indicated in advance. It shall be composed of a 'wedge and circle':* that is, as the following explanation shows, the wedge forms the front, the circle the rear, of the whole combination. The object of this array is twofold: first, to form an offensive front; and secondly, to make a posterior order impenetrable enough to restore to courage the frightened Jayadratha (whom Arjuna has sworn to slay), and enable him to go into the fight. The two portions are described in double metaphors: the 'wagon' and 'needle' on the one hand, the 'wheel' and 'lily' on the other. It is the most ponderous and unwieldy of all the arrays described, and is represented in our account as follows (87. 20 ff.). After the troops, with a by-play of skilful manoeuvres with sword and bow,† have advanced, some of the royal princes station themselves, with half-a-thousand elephants bearing soldiers, at the head of the army, standing in the extreme van (*agrānīke*, 21), to protect Jayadratha. The array was invented and personally arranged by Droṇa. It has two parts: the first consists of a force twelve *gavyūtis* in depth, and at the back of this stands a 'hinder part,' five *gavyūtis* long.‡ The array includes the common infantry, the chariots, the elephants, and the cavalry. The officers were arranged 'here and there' (23). 'Now,' it is said, 'in the back of this (whole combination) was a lily, an embryo-array, very hard to pierce; and, again, there was made a concealed array stationed in the middle of this lily-with-a-needle-array.' That is, the lily, or circular array at the back of the wedge, was an enclosure for another needle-shaped array. At the head of this 'needle' were stationed Kritavarman; next came two allies with their forces; next to these, Duryodhana and Karna; then, a hundred thousand soldiers stationed in the 'wedge' and guarding the front (that is, the fore-part in general). Back of all these, on the flank of the needle and right in the middle of the rear of the lily (cf. 75. 27), stood Jayadratha. But on the van of the whole 'wedge' (the general array enclosing the 'lily' and 'needle') stood the commander, Droṇa.§ There are then three

* *cakataḥ padmakāḥ cā 'rdho vyūhaḥ*, vii. 75. 27.

† *carantas tv asimārgāṅḥ ca dhanurmārgāṅḥ ca cikṣayā*, 5.

‡ Compare with this (22) the statement in 14 that the warriors surrounded Droṇa *gavyūtiṣu trimātrāsu*.

§ *sūcīpadma* must be interpreted 'lily enclosing a needle,' as in 22 *cakraçakata* means the wedge enclosing the lily (wagon and wheel); otherwise we should have Jayadratha on the flank of the outer array; whereas the whole arrangement is made in order to hide him in as deep a mass as possible.

arrays : an all-including wedge-shaped order (at the head of which stood Droṇa) ; a circular array in the back part of this wedge, extending five-twelfths of the distance from the rear to the van of the wedge ; a secret hidden array (inside the circular array) shaped like a needle, the flank of which was in the rear-centre of this circular array ; and here the man to be defended stood.

To oppose this array, the Pāṇdus formed another, but of what sort we are not told, the numbers only being indicated.

Interesting as is the array, more interesting is the scene in the latter part of the day. So undecided is the conflict that when, with the setting of the sun, darkness comes, the troops are ordered still to fight on, and later still commanded to pause only to supply themselves with lights. The army is withdrawn, a new array is made. It is like the arrays made by the gods and demons.* It is now near midnight (*niçāthe bhāirave sati*, 165. 20 ; 168. 26), when the king, seeing all order gone, reforms the army, and after doing so cries 'cast aside your weapons, seize the glowing torches.' This they do. Five lanterns (*vidīpaka*) are fastened on every war-car, three torches (*pradīpaka*) are attached to every elephant, and one to every horse. Thus the Kurus.

The Pāṇdus placed seven torches on each elephant and ten on each car (163. 16, 17, 28), and two on the back of each horse, before and behind, while others were hung upon the standards of the war-cars. The infantry carried oil-lamps (*pāvakatāila-hastāh*, 18 ; *jvalitāgnihastāh*, 29). It was light as day.

The order of fighting is as confused as ever. Yudhishtira appears in advance with Çikhandin behind him (183) ; Droṇa divides the army into two parts ; and the Pāṇdus' aim is to 'split the front ranks'† by forcing Arjuna to the front (*ājī-çīrsa*) to 'burn his foes.' The ease with which he breaks the great array and kills Jayadratha is not less than that with which most of the arrays are disposed of. No matter how large or skilfully planned, they were nothing but masses ready to flee, headed by a few knights. And Arjuna happened to be the best knight.

This long contest weakens the Kurus. Arjuna has his revenge ; the Kurus' leader Droṇa is also slain (184 to 193), while the Pāṇdus' commander and the best knights are still alive. Worthy of notice is the fact that on the morning of this second day the soldiers stop fighting at sunrise to offer the orison (186. 1-4). Nothing of immediate interest breaks the monotony of tedious recital, except still more tedious inter-

* Apparently referring to the light : cf. *ulkāçata*, 164. 5 ; the description is from 163. 10 ff.

† *bhīndhy anīkam, apasavyam imān kuru*, 186. 11, 13.

polated tracts; and the fight drags slowly to the end of the seventh book, completing here at last the fourth and fifth days of Drona's commandership, the fourteenth and fifteenth of the whole war.

Drona, although as strong as if he were but sixteen, was eighty-five years of age (193.43), and a younger man is now chosen commander to take his place. No better description of this ceremony occurs than the scene at the opening of the eighth book. The Kurus hold a consultation after the Pāndus are in battle-order (10.1 ff.) The regular ministers of civil affairs are present at the council, but scarcely share in it, as all is done by the knights. The prince makes a speech, and expounds the need of the hour. Aṅvatthāman follows, and proposes Karṇa as the new commander. The prince compliments Karṇa, and says: 'I know thy valor and thy love for me; be thou our commander.'* The king continues (to encourage this youngest of commanders): 'Our former commanders, Bhīshma and Drona, were old and weaker men and were (therefore) slain; Bhīshma being dead and Drona being dead, Karṇa shall conquer the Pāndus' (24, 25, 38). Karṇa replies: 'I have said that I would slay the Pāndus. I will be thy commander.' Then the formal consecration is performed. Water is poured upon the knight, and this act is regarded as a religious ceremony.† The vessels used, of earth and gold, have been previously made holy. The exercises are such as accompany a coronation. The seat is of *udumbara* wood, the cover is linen, the performance 'is according to the rule of the *śāstra*,' and 'with one mind the priests, the knights, the men of the people-caste, and the slaves rejoiced over the consecrated knight' (47). The priests that aided the ceremony are then fed, and they unite with the regular 'praisers' in extolling the new commander.

We might pause here to ask whether this was not originally a coronation service: whether the similarity between the election to generalship and that to kingship does not lie in the fact that they were at first identical; whether, as royal power grew to be different from battle-power, the king did not find it necessary to choose a (practical) chief, another king, of the fighting class, incapable himself of directing the soldiers' power on the field; whether, therefore, this ceremony is not simply a survival; whether the mention of all the castes rejoicing does not indicate a former assembly of the people at large. But be-

* It is interesting to note here the *tutoyer* of 10.22 followed by the formal 'Sir' in 24, 32, and then again by 'thou' in 34. Elsewhere, in choosing a commander, the king says 'Sir' until the ceremony is over, and then drops again into the usual 'thou': see below.

† *abhiśiṣṭuḥ karnaṁ vidhidṛṣṭena karmaṇā*, 43.

yond the suggestion there is nothing. No proof of this except that, in combination with the electoral legends spoken of in a former paragraph, there exists no *à priori* reason for rejecting what appears at once as the simplest explanation of the historical significance of this election to generalship.*

The sixteenth day (viii. 11. 13 ff.): With the noise of horns and the usual musical accompaniment of forming the order of the day, the new commander draws out the double array, consisting of two triangles, of which the apices form the centre, and the bases make the van and rear, respectively (*makara*). This has already been employed by the Kurus on the fifth, and by the Pāndus on the sixth day. The commander stands on the 'snout' of the sea-beast with which this array is compared. The Hawk and the Owl (two great chiefs) are the 'eyes'; Droṇa's son is on the 'head,' with the 'neck' full of followers. The left foot (*vāmapāda*) holds Kritavarman; the right, Gautama; Çalya stands on the left rear ('after-foot,' *anupāde yo vāmāh*, 19); Duḥçāsana, on the right rear; the two brothers Citra and Citrasena keep the 'tail' (*puccha*). Then it is the Pāndus' part to arm against this array. 'Now looked the king on Arjuna, and said: "It is a vast array; draw out against this mighty host whatever form you will."' Then Arjuna guarded against this array by means of a half-moon array (*ardhacandrena*), on the left flank of which he stationed Bhīma, on the right Dhrishtadyunna, while he himself stood in the middle with the king, back of whom were stationed the twin brothers. Now Arjuna's wheel-guard were the two Pançālas, 'who, being protected by him, did not desert him in the fight.† All the other knights were placed as before the opening of the first day's battle, according to their ability or zeal.‡ That is to say, in arranging the knights, the force brought with each ally had to be regarded in reference to its efficiency as a counterpoise against any one body standing on the other side. What these bodies were could easily be made out by the ensigns and decorations. 'Then beat the drums, then rolled the cars, and the armies danced toward each other, wing by wing, forewing by forewing; glorious was the sight of the army, like unto the full moon in its glory.' But on their meeting follows as ever confusion, amid the 'clash of arms of every kind' (12. 1-10). With the thirtieth section ends the sixteenth day, the first of Karṇa's generalship.

* I have already noted the fact that the commander must not only be a hero, *çūra*, but 'of good family': *kulīnaḥ*, ii. 5. 46; so R. ii. 109. 40; and in R. ii. 109. 28 'a hero and *saṃgrāmanitījña*.'

† *nā 'rjunam jahatur yuddhe pālyamānāu kirīṭinā*, 31: an unusual use for 'protected.'

‡ *yathābhāgam yathotsāham yathāyatnam ca*, 32: compare vi. 1. 30.

The seventeenth day: But Karna is unsuccessful. With the coming of another evening has come no advance against misfortune. Another tent-council is held. The relations between king, ally, and knight are nowhere better shown than in this scene. We must remember that Karna was the best knight in the Kurus' estimation, and that he was a prime favorite of the king. With the close of Karna's first day 'they make a council' (31.7, *mantram mantrayanti*), to see what can be done in order to render Karna's lack of success less for the following day; for they are 'like snakes reft of poison and crushed under foot.' It is the wish of the king that his ally Çalya, a famous charioteer, should serve Karna in this capacity on the morrow. Çalya, who subsequently becomes commander, is evidently anxious to get the latter position, and is angered at the proposal that he should serve Karna. Karna himself, furious at his want of success after so much boasting, stands in the tent 'pressing hand on hand, and raging like a snake.' The king breaks his proposal to Çalya: 'We will go behind you, O Çalya; do thou be charioteer to Karna and save the Kurus.* But Çalya, although being addressed with deference, grows so angry that his brow is wrinkled into a triangle,† being 'mad with pride of his family and his kingship, his learning and his forces;' and he says: 'Much thou insultest, and suspectest much, thou son of the Gandhârî, when thou sayest to me so confidently 'let him be a charioteer,' and thinkest Karna is a better than we. I do not play escort to my equal; point out anyone here superior to me, and I will conquer him in conflict; then I will go whence I have come; or I will fight alone. Look at my prowess in war; insult me not; see my thick arms; behold my bows and arrows, my car and club; I am one fit to destroy my foes; why then employ me in the base work of being a charioteer to this low-born knight, this Karna?‡ It is a great shame when one puts a better man under the control of a worsen—a better man, who has come to him and stands under his power for love.' Çalya's speech is too long to quote in full, but this extract shows its tone. He is especially insulted because Karna himself is nothing but the son of a charioteer (as the world supposes), 'for there are caste-differences; the priests come from the mouth of God, the warriors from his arms, the people from his thighs, the slaves

* 32. 28, *paritrātu*; in the first verse the king is represented as 'humbly and respectfully addressing' his ally (*vinayeno 'pasamgamya . . . abravīt*).

† *triçikhām bhrūkuṭīm kṛtvā*, 30.

‡ *sārathye nicasyā 'dhiratheḥ (karnasya)*; 'base work,' *adhuri niyoktum* (41): 'anyone' above, literally 'any party' (*añṣa*); the king addresses Çalya with 'thou' and 'Sir' (28-29); Çalya uses 'thou.'

from his feet; the warriors are protectors, restrainers, givers, etc., the slaves are servants of all, and a charioteer is servant to priests and warriors. Shall I then, a consecrated king, born of a royal-seer family, called a great knight, honored and praised of praisers—shall I be charioteer to a charioteer's son! Thou hast insulted me; I will not fight; I will go back to my own country.* The king, however, appeases Karna gradually, by 'speaking in a soft voice,' and complimenting Çalya highly; adding that he does not wish Çalya to 'hold 'the horses,' but to impress the foe by his presence; concluding with the tale of the god's grandfather, who once served as charioteer to the gods. Çalya is at length mollified, and apologizes to the king and Karna;† using as he does so the respectful 'Sir' to the king, and quoting the familiar proverb 'Self-blame, self-praise, blame of another, praise of another—these are four acts not practiced by the Aryans' (45). But the quarrel is not ended. Karna begins to boast again, and Çalya remarks that Karna always boasts till he hears his enemy's horn. Karna retorts by a curse, calls Çalya a miserable fool who knows nothing about fighting, and vituperates his country as well, expatiating at length on all the vices of Çalya's countrymen and countrywomen,‡ till the king stops the strife; and without further ado they go amicably to battle, Çalya claiming, however, the right of standing with the commander.§

The new array of Karna and Çalya is called 'the king of

* It is odd that 'restrainer' (*sahgrahitar*) in 45 is a term actually used at times to designate a charioteer.

† *yat tu karnam aham brüyâm . . mama tat kşamatâm sarvam bhavân karnaç ca sarvaçaç*, 35. 43.

‡ 40. 15-16, 17 ff.: compare 44. 5-7 on Vâhikas, and again 45. 19 ff., where the Pânçanadadharmâ gives an insight into the recognition of Aryan and un-Aryan law in the Punjab, and marks the time of the scene.

§ A long interpolation occurs in 45. The knight is approached as by a suppliant so long as the king desires his consent and help. When all is arranged, and the promise given, the king is king again. Compare ix. 6. 17 ff. The chiefs surround him whom they desire to be commander. They give him 'words of victory.' The king stands on the ground, and the chief, who is here reluctant to assume the dangerous part, stands proudly in his chariot. The king even supplicates (*prâñjali*), 'Let the gentleman be our hero, let him be our leader at the head of the army.' The chief replies, 'What thou wilt I will do,' with the same interchange of person noticed above; for when the king has obtained consent he consecrates the knight, saying, 'Thee I elect to the commandship; protect thou us, destroy our foes' (*sâinâpatyena varaye tvâm . . so 'smân pâhî jahi çatrûn*). The chief's answer is here formal: 'I will fight the Pândus at the head of thy army. I will be thy leader of armies; I will arrange a battle-array through which the foes shall not break,' literally 'cross' (*na tarişyanti yam pare*, ix. 7. 5). *senâpranetar* is here the title preferred, but the titles *vâhinîpati*, *camûpati*, *senâpati*, *akşauhîni*, *dhvajîni* (vi. 54. 91: cf. Kâm. Nîr. xviii. 43), though not equally common, are all synonymous.

arrays; but though the relative position of the forces is given, nothing very definite can be gleaned from the description. It is to be noted that, as before, the commander is set aside by the king of the Pāndus, who tells Arjuna (46. 31) to draw up any array (*nātir vidhīyatām*) which seems best to oppose to that of the Kurus, which, in turn, is merely called *bārhaspatya* (27), leaving us in doubt which of Brihaspati's inventions is intended. No descriptive name of the Pāndus' array is supplied (47. 4). The end of the eighth book, or really the seventh section of the ninth, closes this day, wherein the execution of Bhīma's ancient vow to drink Duhçāsana's heart's blood is described (viii. 83. 36); but, except for this and a sudden party interest in the passive gods (87. 42 ff., 48), no scene of particular consequence occurs till we reach the end. Here it is pretended that Arjuna, at first unwilling to kill Karṇa 'unlawfully' (90. 70), is persuaded to do so by divine influence. Karṇa dies (91. 55), and his quondam charioteer is elected commander for the next day.

The eighteenth and last day (ix. 8. 24 ff.): Çalya stands in front in the 'mouth' of the new array. On his left is Kritavarman and the Trigartas; on the right, Gautama, surrounded by Çakas and Yavanas, behind whom stands Drona's son with the Kāmbojas. The king occupies the centre, guarded by Kurus. No array of Kurus or Pāndus is mentioned by name, though it is significant that the Kuru king is again in the centre, while the Pāndu king, with his line (*anīka*) of men, advances right forward against the commander on the opposite side. The Pāndus are here at the outset divided into three general divisions, which, however, soon become commingled.

The fight is at last over. The Kurus are utterly routed. The Kuru king, wounded, is found at night by his own chiefs, and, ignorant of the uselessness of the act, consecrates another chief before he dies, bidding water be fetched in a cup (*kalago jalapūrnah*), which he pours on the head of his chosen chief.

But the Pāndus meet no more arrays. They are surprised at night and overthrown and their commander is slain.*

4. *Observations on the Usages in the Field.*—I turn now to a consideration of the general practices in war, based upon the details given above.

The Hindu camp is a miniature town, as we saw at the beginning of the second division of this paper. Each army in the war described in the Epic had time to construct a camp before fighting, and in it we find, besides the military, not only minstrels and women of low order, but also women of birth.

* Book ten. The scene in ix. 65. 37 ff is the last appointment of a commander.

The camp being near the town, women and old men visit and wander through it at all times, even watching the fighting. Drāupadī, Vairātī, and Subhadrā are, for instance, all in camp, and bewail the death of Abhimanyu. The old men that linger in the camp form an escort for the women at the close of the war, and escort them back to town in wagons drawn by asses.*

The four castes are in camp, and (perhaps with the priests) implied in battle, where (as quoted above, p. 185) a priest is challenged, and where it is said that glory and heaven are the reward of him that dies in battle, whether he be a warrior, a man of the people-caste, or a slave. This subject has, however, been discussed above, with the inference to be drawn from the character of Droṇa and his son, and the application of the 'blood-for-blood' rule.†

The arrangement of the forces in the field may be compared with the forty-six peoples brought into battle by Xerxes. The allies, as in Roman warfare, are generally the wings, *alæ*, but we find them often in van or centre. Each allied host is a complete army in itself, and the tie connecting the different divisions is very weak, being visible only in the opening of the battle, where the nominal order of the commander-in-chief still obtains. I have already casually observed that the station of the commander depends entirely on the exigencies of the moment. He has no regular position; but his title with his acts would persuade us that his regular place was in the van.‡

On the Kuru side in the war, the first commanders are venerable in themselves as well as *ex officio*. The venerable uncle and teacher do not need their new rank to ennoble them. Thus one of them says to the king (his family inferior), 'go back,

* Compare the camp, v. 152. 8; ii. 23. 21 ff.; vi. 121. 4; vii. 85. 12; wailing of the women, vii. 78. 36 (compare ib. 127. 24); old men and escort, ix. 29. 65, 73; vi. 19. 22.

† The words in viii. 47. 18-19 are: *teṣām antakaram yuddham . . . kṣatraviṣṭūdravīrāṇām dharmyam svargyam yaçaskaram*. In v. 179. 25, 'raising a weapon' lowers a priest to the warrior-caste; but Droṇa, whether truly or not, is thought of only as of priestly-caste: *avidhyād brāhṇaṇām samkhye*, vii. 117. 26 (compare viii 15. 29; 55. 33-35; *kṣatriyeṇa dhanur nāmyam sa bhavān brāhmaṇabruvaḥ*, above, p. 94).

‡ This is the earlier position, so to speak; for at first the commander was the active general. Thus he is *netā, pranētā*, i. e. *praetor* in its first sense (compare ix. 6. 17; 7. 4, etc.); and the words addressed to him are *prayātu no bhavān agre . . . anuyāsyāmahe tvā*, vii. 6. 9. Subsequently, success in battle depended on policy as much as on individual fighting; with civilization came more strategy. To this later period we must refer the commander as minister and diplomat. In the well-known story of v. 156. 4 ff., the priests fought with the warriors, but were defeated every time, though aided by the people-caste and the slaves. At last they hit on the device of getting a commander-in-chief. Thereby they defeated the warriors. This is not strength, but brains.

save thyself,' and goes himself to the front (vi. 95. 11); neither such command nor obedience in this regard being paralleled by Pāṇḍu action, where the commander lacked the native authority. But though the commander does not often interfere with the king's personal movements, to watch and preserve him is one of his chief duties, and *rakṣa rājānam* are words always on his lips. For this purpose he orders individual knights over the field, and sends them hither and thither.* The king does not hesitate to revile the commander, nor does the commander shrink from telling the king that he is a fool. The two stand on a footing of friendly intimacy.†

The commanders of the two forces sometimes come out before the hosts and battle in single combat 'for all the world to see.' Neither is guarded, for individual knights 'guard others (the king, etc.), but are not themselves guarded.'‡

Of the forces employed, besides national divisions, we must make others that are not generally specified. The *caturvidham balam* is an *agmen quadratum*: that is, an array perfect in all its parts, of which four are most prominent. These we must again divide, for the first part of the quadrate is the elephant force, and these animals are either driven individually (ridden by a prince, for example) or by many low-fighters; the second part is the cavalry, and these accompany war-cars, or make a solid squadron; the third part, designated as knights in chariots, is to be similarly divided; and the common foot-soldiers are divisible by their functions, as archers, swordsmen, etc., while some called the foot are in reality riders. Then, again, by quality we must divide into the generals and captains, into simple *prahārins* or fore-fighters (the especially brave, but not of rank), and the ordinary.

The captains, *balamukhyāḥ*, have already been referred to. Influential and of permanent rank (to bribe them in peace being recommended to the king, ii. 5. 59), they excel in peculiar

* Compare vi. 92. 20; vii. 111. 20, etc. Duryodhana is the king in all practice (see above, p. 144).

† The commander thus daring is 'goaded with word-weapons' by the king, vi. 98. 1-16. Constant 'goadings' between king or knight and knight takes place. In vii. 189. 58 the king calls to his heroes: 'what are you standing there for, you fools; go on where the fighting is.' Kripa taunts Karṇa bitterly (as do all knights each other): 'oft hast thou fought, never hast thou conquered; talk not, but fight; thou tree without fruit, boast while thou seest the foe not,' vii. 158. 18 ff. Karṇa retorts on the priest (*vipra*, 29, is Kripa); the king intercedes, and at length pacifies them, 159. 13 ff. The commander thus vilifies a prince: 'thou art no man, thou art a slave-girl; be a servant, go and carry clothes' (*dāsi jītā 'si dyūte tvam yathākāmacārī bhava, vāsasām vāhikā rājño bhrātūr jyeṣṭhasya me bhava*), and the prince retreats, 'pretending not to hear' (*ṣrutam acrutam kṛtvā*, vii. 122. 4 ff.).

‡ vi. 57. 31; vii. 21. 54: the rule, like many, is not without exceptions.

knowledge and universal capacity (*sarvayuddhoviçāradāh*, R. ii. 109. 39). The fore-fighters* are either 'heroes' (*çūrāh*), or the latter's followers (*anugāh*, also *anucarāh*), who together lead the van; or a troop of brave but common men placed before others. Between the 'followers,' the *padānugāh* (viii. 96. 32, etc.) seem to be the common followers, and *anugāh* more the *socii* of the leading knight, as these terms are usually employed; though conversely *anugāh* may designate the whole army following. The 'army-guards,' *senāgopāh*, are special heroes, selected not as leaders of reserve, but as watchers of the wings and tail of the army, yet active in the fight.†

The whole action of the army depends theoretically on the commander-in-chief; and although this is not so on the side of the Pāndus, where the to-be-lauded heroes are made most prominent, yet even here such consideration is shown for the position that it seems as if there were in this office a survival of one more important than it is. The commander is represented as all in all as regards defeat. At his fall the army is *ipso facto* routed.‡

The Gurn-commander commands both by silence and by speech. None would dare to fight without being ordered by him (vii. 112. 14). But, especially in the election, other signs remain that the office of commander is a survival of the king's own office. The king is put forward more and more, not as a fighter, but as a 'friendly sign,' to encourage the soldiers, and his position in front is even thus casually explained.§

The early king was his own commander; the later commander-in-chief represented the dying military function of the now effeminate monarch. Thus written, from that later pe-

* Compare *praharatām çreṣṭhāh prahāram sampracakrire*, vi. 52. 1; 46. 18, etc.

† *senāgopāh*, vii. 168. 7; *senāgoptā*, ib. 10; *sānikah*, vii. 2. 9.

‡ Compare of Çalya's death the remark *tasmīn hate hatam sarvam*, ix. 7. 37 (imitated R. vi. 44. 40, *hate tasmīn hatam sarvam tam hanīṣyāmi*). Compare the passage vii. 122. 12 ff.: *vidrute tvayi sānyasya nāyake ko 'nyah sthāsyati*, and ib. 27. Çalya told the king to order a retreat as soon as Karṇa fell, viii. 95. 4. 'Without the leader the army cannot stand a moment,' vii. 5. 8.

§ Wilson's remark that the general remains in the rear (Works, iv. 305) is one of those theoretical statements that opening the Epic alone disproves. The 'sign,' literally 'well-marked,' vii. 34. 18, is a late and novel idea; but the idea of the king as a 'sun enveloped in clouds' (viii. 7. 16), i. e. as a spectator of battle, is common; it is, however, also late, and the fact that the Kuru king is more often represented thus, while the Pāndu king is more often an individual, independent fighter, points to their relative civilization. There were more prowess-deeds to record of one than of the other. A kingly survival in the commander's office may be found in the *vives* shouted at his election: *jīva, jahi çatrūn*; and the kingly word *anuçādhi kurūn* (used of a commander), ix. 7. 10; vii. 4. 11.

riod the armies are both provided with a commander. But the Pāndus' commander is a figure-head, while that of the more advanced Kurus is all-important.

The general order of the day remains to be considered. It is ridiculously assumed that the battle-order of the morning is intact at night; and at the end of the eleventh day 'the two armies withdrew to camp, according to their divisions, their order, and their squads,' an absurd remark in face of the utter disorder of the whole day.*

What was the condition on the field in actual battle? There was no order whatever, after the first plunge into the fight. As soon as the armies meet, we read that there was complete disorder (e. g. vii. 187. 1-5). This is caused in two ways. The mass is helpless and imbecile, left to itself; the knight is reckless and foolhardy. Instead of remaining to attack the division allotted to him at the outset of the day, he rushes about wherever he pleases, and the slightest incident sends him shooting transversely across the field, discomforting his friends almost as much as his foes. The knightly proficiency in 'manœuvres,' either of weapon-skill or of chariot-skill, leads directly to this individual excellence and weakness of the mass. It is a combat of duels and push. Each knight flings himself in front of another, and the two then 'circle,' or wheel about each other, in the method admired by the Greek observers, until one is confused or weakened; for the charioteers do the twisting (except incidentally), while the knights have to keep their balance and shoot. As the cars constantly tip over, the shooting must have been, as described, rather wild. Meanwhile the regiments led by the knights into the field either stand stock-still and look on at the spectacle, or they fling themselves against each other, two unheeded masses, and, cutting and chopping each other in a promiscuous manner, lend their weight against the foe. More than weight we can scarcely call it. No individual common man is important. While this by-play goes on, one knight is slain or flees. Then all his soldiers run away, since they fight not for a cause but for a leader. *Principes pro victoria pugnant, comites pro principe.*†

* vii. 17. 1 : *yathābhāgaṃ yathānyāyaṃ yathāgulmaṃ ca (nyaviṣetām te sene)*. The 'array' may be used of a small part: a 'counter-array' is a term applied even to a sudden stand against a body of elephants; each chief has his own 'array' (vii. 96. 3 ; 98. 28).

† The manœuvres, *mārga*, are made by all the army at the opening of the fourteenth day: that is, the troops advance exhibiting their dexterity in whirling weapons, etc. In vii. 122. 73, after a spirited conflict, each champion 'returns to his own array,' which had stood by looking on; but generally the duel takes place in the midst of the foot-soldiers.

Some idea of the confusion as depicted may be gathered from the constant references to the rushing of war-cars and the trampling of elephants and cavalry, which are themselves employed to 'box in' a knight, and from the descriptions of the general fighting: extracts from which will counteract the theoretical 'order' of the poet, both of course the offspring of his imagination, but one evidently from imagining a code in practice, the other from the actual practices of the field.* 'There was darkness and noise; invisible became heaven, earth, and points of the horizon; blinded with dust were the soldiers.' Again: 'No knights now shun each other; without law or order they fight; with their own fathers, with their own sons.' The field is one where 'double thousands of chariots, elephants, horses, and foot are contending;' where 'seas of war-cars' rush; where 'father knew not son, nor son father;' where 'none could say "this is I," but father fought with son, friend slew friend, the mother's brother slew his sister's son; each slew his own; lawless was the fight.'†

In spite of all this, we are told that strict order prevailed, and that, in accordance with the rule (explained in the next paragraph), every knight sought to kill a knight, every elephant was pitted just against an elephant, no foot-man fought but with one of his kind.‡

* The 'boxing in' of a knight by means of elephants and cavalry is described, e. g. in vii. 171. 2 ff. : *parivavruḥ samantataḥ, enam koṣṭhaki-kṛtya sarvataḥ*, literally 'enchambering.'

† The first quotation in vii. 186. 20, 12 ff. ; 'double thousands' in vi. 45. 81 ; 111. 14 (*rathavañcāḥ*) ; the sea-simile, with 'foam of flag,' etc., vii. 99, 46-53 ; 'sons and fathers,' etc., vi. 48. 24 ; 102. 5 ; 'mother's brother,' vii. 169. 47 ff.

‡ vi. 45. 83 ; so earlier, iv. 32. 9-10, and often. The following quotations will illustrate some of the points above. 'A hero that showing his manliness stands at the head of the army should be bought for a thousand,' says the Niti (as quoted v. 57. 55 : *yaḥ tuṣṭhed agrataḥ*). The common footmen do nothing without the 'headman' to direct them (*mukhya*, vii. 170. 46). All the forces, once in action, fight over the field indiscriminately. There is nothing to show that the cavalry fought exclusively as dependent aiders of the chariots (compare vi. 45. 87 : *tatra tatra pradṛcṣyante rathavāraṇapatayaḥ sādinaḥ ca . . yudhyamānāḥ*). The proper way to fight is to have every foot-soldier fight with his kind ; so with elephant-fighters, cavalry, and chariot-men (vii. 169. 40). But, as one knight is expected to be conversant with all four forms (vii. 165. 9, and often), and is generally represented as shooting indiscriminately, and as the soldiers with hooks were stationed in such a way as to pull at the men in armor, it is improbable that this formula was ever put into effect. Especially the commander was expected to know every kind of fighting ; but Vedic knowledge is also prized. When Droṇa is consecrated (vii. 5. 12 ff.), he is called into the midst of the army (6. 1 ff.), and eulogized before receiving the *senāpatitva* (5. 13) ; he then says : 'I know the Veda and the six limbs of the Veda ; I know the *mānavī vidyā*, the *trāiyambaka iṣvastra* (divine science of bow and arrow), and the various weapons. But Droṇa was, as said by the Epic itself, a great rarity. The commander makes his own stipulations : thus, Droṇa will

The 'door of the array' is probably an opening in the ranks. The 'door-place' of a camp is familiar (*dvāradeṣa*, x. 5. 40), but in battle this seems to be only an exit in the chariot-line of circumvallation, made for example at the beginning of the day, as when Droṇa goes out and looks at the foe's array, and then returns to 'the door of his array' (vii. 117. 34); or stands there,

not kill the Pāṇdu (vii. 7. 7); Bhīṣma will not kill Çikhandin, etc. The confusion in the field is illustrated by a few out of many citations. 'They fight with teeth and nails and feet' (vi. 96. 45); and the strife is one of 'hair-pulling,' for 'tooth to tooth and nail to nail they fought; with feet and arms the fight went on' (viii. 49. 80). Such fear smites the fighters that they void excrements in terror (vi. 99. 26 *et passim*). Joy as well as terror marks the confusion: 'such joy came upon them that all the bands of creatures there rejoiced in flesh and blood, drinking the blood of the wounded' (viii. 52. 36). The fallen lay 'hunting for water' (*mṛgayām cakrire jalam*, vi. 46. 39). The great hosts 'reel with all their warriors' (*loṣṭyate rathābhāṅ . . vāhinī*, vi. 111. 58); 'like a ship broken in the deep' appears the army (vii. 2. 1; 5. 8; 45. 6-8); and 'the battle is one of shrieks and screams; a glorious strife, the increaser of the realm of the God of death'; for 'absolute confusion reigns, and men, elephants, cars, all alike are involved in destruction' (vii. 169. 47; 25. 21, *utpñjalikām yuddham*; ib. 32. 75, *sukalitam yamarāṣṭravivardhanam*: cf. vi. 118. 4). Let us follow those scenes a little further, where 'the sound of the bow-string, the hail of hands beaten, the lighting of club and of sword,' are depicted (vii. 101. 27). No expression occurs more often than this: 'then arose a din tumultuous' (*tumulaḥ ṣabdaḥ*: e. g. vii. 157. 31); and to explain it we have the shouts and cries attempted in language: *halahala, hāhā*, are the sounds on all sides (vi. 47. 63; 48. 82). A more minute picture is presented: 'everywhere were heard the cries "stand," "I am standing," "smite him," "turn," "be firm," "firm am I," "strike out," and one cried for help "son;" and another, "brother;" another, "friend;" another, "cousin;" another, "comrade;" another, "brother of my mother;" and they shouted: "do not desert me," "come on," "advance," "why fearest?" "whither goest?" "fear not"' (vi. 59. 8, 18, 19). Here, as elsewhere (see above, p. 141, note) the *mātula*, mother's brother, is the uncle called upon. Compare the 'lawless strife' of ix. 9. 36 ff., where all abandoned their sons, brothers, grandsires, brothers of the mother, sons of the sister (46). Such exhortations are strewn everywhere; such scenes are found on almost every page, mixed with more regular official exhortations, such as 'fight ye now,' and the calm response 'tis well,' 'all right' (*yudhyadhvam*; *sādhu*; *bāḍham*; vi. 59. 18 ff.; 95. 46; 90. 52, etc.). A ludicrous tinge is often given, as where one hero gives a fearful yell, and the other 'could not endure that lion-roar,' and consequently made a still greater noise himself, so that 'all the army was frightened and ran away' (vi. 54. 36). The knights rush on 'like tigers, licking their lips' (vi. 96. 22; 111. 11). The chief legitimate noise, beside that of 'hundreds of bells' (vii. 175. 11), comes from conch-shell, trumpet, tom-tom, and the like. As observed already, music begins the day; for 'where the drum and pipe is silent there will be no victory' (vii. 85. 24). Thus Arjuna notices its absence when his son is slain (vii. 72. 11). The instruments are discussed below. Now and then, but rarely, amid these tones of horror and confusion that are unpoetically reproduced, we find a true poetic touch. Thus, we have a fine bit or two that may be worth quoting, lest the reader think the battles are nothing but hubbubs. A knight cries out to another in mid-battle: 'Press on; let heaven be thy leader. For glory and for victory, press on' (vi. 112. 28); and a conflict is de-

at the *vyūhadvāra*, to fight (ib. 128. 19).* This is perhaps the same as the five-fold *randhra* (Ag. P. 241. 40) of a battle-line.

The method of signalling over the field was (to send a messenger, or) by banner or horn. The flags on each car showed who was fighting, as the symbols were well known; but in case the dust of battle obscured the fight, the knights intimated their proximity by their horns and shells, each knight being recognizable by the noise he made. Further, the peculiar yell or war-whoop of each served to reveal his presence. Often the driver is told to 'drive where the noise is,' or to 'drive where the sound of arrows is' (vii. 171. 12); but generally the car is driven to meet a particular sound of one horn or voice.

In the pseudo-Epic the chief array described seems to be a *senāyoga* or marching-order, more fitted for an armed caravan than for a troop entering the field, a line of swordsmen being in front, wagons behind, and the women in the centre.† A comparison of Epic practice with pseudo-Epic and Puranic precept shows that in the latter case the four-faced army is now frequently assumed as sixfold, but differently defined according to kind of fighters, and age, disposition, etc., of the same; that the general rule for the commander-in-chief is to go where the danger is; the queen and the king with the treasure are to be in the middle (*yatra rājā tatra koçah*), with the *phalgu sānyam*; the cavalry occupies the wings or centre, on their flank are the chariots, behind these the elephants. The orders of battle are now distributed in such manner that the *makara*, *cyena*, and *sūci* arrays are used when the attack is from the front; the *çakatu* and *vajra*, when from the rear. An *anīkam* or acies is reckoned equal to nine elephants with accompaniments. The soldier that sleeps on his post by day is to be

scribed thus: 'Pure in heart, with death before, and heaven their leader, they fought a noble fight' (vii. 189. 8). Again, we have a spirited comparison: 'who meet the Pāndus in the fight, they return not, even as rivers return not from the sea; but they that turn aside, like unbelievers from the Vedas, like them shall go to hell' (vii. 101. 3 ff.). Such expressions as 'the lightning of club and sword' (vii. 101. 27), 'arrows like swans pursued by hawks' (vii. 137. 27, and 139. 33), 'destructive as death' (*pretarāḥ*, viii. 14. 17); and exhortations, as in the following: 'where is thy mind, and where thy pride, where thy manhood and where thy thunder?' (vii. 122. 9, *garjitam*)—serve to lighten the heavy cumbrous description.

* I think *pūrvadvāra* is thus used occasionally for an opening in the van, but cannot cite a passage. The 'array' in vii. 124 is merely a crowd.

† xii. 100. 43 ff. In this passage Brihaspati's rule, already given, is quoted. In ib. 99. 9 the order of victory, or fighting array, is obtained by putting the knights in the midst of the elephants; the *anusādinaḥ* or cavalry in the midst of the knights; and next to them, the foot. The battle-rules in ib. 96. 3 (compare 100. 26) = M. vii. 91 are the schematic rules against cruelty. In 96. 4 the slaves of war, enslaved for a year, are mentioned.

beaten; by night, to be killed (either trampled to death by elephants or beheaded). A deserter is to be killed, 'like a beast.' The soldiers are to be rewarded from the king's treasury for special acts of bravery, such as killing the hostile king or crown-prince. A distribution of proper opponents sets three horses and fifteen foot to an elephant. The *vyūha* has seven formal divisions, including the reserve (*pratigraha*). The *gomūtrikā* is recognized as a formal *vyūha*. The special object of chariots is here described as splitting up infantry-lines, and their possible absence from battle is noted. Further numerical particularities and un-Epic divisions of the army, e. g. *bhoga*, are useful to compare only with the Nītisāra (K. Nīt. 19. 30; 41. 53, etc.)* and kindred works.

Holtzmann would reduce the eighteen days of fighting described by our present Epic to three; but there seems to me no necessity for rejecting Drona entirely, although this *parvan* has been greatly expanded and filled in with repetitions. The four days obtainable by reckoning one to each commander on the Kuru side bear no further analogy to the four days of fighting about Troy than in their number, and casual similarities incidental to poetic narration.

I have said that strategy is almost confined to tactics in the Hindu army. These tactics, in one final word, give us two leading principles of battle: first, fighting is to be done by soldiers arrayed in groups, not in extended lines; second, concentrated forces are absolutely necessary in attacking a larger number of men; these concentrated forces should be arrayed in one long column of groups of combatants. The first of these is seen in the practice, the second in the precepts, of the Epic. The only strategical rule formally expressed is 'let one know his enemy.'

5. *The laws of battle.*—The 'law of conflict' is made like a treaty, and is said to have been formally proclaimed before the war began. Let us examine this. We find it broken through the whole war. We find practically no reference made to it. When its principles are broken, if the crime is reproofed, it is not said 'the treaty was broken,' but 'the eternal right was destroyed;' and such cases of reproof are rare, and affect only a portion of the treaty, while the breaking of other portions passes unnoticed. It is therefore, as its very formality shows, a late but interesting document. It reads as follows (vi. 1. 27 ff.): Article one: Knights must contend in an orderly manner, and may not use their weapons against non-combatants ('who

* xii. 97. 23. Rājanīti, 241 (note verses 1 and 2: *śaḍvidham balaṃ, māula, bhūta, greṇi, suhr̥d, dviṣad, ātavika; saḍaṅgam, mantra, koṣa, padāti, ācva, ratha, dvipa*).

enter the fight to fight with the voice alone must be fought by the voice alone'). Article two: They that retire from the conflict must be permitted to go (unharmcd). Article three: Those only of like sort may contend together: charioteer must attack charioteer; elephant-riders, elephant-riders; horsemen, horsemen; foot-soldiers, foot-soldiers. Article four: Notice must be given before striking; and no knight shall attack an enemy that is disabled, that appeals for mercy, that is in distress or perplexity, that is already engaged with a third party, that chances to be without armor or weaponless. A note is added specifying that those inviolate are charioteers (or heralds), weapon-carriers, horn-blowers, drummers.

This last law is frequently violated by the best knights on both sides. Arjuna is most blamed, but he has ample provocation, his own son having been deceitfully slain. As already shown, he is made to do no wrong, even in killing Karṇa; and in the earlier book (though later in time) he is made to say, in the spirit of this law, to the suppliant whom he has conquered: 'Not I wish to kill those distressed, I will comfort you' (iv. 67. 5). In the tone of this rule is also (vi. 107. 77 ff.): 'It is not a fair fight when one contends with another who has cast away his arms, or who is fallen, or whose armor or standard is broken, or who runs away, or who is afraid, or who surrenders, saying "I am thine," or who is a woman, or who bears a woman's name, or who is devoid of strength (skill? *vikala*), or who has only one son, or who is not forewarned (*apracasta*, not 'unesteemed').' In general terms, 'the warrior that does not cease at a proper time for mercy is hated by all creatures, and destroyed here and hereafter (iii. 27. 40; cf. v. 33. 50). This is the warrior-law known of old by the great-hearted gods, and is contrasted with the sneaking 'laws of wild tribes' (*dasyudharma*). Included among those that may not be slain are, by universal rule, a woman, a child, an old man, or in fact anyone unable to contend.* One defenseless, whether met in open fight, or coming in battle or to one's house as a suppliant, received the sacred right of protection—the right of a suppliant (i. 170. 36, 42); and there are further general limitations (ii. 41. 13 ff.) in regard to slaying women, cows, priests, hosts, suppliants. If in war this 'suppliant's right' is taken advantage of, the saved suppliant becomes the dependent of the savior, the latter is now his Guru (ii. 38. 7; see above, pp. 104, 107, notes). But the Epic came before the law; and one chief hero slays a foe that stands 'with

* vii. 143. 8; 156. 2; viii. 69. 26; 93. 9; 90. 111 ff.; iii. 18. 13. Cf. the same in xii. 95. 7 ff.; 96. 3, with later additions; and in Manu and other law-books.

face averted,' another engaged with a third, another who surrenders. 'So it is quoted as a 'marvel' that Bhīma once refrained from slaying his foe fallen on the ground (i. 190. 29, *āṅcaryam . . cakāra . . pātitaṃ bhūmāru nā' vadhāt*). The doctrine is old, the practice is natural, and naturally older than the kindly rule. The suppliant is, outside of the fever of battle, never injured; but as to the battle-rules, when Bhīshma fights as commander, we find him at one time alone attacked by ten men together (vi. 113. 2). When flung from his chariot (vi. 48. 95), Bhīshma is 'attacked by all together;' 'conjoined rows of fighters' once charged at him (vi. 89. 16 ff.). So much for the morality in this point on one side. Bhīshma leads the Kurus. But the Pāndu heroes are equally made the subject of universal attack. We find Irāvan in a like position: 'One with many he fought, nor did he waver' (vi. 90. 37). Arjuna, too, defends himself with 'divine weapons' (vi. 117. 36). Such also had his opponents. In one place (vi. 58. 2 ff.) they all fought against Arjuna, flinging at him every kind of weapon—and that too when they have 'walled him in' (*koṣṭhakīkṛtya*); 'but he, the great hero, warded off that rain of grasshoppers' (*vṛṣṭiḥ ṣalabhānām*). Again (vi. 52. 39) they all attacked Arjuna together, crying 'bah! to knightly rules' (*dhiḥ kṣātrāni dharmam*). Bhīma also was attacked by four at once, who threw knives and darts at him (vi. 113. 39). As if to certify that the allusion to 'knightly rules' was but a proleptic addition, we find often such admissions as are conveyed by the astonishment at the feat of the one hero: 'a wonder we saw then, how one fought with many' (vi. 74. 22; and ib. 75. 36, 'how all fought with one'). It is a cause of great reproof to Arjuna that he fought unfairly. No knight had more provocation. Arjuna's own son was foully murdered, and that by full-grown chiefs, while he was but a boy of sixteen. He was deprived of his battle-car, surrounded, and deliberately knocked on the head with a club: 'he fought alone in the fight, and was slain alone by many'; 'he the mere boy, the boy-hearted' (vii. 49. 14; 51. 13; 52. 3). As the son was foully slain to dishearten the father, so every means was taken to destroy unfairly the latter. 'Even in the rear he was surrounded by barbarians' at the opposing king's express command (while fighting with Karṇa: viii. 81. 1 ff.). The Kurus' great hero, who unites the virtues of a Nestor with the dullness of a Hesiod, has a very simple rule in fighting: 'fight fairly (*ārjavena*) with every one; but if one employs trickery, employ trickery' (*māyāvī*: v. 193. 10). Karṇa sinks to death because the model hero of the Pāndus violates the rule that it is not fair to shoot a foe unable to defend himself. So terrible appeared this violation, that God is made to prompt him to the act; he does not really wish to kill

Karna; thus 'he is noble and abides by his manly duty' (viii. 90. 70); but God, Indravaraja, says 'slay now,' and he regretfully does so. But he need not have scrupled. One of his foes, a very worthy priest-knight, beholding a warrior wounded and defenseless lying in the bottom of his car, immediately smote the unfortunate one 'with many arrows, eager to slay.' Thus did the worthy Kripa (vii. 169. 31). He was not much worse than Arjuna's demoniac nephew, who slays the unslayable Alambusha, flings him to the ground, cuts off his head, and casts it into the chariot of the dead man's king (vii. 174. 40). Examine the night battle; it does not need the words of the text to tell us, yet they do tell us, that no rules of battle were observed (vii. 169. 50). 'Rules of good men,' even 'rules of heroes,' are alluded to (*vīradharma*, vi. 59. 81-82), but we notice that whenever a hero 'makes up his mind to fight in an Aryan way,' he violates all 'laws' of magnanimity. The real meaning of fighting in an Aryan or noble way is to rush amid the foes and fight to the death, sparing no one.*

The God of the Pāndus advises Arjuna (who will not consent, but others eagerly do) to 'put away all right,' and try to kill the commander-in-chief opposing by tricking him into believing that his son is dead. The king of the Pāndus agrees to this, and the silly trick is performed.† The same expression of 'rejecting right' is used again when a whole corps is disbanded (vii. 192. 83). It seems, therefore, that right was a vague thing, a sentiment of uncertain honor rather than a rule, and could be violated without much compunction on either side. Later the law, or the later sentiment formulated in law, forbids what was done, and tries to cloak it. No authority is given for such rules. The rule is given that a king should fight with a king (*rājā rājñā yoddhavyah*), but, except by accident, no such rule is observed (vii. 162. 49-50). It is applied only when king meets king, which, of course, often happens; but as often the king contends with an inferior.

As a general thing, very sensible explanations are given of the reason why 'irregular' acts are done. Arjuna cut off Bhūriṣṭavas's arm while the latter was contending with a friend of Arjuna. The 'rule' of chivalry is that when two men are fighting a third shall not interfere. How does Arjuna excuse him-

* *āryāṅ yuddhe matim kṛtvā*, vi. 86. 31; vii. 22. 2; compare vi. 88. 44. Also R. vi. 16. 72 (idem).

† Droṇa is easily made to believe the story of his son's death, for he thinks that 'a Pāndu cannot tell a lie.' The excuse for this act is, that 'a man is not besmirched with a lie told for life's sake,' here wrested to mean 'told for the sake of a foe's death': vii. 190. 11. 43, 47. Arjuna wished to capture him alive, but they cut his head off: ib. 192. 63 ff.; 193. 63. This scene is, however, plainly an interpolation.

self? He says: Bhūriçravas was on the war-path, and tried to kill my friend; in war there is no law; fathers even kill their own sons, etc.; I should, indeed, have sinned if I had neglected my friend, for he needed my help; I therefore cut off his antag-onist's arm; it is silly to talk about 'fighting with one person only'; how can one man be always fighting with one only? how could there be any real conflict if one were to fight with one?*

The especial reputation of Arjuna's elder brother rests on his cruelty; he is Bhīma, the fear-maker; his son is but half hu-man (vi. 110. 13). The frequent exercise of 'shooting into open wounds' as a test of skill conveys an idea of the normal atrocities practiced (viii. 90. 66, and often).

Droṇa cries out to Karṇa 'make the boy turn his head, and then hit him'; who did as he was told, and, after slaying the youth's steeds, attacked him with the help of six other men (vii. 48. 29 ff.).

The *ātātāyin*-rule permits one to kill anybody that tries to take his life.† The formal list of those 'not to be killed' is often given; but if, for instance, it be the duty of the elephant-riders 'to catch by the hair and cut the head off' (vi. 57. 14), are we to suppose that these agile monkeys waited to see if the man over whom they tramped was in proper condition, or 'had a son,' or fulfilled other requisites of an object of slaughter? Or is it the noble knight for whom these rules are made? But tenderness was unmanly. Arjuna grieves over the death of his old teacher, but Bhīma cries out at him: 'lo, he talks like a priest; . . . a knight lives in destruction. . . Compassion is for women . . . but a warrior is by name a destroyer,' etc. (vii. 197. 4). Absolute destruction is the aim of all in the field. 'To die in battle and to escape a foe—that is the highest joy, and this the highest crime' (viii. 93. 55 ff., 59; the same in ix. 3. 57; 4. 10). This is the real *dharma*, or rule of knightly right. But we have a theoretical *dharma*, a theoretical 'Aryan-fight'; and in such a case (re-ferred to above) it is carefully explained that 'on this occasion they did not use barbed or poisoned arrows.' But here the veil drawn over the old battle is too thin to hide it; for barbed and poisoned arrows were used throughout the war.

The knights 'know polity' (viii. 10. 14), and can quote the wrong doings of their adversaries; but when they do so, it is regarded as sufficient answer to hold up the list of 'wrong' acts perpetrated by the accuser and his party. Tit for tat is apology enough (vii. 198; viii. 91. 1 ff.). Right is revenge. It is de-

* *ekasyāi 'kena hi katham saṁgrāmaḥ sambhaviṣyati*, vii. 143. 28. This conduct is contrasted with *āryakarma*, vs. 10.

† Given in vi. 107. 101; literal use in ix. 11. 11, 'attacking'; with twisted application, x. 1. 53.

clared to be so in so many words, as Justice is declared to be a weak god. 'The wise say that Justice protects one; ever have I been just, but Justice protects me not; Justice destroys its devotees, but never protects'—so speaks the great Kuru (viii. 90. 87). 'I shall pay my debts to my fathers and to my mother,' cries Bhīma; or again: 'I shall be clear of debt to my dead father'—these words mean that the speaker is about to revenge himself or avenge his parents—this was his 'right' (vi. 91. 26; vii. 195. 21).

As a general rule, a knight is killed without mercy. We saw above, however, that Arjuna wishes to capture Droṇa alive, or rather to spare him; and so Duryodhana requests Droṇa himself not to kill Yudhishtira, but to capture him alive and bring him before him.* Those 'fated to be killed by one' are avoided by others (vii. 123. 36). And, not to say there is no magnanimity, let us close these typical passages by one rare, and in its rarity worth noticing. Karna does not take the life of Nakula who has attacked him; he disarms, but does not slay. Giving him his life, he says, 'Go now, fight with thy equals; depart.' So the knight 'ready to die was spared by Karna; and he returned, ashamed' (viii. 24. 48 ff.).

Must we also regard the private compacts as late? These are taken in self-defense, or to promote joint action. The most famous is the great conspiracy. At the close of the eleventh day, the Kurus resolve on slaying Arjuna as best they may. They 'make an oath in respect of the battle' (*kṛtvā śapatham āhave*), to the effect that they will all attack Arjuna together, and they will kill him or go to hell. On making this vow, they consummate it by a libation and sacrifice. First they seize the holy *kuṣa*-grass garments, with girdles of *mūrā*, and then they swear their 'oath of war' (*raṇavrata*). Against magic they put on these *kuṣa*-grass garments; and then they bind on their armor, after they have anointed with ghee. Then comes the oath, and they swear 'by glory and victory,' 'by rich sacrifices,' 'in the name of all the gods, and worlds, and hells; and in the hearing of all existent things'—standing over the consecrated fire: 'may we go to the world of the evil ones if we do not kill him, or if not killing him we retire.' Then they go out and challenge Arjuna (*āhvayantah*, 'call him out'), who responds by his own oath: 'A vow have I taken, and this is my vow: that challenged in conflict I ne'er shall retire' (vii. 17. 18–39). The challenge is here given after the *avahāra* or formal return to camp.† Such pledges of mutual support are given between

* *jvagrāham gṛhītvā . . . matsamīpam ihā 'naya*, vii. 12. 6.

† In like manner Arjuna himself curses himself 'by all the worlds,' etc., if he fail to kill Jayadratha (vii. 73. 24 ff.). So Dhṛishtadyumna

the chiefs elsewhere, as in the case of Çalya, who agrees with a friend thus: 'we will make an agreement; we will mutually protect us; let him of us be guilty of the five cardinal sins, and all the little sins, who fights alone (not aiding), or deserts when fighting' (ix. 8. 8 ff.). But we find the king reproved later for breaking this agreement, and urged to go forward and help (ix. 18. 20).

Little private vows are frequent. One makes a vow (*vrata*) never to have his back pierced with arrows (v. 185. 25-6). Another 'vows the vow of the devils' (*āsura*), which is 'never to have his feet washed nor to eat meat until he kill Arjuna' (iii. 257. 14). Another swears to drink his foe's heart's blood, and fulfils it twelve years later.* An early case binds a man to kill any one that draws blood from his king, except in war—this is also a 'vow' (iv. 68. 55).

Alongside of 'wrong-fighting' we may put boasting. This is declared to be un-Aryan; but there is no warrior who boasts more than he that quotes the rule—though it would be difficult to say which of all the chiefs was the greatest braggart.† Only one pure regulation seems to be felt as binding on the Aryans, and that is not found in the formally adopted code. There is a general fighting rule, quoted as 'a decision of the *qāstra*' (or legal work), to the effect that 'one must not strike below the navel';‡ and any violation of this rule results in the violater's being stigmatized as 'crooked and un-Aryan.' He ultimately, it is observed, will go to hell. As this is the only rule quoted as 'legal' (opposed to vague 'rules of right'), and as there is no excuse at all offered for the person that breaks it, it seems as if it might really be an old fighting-rule. At any rate, to believe this does not involve our believing in the strained courtesy of the other rules, although the early codes may have taught consideration for helpless persons in general terms. Such a simple law may well have been generally adopted, and is in accordance with the uncorrupted Aryan morality still preserved on our side in the Anglo-Saxon contempt for one that 'strikes below the belt.'

6. *The army-forces in detail.*—I proceed to discuss the parts of the army as shown to us by the Epic.

curses 'him that fails to slay Droṇa, or him that Droṇa overcomes,' with the words: 'may he be deprived of his hopes' fulfilment, of his warriorship, and of his religious rights' (vii. 186. 45 ff.). Not succeeding in this, his opponent taunts him 'especially weak in failing after cursing before kings' (ib. 58).

* viii. 83. 28; 84. 11: compare vii. 137. 28, etc.; R. v. 82. 19. N. interprets *āsura* above as *a-surā*, abstinence from wine.

† *āryeṇa hi na vaktavyā kadā cit stutir ātmanah*, vii. 195. 21.

‡ *adhō nābhyā na hantavyam iti qāstrasya niçayaḥ*, ix. 60. 6, 28; 61. 28, 38.

The general term for all that is carried by the troops is *nāhana*, 'luggage, that which is carried.'

The arms may be generally divided into those of offense and those of defense.

The arsenal I have already spoken of; it was a chief object of care: a large building described as built near to the city wall, where, every morning, the king goes and inspects personally the condition of the arms.*

I discuss first the knight and his chariot; then the cavalry and elephants; next the arms of the knights, together with the arms of the lower classes; the defensive armor; and last, the trappings of war, and music.

The knight in his chariot fights wholly for himself, and alone, except when helping a friend, and then generally by shooting from a distance. If he be a *rājaputra*, one of his chief duties, however, is to guard dangerous places and keep watch over the king.†

Comparing the Epic and Vedic ages, we find in the Epic the arms of defense equally developed with those of offense, whereas in the Veda the former seem more deficient, not only in construction but also in number. The Vedic hero rides in a two-wheeled chariot, and his chief weapon (*āyudha*) is the bow (*dhanvan*), not straight, but already bent before use. To this was added one string of leather (*jyā*), and the arrow (*iṣu*), which was drawn not to the breast but to the ear. The names of these weapons are the same in Indo-Iranian, and in part appear pan-Aryan,‡ though other national names are given: e. g. *bāna*, 'reed'; *çaryu*, later *çalya*, 'dart.' The left hand was already protected with a leather strap. The arrows were feathered, and often poisoned; tipped with horn or metal, and preserved in a quiver (*iṣudhi*, *niṣaṅga*). Besides this, the warriors had spears (*ṛṣṭi*), and, perhaps, short swords (*kr̥ti*); while to heavenly powers the singers attributed *jūr̥ni*, perhaps lightning only, and the axe (*paraçu*), though not disdaining the throwing of rocks. In defense the Vedic warrior carried the 'defender' (*varman*): a word common to the Vedic and Iranic. This covered his shoulders, and was either made of metal wire or covered with metal, while for the head he carried a helm of several pieces. But except for the leather strap protecting the left

* *āyudhāgāraṁ vapraṅtam*, i. 147. 13; *sāṅgrāmika* and *āyudhāgāra* are the usual terms. Personal supervision of the king, see duties, above; and compare i. 194. 14, where a king passes by every treasure of wealth in order to visit the arsenal.

† Compare vii. 84. 14, where a *samghāto rājaputrāṅgāṁ sarveṣāṁ* is made about the place of danger.

‡ The arrow, Sanskrit *iṣu*=Avestan *iṣu*=Greek *iōc*. Bow and bow-string are Indo-Iranian.

arm from the bow-string, no other defense was worn, unless we accept a doubtful reference from which some protection of the feet has been, with no certainty, assumed.

Such is the picture presented by the Vedic knight, the earliest Aryan warrior.* We have now, with this as an introduction, to see what developments took place before the Epic period. We shall see that there is some difference between the two periods, as well as between the Epic and the post-Epic and more artificial age in which the art of war was demonstrated theoretically. In the latter case we find, for instance, as if a museum were described, that bows are made of metal, horn, or wood; that the string is of bark or animal membrane, the pat or lute plant, or of hemp or flax; that there are two or three strings to a bow, which is again said to be just six feet in length, etc.†

A. *The chariot*.—The earliest chariot was a car of two or three wheels, and with one, two, or three horses; in the Epic we find the same, or one of four, sometimes eight, wheels; and with two, three, or four horses, or (in the latest portions) eight.

In particulars, we find the Vedic war-car, *ratha*, placed on a box, *koça*, fixed on a wooden axle, *akṣa*, fastened by cowhide thongs. The seat, *bandhura*, is single; in the case of gods, three to eight seats, as fancy dictates, are mentioned. The knight stands on the floor of the car, *garta*, to the left of his driver. A rim is perhaps to be assumed as protecting the car, called *añka*, perhaps comparable etymologically with ἀντιξ.‡ The wheel-spokes are of wood. A banner-pole stands erect in the car.§ A horse stands on each side of the pole, and the two are yoked, guided by a bit, *çiprā*, and reins, while urged by a goad (or whip). Only Indra has a *caturyuga*, τέτρονον ἄρμα. One horse in shafts was a sign of poverty. The car and pole were decorated. Axe and bow were the chief weapons, but

* Drawn from Zimmer's *Alt. Leben*, pp. 298 ff.

† The regular divisions of the later schemes will be found Ag. P. 248. 1 ff.; see Wilson iv. 292 ff. According to this, the whole body of arms falls into five classes: 1. *yantramukta*; 2. *pāñimukta*; 3. *muktāmukta*; 4. *amukta*; 5. natural weapons, fists, etc.; and fuller theoretical accounts of still later origin may be found in Oppert's publications, where also the Hindu gun, cannon, and other quite modern arms are described in Sanskrit verses even later than Kāmandaki's. To Mbh. i. 221. 72 (quoted above, p. 111) the commentator defines *caturpāda* (applied with *daça-vidha* to the *dhanurveda*) as *mantramukta*, *pāñimukta*, *muktāmukta*, *amukta*, giving only four scheduled classes, for here we have ten sorts (*vidha*) of fighting, and four kinds of weapons as the 'feet'; while the Agni Purāna gives the 'four feet' as kinds of fighters (chariot, elephant, horse, and foot), the (five) 'sorts' as the arms explained above.

‡ Bezzenberger, quoted by Zimmer, loc. cit., 251. The related *añkuça* means hook or guard; compare the use of *kañkaça*, vii. 187. 47: *nyañ-kāu* with *añkāu* in Pār. G. S. iii. 14. 6.

§ Pār. G. S. iii. 14. 18, *stambha*.

knives and others smaller are used. Many warriors fight on foot; also 'riders' are mentioned, but not regular cavalry. This is all we know with certainty of the Hindu chariot before the Epic.

Three drivers might stand on the broad shelf that ran in front of the largest Epic war-car (*ratha*, rarely *yāna*, wagon).* In the rear stood the knight. To shoot directly in front he leaned over a fence-rim between the belly of the car and the horses, of which in this case four were used; or mules instead were employed. Each chariot is stocked with arms, and many more are borne behind by attendants. Over each war-car stood an emblem-pole, and shone silk-emblazoned banners with woven or painted figures of allegorical import.† A covering over the largest war-cars protected from the direct rays of the sun, a covering used as well on the field as on a march (*ātapatra*: xv. 23. 8).

Over against this view of the large four-horse chariot, we have the simpler picture of a two-horse car, small in size, containing only the knight and one attendant, the charioteer. This car was much smaller, and, indeed, Homeric; for, as in the Iliad one man seeks to pick up and run away with a chariot, so we find here a knight attempting to lift a war-car alone out of a morass. Outside of the war proper we find the chariot-duel.‡ Of course impromptu meetings of two chariots and the subsequent strife between the occupants are of frequent occurrence in the battle scenes;§ but it is significant that, apart from the field of actual battle, a king proposes in one of the early books to recover his kingdom by instituting 'a duel in chariots' between his adversary and himself, the result of which shall establish peace.||

* Wilson's description (iv. 290 ff.) is in general correct. He is further right in saying that the account of six men in each war-car described in Porus' battle "does not seem to be correct." Megasthenes' account does not weigh well with the native. Lassen is wrong in saying that in the Epic only one charioteer and one archer is mentioned for one car (i. 159). Rājendralālamitra has vainly sought to make probable the carrying of scythes on the early Hindu war-car (Indo-Ar. i. 342). The chariot can easily carry five persons besides the drivers, but only on festival occasions, in a triumphal march, or on a journey in a state car, not in battle (xii. 87. 37).

† In Greek the ἐπισημα of the shields were invented by the Karians; those in India were represented by the banner-emblems.

‡ *ratha* may be for war (*sāmgrāmiko rathah*) or for peace (*kriḍāra-thah*), xiii. 53. 28.

§ *dvāiratham yudhyatām*, vii. 173. 61; *bahūni dvāirathāni (yuddhāni)*, vi. 83. 1; *dvandvayuddham (kartum icchāmi, i. 136. 15)* is the general 'duel': cf. *apratidvandvatām yuddhe*, iii. 116. 18; *dvandvayuddham avāpnūvan*, vi. 48. 14; compare *yuddham dvāiratham*, R. vi. 86. 27 (and 91. 1). The challenge to duel is given in R. vi. 58. 17 ff., beginning *tiṣṭha rāma mayā sārddham dvandvayuddham prayaccha me, tyājayisyāmi te prāṇān dhanurmuktāiḥ citāiḥ cārāiḥ*.

¶ *dvāirathenā 'stu vāi cāntiḥ*, iii. 78. 8.

The number of charioteers depends on the horses. When two horses are sufficient, one *sārathi* or charioteer is sufficient also. In the case of four horses (two fastened to the pole, two by straps outside, not tandem: *dhur* and *pārṣṇī*), we have one charioteer in the middle, who guides the pole-horses, and on each side of him the two drivers of the outer steeds, *pārṣṇīsārathī*.* In proverbs and verses of late origin it is universally assumed that four horses will be used. Thus (vii. 112. 46 ff.): 'Let the *rathakalpākāh* according to rule arrange the chariot,' which has five qualities, and four horses; and we are expressly told in the opening description that all the knights had four-horse chariots. But that such was not always the case will be seen below from the account of the poem itself.

I now examine in detail the war-car and the steeds.

The parts of the chariot (*ratha*, *yāna*, *syandana* = *currus*): Beneath is the axle (*akṣa*), to the ends of which the wheels are attached, and above and before which is the charioteer's place, while above and behind is the place of the knight. The 'nest' or box above is so intimately connected with the axle that the two are often broken together.† The noiseless running of the axle is especially praised.‡ The mention of this part of the wagon often implies that the car has only two wheels§—as where, in enumerating disasters following single arrows, we find that a knight broke the single yoke with one arrow; the 'three-fold-piece,' with three; the four steeds, with four; and the one axle (the two wheels), with two (iv. 57. 36). In iii. 134. 9 this is formally stated to be the case. The wheel consists, besides the wooden circle, of the tire (*rathanemi*, vi. 117. 54), the spokes (*ara*), and the hub (*nābhī*). The 'place at the spokes' (*arūsthāna*) was reserved for knights, high-born attendants of the king, 'who at the master's chariot did mighty deeds in the van.'¶ The tire, which was also called 'fore-circle' (*pramāṇḍala*), appears to be of iron, if we may judge from constant reference to the 'noise of the hoofs and the tires.'¶ But what

* Compare P. W., s. v., and *pārṣṇīyantārah*, vii. 196. 12.

† *bhagnacakraṅṣanūḍāh*, vi. 71. 32: though of course the nest may be broken alone, *bhagnanūḍāh*, vii. 113. 13; ib. 196. 13 (v. l. *ati spārha*).

‡ *akūjanākṣah* (*rathah*) v. 48. 28 (Pāṇini uses *kūjana* of wheels).

§ Two-wheeled chariots are implied also as the regular form in the Sūtra period: compare e. g. Āc. G. S. iii. 12. 1 ff.; Pār. G. S. iii. 14. 2.

¶ vii. 34. 14; xii. 98. 28: *bhartū rathe ca yaḥ śūro vikramed vāhinī-mukhe*.

¶ e. g. ix. 9. 14–15. It was only the axle that should run without noise, i. e. without creaking. The car as a whole is famous for its racket: compare 'the earth-shaking rush' of a car in vii. 188. 1. The minutiae in the carpentry of the car I have not particularly observed, but doubt if more special points can be solved by the Epic. The points discussed are those most important or doubtful. The car-wheel described in

is the 'chariot-nest'? and does it differ from the 'chariot-lap'? Between these two expressions (*rathanīḍa*, *rathopastha*) I think we may discern a distinction. The *upastha* was the general bottom of the car; the *nīḍa* was the little shelf in front where the charioteer stood. This difference existed probably in four-horse chariots only.*

Çvet. Up. i. 4 has three tires, fifty spokes, twenty *pratyāra* or counter-spokes, and sixteen end-pieces to the felly (or felly and tire together), as if these were made of small pieces patched together. I do not understand the *ṣoḍaśānta* or the 'forty-eight' pieces following. Very likely this may be nothing but an imagined wheel, to illustrate the philosophical stuff in which it is buried.

* Compare the following examples: the *rathanīḍa* is for the charioteer alone in viii. 24. 38; 64. 28; vi. 53. 5 = ib. 114. 33; vii. 173. 5. The last example is copied from the two identical passages in the sixth book: *sārathīm cā 'sya (çūrasya) bhallena rathanīḍād apātayat*, 'with one dart he made the charioteer fall from the nest.' Compare also the cutting of the *yugāṅdhara* from the nest in vii. 16. 31. But when the knight falls, he 'sinks down in the lap of the chariot,' as does Droṇa (vii. 162. 42, *niśasāda rathopasthe*: compare viii. 15. 42; 50. 47). And so it is said of a knight hard pressed, 'he wavered not from the lap of the car' (vi. 54. 17). 'Down in the lap of the car' sinks the king, and faints there (*kaçmalam ca jagāma*); while the charioteer turns the steeds and retreats (vi. 58. 17). The scene comes again (in viii. 15. 43), where the driver, seeing his master senseless in the *upastha*, withdraws from the contest in the sight of all the army, and takes the king with him (although usually on such an occasion there is a rush to seize the wounded knight, as in viii. 62. 31-32, where the king crouches down in the *upastha* and all cry 'seize the king'). So again in vi. 92. 36 the knight sinks in the *upastha*. So in R. vi. 51. 79 the knight is in the *upastha*; or the banner falls into it, R. vi. 86. 37. But in the last Epic case the distinction shows itself to be not a total one, but one of part and whole; for here the two drivers (*yantārāu*) are also wounded and fall in the 'lap,' and again a charioteer (*sūta*) falls from the 'lap' in v. 182. 3; the *sārathi* is in the *upastha* in iv. 33. 40; the *upastha* includes the *nīḍa* in iii. 21. 25-26. As, however, the drivers generally are represented in the 'nest,' and we know them to be in front (*syandanāgryeṇa* is even the position of Mātali, iii. 171. 28), and the knights are in the 'lap,' we may assume that in the narrower sense *upastha* denotes the owner's place, and *nīḍa* the driver's, although the 'lap' or 'bottom' may be taken to denote the whole of the underpart. The little roofed fore-chamber of the Assyrian war-car, as distinguished from the plain front of the Persian, would be perhaps too much to assume for the Hindu car; but a chamber, if unroofed, separated from the knight's room, seems necessary. Compare besides the above the following: a joyful knight 'as it were danced in the *upastha*' (vi. 100. 46; 104. 29). A fainting knight sits in the *upastha*, braced against the flagpole (vi. 101. 47-48). Bhīma's son is killed, and the body lies in the *upastha*, while the driver drives away with it (vii. 166. 38). Of Karṇa, when slain by Arjuna, the same words are used (*upāviçad rathopasthe*, viii. 53. 36). But when Çalya demands that his equality with Karṇa be recognized, he refuses to take the place of the ordinary charioteer, and so we find him in the *upastha*, whence he manages the reins (*çalyo rathopasthe raçmiśameçrakovidah*, viii. 79. 11: compare ib. 36. 10, *sanipastham mā 'roha tvam*, to Çalya). Again a knight leaps to the ground from the *upastha*, and fights with his club (ix. 11. 41). All the knights of the army are described as standing before the battle begins either 'in the lap of a war-car or on the shoulder

The chariot, as the preceding quotations show, swung so low that it was easy to leap out or in, or to force another out. We even read in a very vigorous rush of 'all the knights deprived of their cars': that is, flung out (vi. 48. 25). One knight leaps out to seize hold of one below (vi. 59. 100). Often the car is mounted, apparently in motion, by refuge-seeking friends, who climb up after losing their own cars. We thus find two brothers standing in one chariot after one of them had deserted his own because of slain horses.*

The chariot gives the honorable title of *rathin* and *atirathin* to the knight. According to the opening of the war, the knights are classified as 'those that have chariots,' 'superior chariot-men,' 'very superior chariot-men,' etc.†

of an elephant' (v. 165. 20). The word *apātayat*, usually used as above, is often simply of the war-car as a whole (*rathād bhūmāv apātayat*, vii. 169. 14), so that we cannot tell what part is intended. We may, I think, also draw from these quotations the conclusion that the knight seldom had, or used, a seat, but generally stood in the *upastha*, probably the round hollow bottom, implied by *uḍupa* (e. g. xvi. 5. 8), car as boat, which contained breastplates of leather and metal, bows, arrows, etc., probably stored about the side (viii. 79. 5). That the driver has a seat is indicated by the term *bandhura* or *atibandhura* (e. g. vii. 36. 31; iii. 241. 31), handed down from the Vedic age, here as the seat of the driver, while (if one exists) the knight's seat is called *talpa*, vii. 192. 68. 'Bosom' (*kroḍa*) rather than 'lap' is the commentator's definition of *upastha* (vii. 36. 32). It itself makes a comfortable seat to repose in after one has unharnessed and seen to the horses, and wants to rest in the stable (iii. 73. 32). The commentator is certainly wrong in taking *upastha* to mean *uparibhāga* in iv. 45. 7. The *upastha* as storage-place in R. ii. 39. 20.

* vi. 78. 22; scene repeated in vii. 30. 7. The expression for dismounting or tumbling out of a car is *avātīrya rathāt*, *rathād avaplutya*, *plutaḥ syandanāt*: vii. 3. 8; viii. 90. 105; vi. 59. 89; 86. 35; vii. 31. 24. One descends from the front apparently in R. vi. 111. 55 (*avātīrya vinānā-grāt*: unless the *agra* be a pointed rear, which seems impossible). In xii. 38. 13, *rathāt paścād avātarat*, the adverb is temporal. The ordinary mount appears to be from the side or back. (Climbing into another's car is illustrated by vi. 48. 95 ff. (cf. 79 ff.): 78. 22; 82. 20 (father and son); 113. 18 ('with bow destroyed, deprived of war-car, his horses slain, his driver slain, he hastily mounted the car of Citrasena'); vii. 30. 7. In vi. 58. 9 ff., the two stand and shoot together at the foe after Sātyaki ascends Abhimanyu's car. Arjuna even seizes his son in his arms and lifts him into the car. The words employed are about the same, but not technicalities of driving, apparently. *Āruroha*, *adhiruroha*, *abhi-*, *āsthāya*, *upāruh*, *pratyapadyanta*, are all used for mounting; *avaruh*, *pratyavaruh*, *avaplutya* for dismounting (*yānād avaplutya*, viii. 61. 44; *avaruhya yānād*, 84. 24). *Avaplutya* has also the technical sense in fighting of retiring: thus, a knight, knowing his sword is broken, retires six paces (*avaplutya padāni ṣaṭ*, vii. 14. 74), but *āplutya* (eight paces, vii. 15. 28) is 'advancing.'

† These terms were also employed as proper names. *Adhiratha*, *Ādhirathi*, *Atiratha* (vii. 134. 13, 11; viii. 51. 68; vii. 132. 6; 133. 44), were at first those skilled in driving 'on the car.' Proper names are also made by forming *ratha* into the end of a compound, as *Vṛkaratha* (*nāma bhrātā karṇasya*), vii. 157. 21. Compare also p. 204, note.

The ease with which the chariot is overturned indicates again its small size, for it falls over 'like a clod' when the driver's hand is loosed (vi. 48. 18); and its fragility is shown by the ease with which it is splintered (*çakalīkṛta*) and the knight decarred (*virathīkṛta*); while another indication of size may be gleaned perhaps from the poetical statement that 'the wheels sank up to the hubs in blood.'*

The knight sometimes falls forward directly over the front of the chariot,† which would imply absence of railing or defense before the knight. There appears, however, to have been a guard of some sort round the car in the Vedic period; and in the Epic we may probably translate the 'guard' (*varūtha*) in this way, though it also means an over-shield. The usual application of this word as an adjective of the car leaves the sense doubtful;‡ though, being spoken of as distinct from the sun-screen, the former meaning seems certainly admissible, as well as indicated by the cars 'void of defense,' where the sun-screens do not appear to be meant. The commentator says it is a leather protector.§ There is nothing, however, but this *varūtha* to correspond to the ἄτροξ, made probable for the earlier time; and flying weapons never appear to be impeded or caught from above by the 'protector,' nor is it a conspicuous target (as the flag and pole are), though included in damaged portions of a wrecked car.|| It must, nevertheless, have been low, if it ran in front at all; for, besides falling over in front, a man falls and clings for a long time to the pole, till he becomes insensible, as if still partly in the car (iv. 64. 48, 49).

The 'pole of the car' (*ratha-īśā*), or commonly the pole alone (*kūbara*),¶ is fastened to the box of the car (*kāsthā*), and to the double yoke (*yuga*, *iugum*, ζυγόν) that crosses it, and (*dhur*) rests in turn on the necks of the steeds.** The fastenings of the yoke (like the general *cakrabandha*, *rathabandha*) are termed *yoktra*, fastening yoke and pole, or *saṁnahana*, 'joiners,' and all appear to be of leather, as do the reins (*raçma-*

* *ānābhi*, vii. 146. 89; 103. 30-31; vi. 117. 15.

† *hato rathāgrād apatat*, viii. 89. 65; *rathānīka*, vii. 96. 70, is a rank.

‡ *çvarūthāh*, vi. 106. 22; *mahārathāh savarūthāh*, ix. 26. 37.

§ *vivarūtha*, viii. 16. 14; with *chattrā* and *bandhura*, iii. 241. 31.

|| 'The yoke, pole, *varūtha*, standard, charioteer, horses, threefold-piece, and the seat' (*talpa*, not turret), iii. 242. 5.

¶ vi. 46. 5; 71. 39; vii. 196. 12, etc. Perhaps also *yugandhara*, 'yoke-holder,' vi. 1956 C = 48. 94 B, *yugabandhura*: and vii. 16. 31.

** *dhur* means the load, either pole or half-yoke; *dhuryam* is merely the weight on the horse coming from the piece in the neck; *dhuryam* may, therefore, include part of the pole itself. The duplicity of this yoke consists in two pieces, one about the neck of each horse, so that, when it is cut in two, each horse carries one *dhur*: compare vi. 48. 24-25, *cakre bhagne yuge chinne ekadhurye haye hatah, āksiptah syandanād virah sasārathir aḡhimagāh*.

yah),* and are gilded, so that they 'shine like the sun,' with the gaudy rest.† • When a distinction is intended, *īṣā* is the lower, *kūbara* the upper end of the pole.‡

A desperate attempt against the Kuru commander of the day by a knight no longer able to use his bow shows us the use to which the stout pole of the car may be put (vii. 191. 21 ff.). The knight's charioteer has been slain; he thereupon directs his horses full at the steeds of his opponent, in such a way that the horses of both cars 'become mixed together' (*asyā 'cṣvān svarathācṣvāih . . vyāmicrayat*, 19); he then drew sword, and, taking his shield, crawled down upon the pole of his own war-car, and 'standing on the middle of the yoke, on the very tip of the yoke, and on the hind-quarters of the blood-red horses' (of his foe), suddenly appeared under the front of his adversary's car, who meanwhile saw no opportunity (*antaram*) of killing him. The Mahāratha (or distinguished knight) whom he attacked then seized a car-spear (*rathaçakti*) and slew the foe's horses; 'avoiding his own red steeds,' but letting them escape with broken harness. The adventurer is cast to the ground, and for the moment defeated, but the whole army 'honored his great achievement.'§ Here apparently the knight uses the car-shield to protect himself with.||

The relative positions of the four horses drawing a large chariot were as follows: one bears the right-hand *dhur*, one the left, the 'near' horse; one is attached to the end of the fore-axle (*pārṣṇi*) on the left; another, parallel to this, to the axle-end on the right. Such seems to be the arrangement according to the text, though it would not be impossible to interpret as a double span, the foremost drawing on the yoke and pole, the hinder pair on the axle. N. understands two yokes.¶

The car-pole (*rathadhur*), held at one end by the yoke, was either regarded as divided at the heavy end into three parts,

* The reins and girdles are distinct, viii. 27. 30.

† vii. 2. 34; 115. 20; viii. 79. 59.

‡ Thus the *trivenu* is *īṣā*, the *yugandhara* is *kūbara* (see below).

§ Dhrishtadyumna's progress: *tataḥ sa rathanīḍasthañ svarathasya ratheçayā, agacchad asim udyamya çatacandram ca bhānumat*, then stepped upon the *yugandhya*, then stood *jaghanārdheçu cā 'cṣvānām*, directly under the foe's *nīda*, 27 ff., and also *yugapāliṣu*.

¶ Depriving a car of its pole was one of the manœuvres practiced; the car was then *vikūbara* or *çirnakūbara*, vii. 196. 12, etc. The trick of seizing the pole is not uncommon. When Bhīma sees the Guru coming through an opening in the array (*vyūhadāvāra*), 'he gets out of his own car in a hurry, and shoots at the *atiratha*, seizing the pole of his war-car' (vii. 128. 20: compare R. vi. 69. 46, *nihatya hayān nirmathye 'ṣāñ rathasya*, etc.

¶ Compare iv. 45. 20 ff.: *dakṣiṇām yo dhuram yuktaḥ (hayah); yo 'yam dhuram dhury avaro vāmāñ vahati; yo 'yam pārṣṇim vahati; yo 'yam vahati me pārṣṇim dakṣiṇām abhitaḥ sthitaḥ*.

two of these (the pole the third) being side braces that ran behind the horses and connected at each end with the *kāṣṭha*, axle-wood (box), and this was called the 'threefold-piece' (*triveṇu*), literally 'the piece with three sticks;' or this piece was a triangle of bamboo, one side of which was parallel to the axle and the other two ran together to the pole.*

The chariot, when entering the field, always carries a loose piece of wood, which often comes off and lies with flags, standards, etc. This is the 'drag' (*anukarṣa*), explained variously,† but most simply as 'a piece of additional wood fastened beneath the car for the purpose of quickly repairing damages sustained in battle.' It would thus be a part of the *upaskara* or general furnishings of the war-car. As I have noted no occasion where any attempt was made to repair a damaged car in the field, it may be that it was meant for the artisans left in camp, who could use the timber at night, and always find some when needed. To drag about a log of wood for the sake of possible repairs at night seems, however, so absurd that I am almost led to think the piece was meant as ballast: not unlikely

* The two side-pieces seem quite certain. I cannot decide whether the third piece was an addition to the axle parallel to it or was the pole itself continued. Compare the commentator on *chinnatriveṇucakrā-kṣaḥ*, viii. 16. 13: *ubhayataḥ kāṣṭhadvayasahito dhūrdanḍaḥ*, 'the yoke-pole connected on both sides with the two ends of the axle-box.' This piece of wood is generally mentioned without description in the text. Where Arjuna mounts his car in iii. 175. 4 (*girikūbarapādākṣaṇḥ ṣubhaventriveṇumat*), the commentator says that the *pādāu* are the (two) wheels, and defines our word as a 'three-cornered piece of wood uniting pole and axle, and called *ṣubhaveṇu*, because the sticks (*veṇavaḥ*) of which the *triveṇu* was made were beautiful.' That is to say, the wood was bamboo, but the compound had so often been used that the same word could be used again as an adjective. The word occurs quite often (compare iii. 242. 5; iv. 57. 87; vii. 156. 83 ff., *triveṇuka*, etc.). We find it silvered (*rajatatriveṇu*), viii. 37. 27; and apparently synonymous with *tridaṇḍa* (*iṣā tadubhayapārṣvadārunī*, comm.): from which we may also conclude that the original bamboo had been replaced by stronger wood, though keeping the old name. Such use of the word as this, and that in ix. 9. 31, *nadī triveṇudanḍakā vṛtā*, easily leads to a confusion with the flag-staff, which may also be of three bamboo pieces. The Puranic use is a copy of the Epic, as in Var. P. 96. 11, *rathāḥ suakradanḍākṣatriveṇuyuktāḥ*, etc. Chariots described as *dvi-triveṇavaḥ*, in the description of vii. 36. 31 ff., would seem to support Burnouf's notion that the *triveṇu* was anyway the flag-staff. But the commentator always keeps the explanation given above; and it seems more likely that what is meant is a double triangle, one on top of the other, for strength; although 'two or three' might be the interpretation, not referring to flag-staffs, but to this pole-piece as compound of three or of only two, the essential parts. The meaning in the last passage, however, remains to me quite doubtful. It is just possible that the *triveṇu* modified the shape of the war-car, and that we have to translate *rathāgra* in many passages more literally (*hato rathāgrād apatat*, viii. 89. 65, etc.).

† v. 155. 8; vi. 89. 88; 106. 21 ff.; vii. 88. 6, with *talpa* and *triveṇu*; viii. 19. 42; 58. 26; and often.

when we remember how the cars tip over every few minutes.* From such hints and guesses we may perhaps conclude that at least the two-wheeler was a very light affair, constructed largely of bamboo (though light, a very tough wood: compare its use for bows), and meant mainly for speed and manœuvring. *Ghūrna* or shaking, as applied to a war-car, is indicative of this.† It is generally assumed that war-cars of the earliest period were heavy and clumsy; but on the contrary the earliest form seems to have been very small and light; with the addition of another wheel and ultimately pair of wheels come size, stability, weight. The *currus* of the Roman and *syandana* of the Hindu are both so named from their 'running' power or speed.‡

The standards and flags of the war-cars, *dhvaja*, *ketu*, *patākā*:§ These bear an important part in battle, for they are the rallying points of either party, and the standard of a great knight is well spoken of as the upholder of his whole army. They are not, however, national, but individual. They do not correspond morally to our flag, but rather to the plume of the European knight in the middle ages. This distinction must be borne in mind, for it illustrates at a glance the Hindu field, where, as said above, the men fight only for their leaders.

We have next to distinguish between ensign and banner. At the back of the car, perhaps on one side, rises a staff, straight up high from the floor. The main staff, I incline to think, was in the back-middle of the car, while the little flags were on the side. This staff bore the ensign or signum at its top, and apparently below this top floated the flag.¶ The flag-pole was often the first objective point of the foe's arrows, which seem aimed not so much at the symbol as at the pole itself, doubtless because the former was of metal and the latter of bamboo;¶ though of course the ultimate purpose was to dis-

* Possibly the 'block' of wood (*pātalya*) in R. V. iii. 53. 17 may be an *anukarṣa*. Unexplained by Zimmer, loc. cit., p. 251.

† So *ghūrṇitavān rathah*, in viii. 90. 83, of the car repeatedly swaying from side to side, though not in war, but through a curse (*ghūrṇe rathe* in 84).

‡ The names are synonymous. Compare R. i. 71. 5, where the *āvijas* are to go in a *syandana*, and ii. 4. 4, in a *ratha*.

§ *vājayantī*, perhaps garland, viii. 58. 28 (see below).

¶ Compare for the position of the staff the statement in vi. 101. 47-48, where a wounded knight sits down in the *upastha* reclining against the flag-pole (*dhvajayaṣṭīm samācṛitah*), and the same in vii. 166. 32. The pole could not have been forward, for he would then have turned his back to the foe (since he evidently uses the staff as a brace to his back), a thing no knight, even dying, would do. The only passages that I have noticed which seem to contradict this are like that in vi. 82. 59, where one shot fells *dhvaja* and charioteer; but we cannot deduce much from the remarkable shooting of the Epic heroes.

¶ *vānavi yaṣṭih*, i. 68. 17: compare *veṇu* in *Çat. Br.*

grace the knight by bringing down his symbol. When the symbol falls, the whole party (we may rightly regard the knight's followers as such) falls into dismay and disorder. On the top of the staff was placed the *dhvaja* or *ketu*, the former meaning sometimes the whole arrangement, staff and image or banner; the latter the symbol or banner alone. This image was a likeness of some animal, as a boar or flamingo. Thus the *vānara* or ape-ensign of Arjuna was placed on the top of the *dhvaja*, and his car is usually termed the 'car with ape-standard.*' The *ketu* is often a part of the *dhvaja*, but as often synonymous with it (in its narrower sense). Thus any symbol as specification of the general *dhvaja* may be so used also of the *ketu*.† The sudden fall of a knight 'like a *dhvaja* released from its fastening' implies a heavy substance; while the expanding (*utsrjya*) of the *ketu* implies a banner, iv. 65. 1. *Ketu* is, therefore, at times synonymous with *patākā*, 'flag,' while *dhvaja* is also the metal top-piece of the staff, or that with the staff.‡ The height of the standard as a pole may be known by its being always very conspicuous, and inferred again from the pretty image describing a cluster of tall river-trees raised above the flat ground like a *dhvaja* above a war-car (i. 70. 17). The same passage includes a frequent epithet of the army used as a noun, *dhvajinī*, the 'bannered' host (i. 70. 32). One of the battle-books gives us what is called 'a picture of the standards,' whence we see how variegated and of what different sorts they were. They are all 'like mountain peaks,' bright with color and gilded, decorated with flags, and differing in name, form, and color. Arjuna carried 'an ape with ferocious mouth and a lion's tail,' and had flags besides; Karna had a *hastikakṣyā*; Droṇa, a steer; still others bore peacocks, boars, elephants, sometimes bearing bells of silver or of gold; and one knight has a silver boar in a gold net.§ In another place we are told that a younger knight has a gold *ṣarabha* (an eight-legged monstrosity) as his symbol; and his twin brother, a sil-

* *dhvajāgre*, viii. 79. 22; *vānaradhvajah*, viii. 56. 91, etc.

† Compare *vr̥ṣabhadhvajah*, *kapidhvajah*, *pakṣivaradhvajah*, iii. 39. 83; viii. 56. 91; 94. 58, etc.; but all used also with *ketu*: but not *ketuyastih*.

‡ Compare the last line in the first act of *Çakuntalā*, where the *ketu* has a silk flag (*cīnāṅcukam iva ketoh pratīvātām nīyamānasya*); and the chowrie-flags (*cāmara*) in the similar line of the first act of *Vikramorvaçī*.

§ The *dhvajā bahuvīdhākārāḥ* in the *dhvajavarṇana* of vii. 105. 1 ff. Arjuna has one *siñhalāṅgūlam ugrāsyaḥ vānaralaksanam*, ib. 8; the distinction of *nāma*, *rūpa*, *varṇa*, ib. 2-5 (*anekavarṇāḥ*). The flag is here *patākā*. From vs. 14 it is evident that the pole in Karna's car runs down into the *upastha*. The *govr̥ṣa* is Çiva's sign (*vr̥ṣadhvajah*): the boar, Vishnu's. The symbols top the *dhvaja*, but the latter is here also convertible with *ketu*.

ver swan with bells.* From other passages we see that trees and flowers as well as animals were employed as signs. Especially the palm, which from its height and majesty was regarded as a most fitting emblem for the Kurus' greatest warrior, and was on that account the 'symbol-tree' *xat' εξοργύv*.† The same knight does not, however, bear always the same ensign. Thus, in another war we find Bhīshma with the ensign of five yellow stars and a blue (silk) flag; and Drona boasting the *kamaṇḍalu*, or pot, that marked his low origin. Contrasted colors are loved. Kripa has 'red horses and a blue flag,' etc. But the ensigns are individual enough for their knights to be recognized by them, as by their clothes and steeds.‡ 'With ensigns hoisted,' the knights show themselves ready to advance against the foe.§ The symbol was a sign giving luck, as notably that of Arjuna, or bore ill luck to its owner.¶ The color of the metal in the image, or of the cloth in the flag, is always made prominent. One hero has a red ensign,¶ and others have blue, yellow, etc. But above all white is beloved. So the war-cars 'look like cities,' being so gaily dressed.** Karna is distinguished by a symbol called *kakṣā*, or *kakṣyā*: I think, a tiger. He is described as having a white flag, crane-colored steeds, a gilded bow, and (after other things) a *nāgakakṣa* or *hastikakṣa*, possibly an elephant girdle, but, from its use in connection with Karna, more likely a beast. Compare viii. 11.7; 56. 85; 87. 7, 90 ff.

The expression *patākin*, 'flagged,' is used as well of the standard, *dhvajā*, as of the car itself, whence we must imagine that the staff bore flags beneath the emblem.††

All have these banners (vii. 34. 16), and it is very likely that they were placed on other parts of the car, besides the staff.‡‡

* vii. 23. 86 ff. Abhimanyu's is *ṣārṅgapakṣī*, bearing a hawk's wing(?). Yudhishtira here has a divine bow. Other such ensigns are found in vi. 74. 13 (*yūpaketuh*); vi. 104. 14 (*tātadhvajah*); vii. 2. 23 ff. (*indīvarāṅkah* and *siṅhaketuh*); vi. 115. 31 (*karṇikāradhvajah*: compare vii. 36. 12; vi. 112. 29; 115. 26, etc.).

† The *tāla* is *dhvajadrumah*, xii. 55. 18. Bhīshma is 'the one with palm as ensign,' *tālaketuh*, *tāladhvajah*.

‡ Drona bears the *kamaṇḍalu* in iv. 55. 43; vii. 23. 82; and a *vedī* of gold in ib. 58. 3. Bhīshma is described in ib. 55. 54 as equipped with *pañcatāreṇa ketunā nīlānusāreṇa*; so Kripa has a *nīlā patākā* in ib. 41. A further mention of the *dhvajā*-animals before the war, in i. 225. 16 (*bhūtāni vivīdhāni mahānti ca*). On the recognition of the dead by their banners, etc., see xv. 32. 14.

§ Compare vii. 36. 12; and vi. 45. 7, *abhyavartanta sarva evo 'cchritadhvajāḥ*. So *ucchritā rathe dhvajayaṣṭih*, x. 13. 4, the technical word.

¶ *amaṅgalyadhvajah*, vi. 112. 19.

¶ *lohītakadhvajah*, v. 171. 14; vii. 23. 18.

** *rathā nagarasaṅkācāḥ*, vi. 79. 57. Compare xii. 100. 8.

†† vii. 193. 12, *dhvajā bahupatākinah*, and often in references given above.

‡‡ Compare later the explanation of the relation in size between *dhvajā* and *patākā*. Ag. P. 61. 35 (the whole chapter on consecration of *dhvajā* at the door of the king); and Brh. Saṁh. 43. 8-39; Mbh. i. 63.

A chariot that is *abhi-patākin* is one of which the flags, to show victory, blow forward, against the wind.* Karna's flag is golden and garlanded,† and the bow of Indra (rainbow) alone can serve to describe all the colors of the flags.‡ So we read of the flags and umbrellas shining in an array among jewels and weapons.§ Before and in the war we find Yudhishtira riding on a car of which the flagstaff-top was ornamented with two musical instruments, perhaps tambourines, called *mṛdaṅgāu* (iii. 270. 6; vii. 23. 85).

The special flags called *vaijayantyaḥ* appear to be used in war only upon the elephants, and must therefore have been of small size (vi. 112. 27; viii. 58. 28). These may be only garlands, as in the 'Indra-garland' (i. 63. 15)—a sign of victory.

Dhvaja is used outside of war as any sign, e. g. of a god, or of a huckster. Thus we have *dharmadhvajah* and *dharmadhvajikah* of the sun, 'whose emblem is duty,' or used of one that sins, that trades in duty.||

Almost as part of the banners stands the *chattra*, or umbrella, a real protector, and indispensable part of a car's furniture, but also regarded as a flaunting ornament. It was generally white. On festal occasions it is carefully held over the head by another equal or attendant. In spite of its frequent occurrence in descriptions of spoils, it does not seem to play any part in the action, and I fancy it does not really come into the poem until a later age, but properly is to be associated with the mass of effeminate luxuries depicted long after the original.¶

The arms stored in the chariot are represented as so many that we can only see late readings in such statements. The car, according to these accounts, was an arsenal, holding a

* viii. 11. 7 ff. Compare *atipatākaḥ* (*rathaḥ*) in viii. 24. 54; 59. 67, a war-car with banner over it.

† *patākā kañcanī sragvī dhvaje*, vii. 105. 13.

‡ *indrāyudhasavarṇābhīḥ patākābhīr alaṅkṛtaḥ*, vi. 50. 44; compare ib. 79. 57. *nānāvarnavicitrābhīḥ patākābhīr alaṅkṛtaḥ*.

§ vi. 87. 14. Compare also viii. 24. 54, 72, cars with banners and moon-colored steeds; elephants with different banners of various colors.

|| *dharmadhvajah*, iii. 3. 19; *dhvajikah*, xiii. 163. 62 (cf. *dhvajin*).

¶ Thus, in viii. 27. 33, on the battle-field are found umbrellas, fans, sandal wood (the Hindus' most costly wood); and in ix. 10. 2, 'a gleaming white umbrella' is carried over Yudhishtira; cf. iv. 55. 55 and 64. 3. In vi. 22. 6, the chariot-umbrella has ivory ribs. One of the first things Acvatthāman asks, when he finds his king dying and deserted, is 'Where, oh where is thy pure umbrella? and where is thy fan, O ruler of earth?' (ix. 65. 18). The *chattra* is white (vi. 103. 25), and furnished with a gold-stick (*hemadanda*, vi. 55. 31; R. vi. 36. 113). Another name, *ātapatra*, 'parasol,' means the same; in a march described in xv. 23. 8, the king goes out with a line of war-cars (*rathānikena*), and has a white *ātapatra* held over him. The bells on the war-car are also noticed in R. vi. 49. 8.

complete assortment of arms in large numbers. Thus, a car (vi. 106. 22 ff.) is full of all arms, and a knight says (vii. 112. 46 ff.): 'Let the car-attendants put all the car-quivers (*upā-saṅgas*), all the furniture (*upakaranāni*), just as is right, into my war-car; for I shall use all weapons, and the car must be furnished as has been appointed by instructors.*'

The knight then goes out to meet the 'Kāambojas, who are conversant with many arms; the Kirātas, who are like poison; the Çakas, who are like fire,' etc.; his lion-*dhvaja* decorated with white flags, himself clothed in a brass corselet, his bow pressed to his bosom; 'and he was adorned with *lāja*, perfume, and wreaths, he, praised by girls, and kissed by the king.'

More specific is the account given in the following (viii. 76. 17): 'Six *ayutāni* of arrows, numberless darts, hammers, spears, knives, *bhallas* (also arrows), two thousand *nārācas* (iron arrows), three thousand *pradara* (arrows)—which not even a wagon drawn by six cows could carry' (*çakataim sadganyam*)—are here left under the care of one warrior. 'With darts (54. 7, *viçikha*, *vipātha*; 29, *prātkā*) and handguards, with quiver and horn and banner, with breast-plates, diadem, sword, and bow,' is the description of a knight in his car (iv. 53. 9). In another passage (xiv. 79. 14), a knight 'ascended the car packed with hundreds of quivers, after he had girded on his golden breast-plate and his shining helm.' A hundred quivers, besides clubs, *çataghūis*, bells, spears, spits, darts, bows, are in a car with a *varūtha* (viii. 11. 8). A car of priceless value is described in the (late) twelfth book, but is used for state, not for war, and appears to be merely a means of exhibiting jewels, being adorned with sapphires (*masāra*), crystal, and gold-plated wheels (*hemanibaddhacakra*), while 'all sorts of gems' are fastened to it, so that it 'shines like the newly risen sun.'† Compare the brief account, marked late by the meter, in the opening war-scene, where Yudhishtira has 'a war-car like Indra's, with golden harness, and bright with *hātaka* (gold);‡ and also compare the car described again in the twelfth book (37. 32 ff.), where the king 'mounts a nice new war-car covered with *kambala*-skins, and drawn by sixteen white cows.' In this car Bhīma, the emperor's brother, 'took the reins' (*ja-grāha raçmān*), as it was at a great state ceremony, and Arjuna held the white umbrella (*pāṇḍurān chattram*) of royalty over the emperor's head. In the same passage we find mentioned

* His car is *pañcaguṇa*, 'has the five qualities,' unexplained.

† xii. 46. 33 ff. A hundred villages are put parallel to a hundred war-cars in viii. 38. 9; if for comparative value, such state-cars must be meant.

‡ vi. 22. 5; a designation of gold more common in R.

a car drawn by men: that is, the steeds were replaced by men (*narayāna*, ib. 40). Another description of one of these enormous war-carriages is furnished by a passage contemporaneous with or next later than the last. It is here we find a distinction (above, p. 236) formally made between war-cars and pleasure-cars;* and here perhaps the shortest yet fullest picture of the former in its greatest if not most ponderous glory. 'Harness up (*sajjīkuru ratham*), the saint cried; prepare quickly thy chariot called the war-car, with weapons and banners, with a spear and a gold staff (*yastī*), noisy with the sound of bells, furnished with ornamental doors (*yuktas toranakalpanāih*, 31), gilded, supplied with hundreds of arrows; this was done, and the king placed his wife at the left of the pole (*vāme dhuri*), himself at the right, and laid within the car the goad, sharp-pointed, made of three sticks' (*tridandam vajraçūcyagram pratodam tatra cā dadhat*)—for this was another *narayāna*, and the king and his wife were forced to drag the car for a great saint. Whether we may be allowed to predicate but two steeds for such a car in its normal locomotion I doubt, but these two were goaded 'on back and hip,' and dragged the saint about for some time without exhaustion. The ornamented doors were probably in relief, judging by a Purāṇa standard; though Epic evidence fails me.†

Another description, rather simpler, tells us that the war-car ready for battle was 'large and fine, and adorned with bells, with a golden net, and light to run with the noise of thunder; well-adorned, furnished with tiger-skins which made protection (guard, *varūthin*), and drawn by good fair-necked steeds' (v. 131. 28 ff.). Compare the almost identical description of a war-car in the sixth book of the Rāmāyaṇa: 'He mounted with joy the divine war-car, his bow strung, that car furnished with all kinds of weapons, sounding with a hundred bells, harnessed with thought-swift steeds, and well guided by

* *sāmgrāmiko rathaḥ* and *krīḍārathaḥ*, xiii. 53. 28 ff.

† See P. W., *kalpana*. Compare the *vimāna* described in R. vi. 106. 22 ff. It is adorned with gold and gems, banners, and emblems; and it is beautified by *hemakakṣyāḥ* (m.), gold plates, and nets of bells. The Lexicon compares *kakṣa*, defined as part of the car (*kakṣa*, 12) by native lexicographers, and translates doubtfully 'Flügel.' Apropos of the legend, it may be asked why, if any weight at all is laid on a legend describing how a king maltreated the priests (see above, p. 78), we should not also conversely treat this story as an indication of the way priests treated kings. The answer is: because the former is a national legend, and belongs to respectable tradition; the king so proud being held up by the Epic and legal literature alike, his image being in a sense historical; while this latter is one of the wild self-made absurdities of the pseudo-Epic, not supported by earlier legend; and because the former illustrates what may well have happened at an earlier day, and the latter fails to correspond to any antecedent probability.

the charioteer; which had the sound of thunder, and the glory of the shining moon or sun; which had a lofty flag-staff; which was irresistible, furnished with a protection (*suvarūtham*), well adorned, covered with a net of gold, on fire as it were with glory.*

Some parts of the chariot are not easily explained, as they are rarely mentioned, and not described. Thus, we find in a list of parts of chariots, besides those already discussed, the *dandaka*, apparently equivalent to *yasti*, the banner-staff; the *janṅhā*, probably the *akṣajāṅhā* or 'axle-tree;' and the *daçana*, perhaps the spokes (unless the harness in general be meant).† The triangle-piece, elsewhere explained, is said in another passage of this book to be silvered; and from the same paragraph we may add a new item to the car, namely the *tri-koça* or threefold receptacle, said to be of gold, i. e. gilded: 'the war-car decked with tiger-skins, of noiseless axle, golden *tri-koça*, and silver triangle-piece.‡' *Koça* alone is specifically a sheath for a sword. We may have in the last three epithets three near parts, axle, axle-box, axle-pole-triangle, as *koça* is used in Vedic literature; but why three-fold? On account of its non-specific meaning, frequent in the Epic, I prefer to regard it as indication of three compartments for receiving arms.

* R. vi. 31. 28 ff. Bells are here *kiṅkinī* (*çatanādita*). Compare R. vi. 49. 8. Compare, too, R. vi. 51. 17 ff. (*sadhvajah . . sāvukarṣah*) a car furnished with tridents, axes, etc., in ib. 108; and R. vi. 66. 8, where *agnivarna* of *ratha* is to be thus interpreted as 'golden.' The same R. vi. 74. 1 (*rathānām cā 'gnivarnānām sadhvajānām varūthīnām*).

† (*rathān*) *içāmukhān dvitriveṇūn nyastadaṇḍakabandhurān, vijaiṅghākūbarāns tatra vinemidaçanān api; vicakropaskuropasthān bhagnopakarānān api, prapātītopastaraṇān*, vii. 36. 31 ff. The commentator does not touch the words given above; those not given here are discussed in their place. *Daçana* (see P. W.) for *dañçana*? Its close connection with the wheel and all parts of the car would seem to refute 'harness' as a proper translation. From its literal meaning one is tempted to bring *daçana* into connection with the 'hook' sense of *ānkāu* and *nyaṅkāu*, and imagine a tooth or hook on the wheels. But scythes or their equivalents seem not to have been used, or they would have played a part in the descriptions; and they can not be proved for either the Vedic or Epic age. Rājendralāla devotes himself to the proof for Vedic times, but the one passage quoted proves nothing. The *ānkāu* and *nyaṅkāu*, 'which run along with the wind on each side of the war-car.' could easily by themselves be taken thus; they are by implication the protectors of the car, and *abhito ratham* (*yāu dhvāntam vātāram anu samcarantāu*) means loosely 'found on each side' (not part of the side), as in Mbh. iv. 64. 33, *ratharakṣiṇaḥ çerate . . abhito ratham*, 'lie on each side of the car,' or as sharp protecting pieces fastened to the side; but this passage from Pār. G. S. iii. 14. 6 is not definite enough at the best to allow of its being used as an argument on the point.

‡ *ratham vāiyāghracarmānam (= vyāghracarmapariṅgtam, comm.) akūjanākṣam hematrikoçam rajatatriveṇum*, viii. 37. 27.

The allegorical car described in viii. 33. 17 ff. gives a few unique particulars in regard to the chariot. We find here a protector called *parivāra*, and one called *parirathyā* (compare A. V. viii. 8. 22), besides the common *varūtha*; a *pariṣkara*, 'guard of the wheels'; two *adhīsthāne*, 'standing places over the fore-wheels' (M.); and an *apāskara*, a hind-piece of wood. The seat, called *bandhura*, is made of three pieces. Knights guarding the car are called *purahsarāh*, *pariskandāh*, and *prstharaḥṣāu* or *cakrarakṣāu*. These are also called *pārçva-gopāh* and *paripārçvacarāh*. Both commentators understand that there are four wheels. The similar cars described in the Purāṇas seem to be copies of those in the Epic.

In the simpler descriptions, and often seen by implication, we find two-wheeled cars. Since the commentator is used to the later order of four-wheelers, he sometimes endeavors to make these into the four-wheelers, as was said above. Nevertheless, from the Epic descriptions we should almost believe that two-wheeled cars were universal, except in the latest portions of our text. For instance, in one case a wheel comes off a car; and then, it is said, 'the horses dragged the car with one wheel.*' By implication, Krishna's car, said to have had 'two wheels, like the sun and the moon,' could have had no more (v. 83. 15). This car has four horses, so that, we see, the four steeds were not confined to the larger chariots (the size of a war-car does not seem to have anything to do with the bestowing of the titles *mahāratha*, *atiratha*, etc.).† Another two-wheeled car is inferable in a passage that says: 'the (one) yoke, the one pole, the two wheels, and the one axle, were broken, cut to pieces by arrows' (v. 181. 14).

On the other hand, eight-wheeled cars are spoken of, although very seldom. The same number of steeds is sometimes found.‡ As we see the car of two horses and two wheels the prevailing one in the earlier period, and can trace a gradual increase in weight and size, we may say with Lucretius:

Et biugos prius est quam bis coniungere binos,
Et quam falciferos armatum escendere currus.§

* *ekacakram ratham . . ūhuḥ*, vii. 189. 54.

† v. 165, quoted above, p. 204, with Kripa's extraordinary title *rathayūthapayūthapah*, 166. 20, applicable to numbers or ability only.

‡ 'Great was the noise of the eight-wheeled car,' vii. 175. 13 (*rathah . . aṣṭacakrasamāyuktaḥ*). Again *aṣṭackra* in vii. 167. 38. These eight-wheelers belong to the book nearest in age of battle-books to the Rāmāyana. So we find also in Rāmāyana the *aṣṭacakrasamāyukto mahārathah* (R. vi. 44. 27). For the steeds, see below.

§ Lucret. v. 1298. His next venture will scarcely obtain credence, certainly not for India: *et prius est armatum in equi conscendere costas . . quam biugo curru belli temptare pericla*.

We are now prepared to disbelieve the erroneous statement made at the opening of the war, when describing the battle-cars. The error consists in the universal practice asserted. But probably the following accurately describes the largest chariot used, except the eccentric and unique special cars of one or two heroes. My subjects are in part anticipated by this formal statement, which says (v. 155. 13 ff.): ‘All the cars were drawn by four horses (*caturyuj*), and equipped with arrows and spears, and a hundred bows apiece; for each car were two pole-horses, directed by one driver (*dhuryayor hayayor ekah . . rathī*), and two outside horses fastened to the axle-end (*pārṣṇi*), and driven by one driver apiece (*pārṣṇisārathī*). The battle-cars were ‘like guarded cities,’ and the horses had gilded trappings, *hemabhānda*. Each car was accompanied by ten or by fifty elephants.*

The charioteer, *sūta*, *sārathi*, *yantar*, *niyantar*, *rathayantārāu*, *pārṣṇiyantar*, *pārṣṇisārathī*, *abhūcugraha* (viii. 32. 19), *rathavāhaka*, *rathin* (abstract, *sārathyam*): The car held one or three charioteers. Two alone seem sometimes implied (e. g. vii. 156. 83 ff.). Often, however, the knight is his own driver. One kingly knight sometimes drives for another, as Krishna for Arjuna and Çalya for Karna. But the social position of the charioteer is, as seen from Çalya’s indignation in the scene quoted at length above (p. 217), one inferior to the knight’s in the war-car. He only served for political purposes. There remained enough of the cattle-driver extraction in Karna to warrant this, but the dialogue shows the position of the ordinary charioteer to be properly that of a high servant. Of kings the charioteers were not thought unequal to high station, and princes in distress adopt this mode of life by preference. Thus Nala becomes chief hostler, and passes his time in the stable, *açvaçālā*; and Nakula takes service as a horse-trainer. Sanjaya, however, the old charioteer, shares his old king’s hermitage.† Of less than kings, the drivers were apparently of little importance; they generally fall in battle unnamed. Still, the practical position outweighs the theoretical station. We find the charioteer refusing to obey when the knight gives too reckless commands, but yielding when pressed. He is a servant, but a privileged one. Moreover, it was the charioteer’s duty to guard his knight; and this may easily have been interpreted to imply keeping him out of death’s way. Compare the vivid scene in the seventh book: ‘Then he urged on the (one) charioteer: “drive thou the steeds quickly before the face of Droṇa”; . . . and again he urged

* The ideal may be studied in brief in R. vi. 86. 2 ff.

† Nala, iii. 67; 71. 11; Nakula, iv. 13; Sanjaya. xv. 16. 4.

on the driver, saying "go, go" (*yāhi, yāhi*); but the driver said, "thou art not skilled enough in fighting." Then cried the knight, "I would indeed fight now, even with the gods! Drive on!" and the charioteer, striking with his goad the three-year-old colts, drove on; but he did not rejoice in his mind.*

The rule of protecting the knight is formal. 'In battle the knight, if confused, must be guarded by the charioteer'; or, 'ever must the man of the war-car be guarded'; and when the charioteer risks his life in saving his master, he does so because he 'bears in mind the rule.† It will have been noticed that we have in the case above but one driver. Side by side with this we find two more, the *sūta* or charioteer proper being understood, especially noted as the *pārṣṇīsārathī*, or twain standing on either side of the car, perhaps over the fore-wheels (see above), who guides the horses running free outside the pole-horses (vii. 48. 29). Perhaps we have, conversely, to understand the two in a large car when but one is mentioned, as in the following; but I see no reason for this except the difficulty of one driver's managing a four-in-hand, which is slight, since there is nothing to disprove the possibility of all four horses being on the pole—though this is against usage. Compare: 'Light-handed he shot (a flood of arrows) at the foe's head, neck, hand, foot, bow, horses (pl.), umbrella, standard, charioteer (*niyantar*), three-fold-piece, seat (*talpa*), wheels, yoke, quiver, back-board, flag, two wheel-guards, and all the belongings of his car; down fell the knight wounded in all his adornments and garments, down upon the earth, like a tree bruised by a great wind.' The completeness of description might here be taken as excluding the outer drivers.‡

* vii. 35. 31 ff.; 36. 1 ff. The expressions used are generally the same. Compare *codayā 'cvaṅ bhṛṣam*, vii. 145. 3; *tvaṃ sārathē yāhi javena vāhāih*, viii. 76. 2; *tvarayan hayān*, viii. 26. 18, etc. The pride of the knight in venturing to fight the gods is too common to require further reference. We must remember that the gods meant are the old-fashioned gods, now much reduced in circumstances, and by no means types of divinity. Another common comparison is likening the foe to grasshoppers, to blades of grass (*matvā tṛṇena tāṅs tulyān*, vi. 113. 36, etc.), or to 'one sixteenth' of one's own power (vii. 111. 30, and often).

† *rakṣitavyo rathī nityam*, iii. 18. 9; and ib. 8, *mohitaḥ ca raṇe cūro rakṣyaḥ sārathinā rathī*. In iv. 64. 49, the *saṃyantar* rescues the knight, *upadeḥam anusr̥tya*.

‡ vii. 88. 5 (*cakram*, also singular). *Niyantar* is usually *yantar*, controller. The *cakragoptārāu* seem to be guards over the wheels, not guardsmen (*cakrarakṣāu*). The knights are their own drivers in vii. 196. 13. The goad *pratoda*, held by the *sārathī*, is constantly falling from his hand: compare R. vi. 57. 24; 31. 40; and note that the goad and reins are both held in the left hand by an expert driver; and if this arm be wounded, he picks up goad and reins (with the other?), driving on as before. Compare viii. 27. 16 ff.; *sa nīrbhīdya bhujāṃ savyam . . hemadaṇḍo jagāma dharanīm . . vidhasya . . pratodaḥ prāpatad dhastād raçmayaç ca . . pratodaḥ gṛhya so 'nyat tu raçmīn api yathā purā vāhayāmāsu tān aḥvān . . .*

We find the king of the Pāndus acting the part of a driver beside the regular charioteer.* The art of the driver consisted not alone in driving well and fast, and keeping the car straight, for this indeed was but the foundation of his science. His true art consisted in wheeling and turning, in bringing the car rapidly about, so as to attack the antagonist with such speed from all quarters that the chariot seemed to advance from all sides at once. Reference has been made to this art in the paragraph on the battle-orders. The circumstances in which the knight or his driver exercises his skill are always the same, either to escape surrounding on the part of the foe or to surround. The names of the circles are apparently technical, in as great a degree as technicalities can be predicated of the transparent battle-terms employed. We have seen the 'right' and 'left' circles spoken of: that is, the 'circle,' *maṇḍala*, is the regular term for the evolution, to which we have added either *yamaka*, 'the double wheel,' or 'left' and 'right,' distributively. Either of the latter is, again, called a 'crescent,' *ardhacandra*. The Rāmāyaṇa, in a doubtful passage, uses the words *vithī* and *sarpaḡatī* in as if a technical sense, like *maṇḍala*, corresponding to (*yuddha*-)*mārga*, and it may be that in the Mahābhārata also these words have escaped my notice so used; but I can cite no instance of them from the latter work. The effect of 'circling' was produced by 'goading the steeds and hauling on the reins:' directing them, of course, by the latter at the same time.†

* *yudhiṣṭhīras tu madreḡam abhyadhāvat . . svayam saṁnodayann aḡvān dantavarṇān*, ix. 16. 47.

† *maṇḍalāni tataḡ cakre gatapratyāgatāni ca* (vii. 19. 6.), 'circles he made then forward and backward; evam ukṡvā tato . . . hayān saṁcodya, raḡmibhis tu samudyamya javenā 'bhyapatat tadā; maṇḍalāni vicitrāṇi yamakāni 'tarāṇi ca, savyāvi ca vicitrāṇi dakṡiṇāni ca sarvaḡaḡ; pratodenā 'hatāh . . . raḡmibhiḡ ca samudyatāh, vyacaraṁs te hayottamāh (iii. 19. 7.), 'circles of different sorts, double and single, (other) to left and right.' The partial repetition in vii. 122. 66 gives us *mārgaḡjñāh* as one who understands such manœuvres (*maṇḍalāni*, etc.); *itarāni ca carantāu yuddhamārgaḡjñāu tataksatur ratheṡubhiḡ*, etc.). The same use in club-fight: compare ix. 57. 25 ff.; 58. 22, 23; in the last example, a *gomūtraka* manœuvre of club-fighting diversifies the contest. I should translate 'in an ellipse' instead of a true circle; here *arim sammoḡhayann iva* is added, the ultimate object being to confuse the foe. 'Wheeling left' is *usavyam āvrtya vāḡinaḡ*; 'wheeling right' is *pradakṡiṇam upāvṡtya*, in iv. 57. 42; 64. 4; with *ardhacandram āvrtya*, 'wheeling a half circle,' ib. 59. 10. In the first of these passages, *yamaka* applied to *maṇḍala* is defined by the commentator as 'repressive.' This meaning would not be impossible throughout, and is etymologically permissible. We should then translate (instead of 'double and single') 'those circles meant to narrow the area of the foe's action, and others—that is, others that give him headway; but I prefer 'double.' The passage in the Rāmāyaṇa (vi. 92. 3) contains *vithī* in both editions, but the verse appears corrupt in the second pāda. In vs. 6 (*darḡayitvā tatas tāu tu gaṡir bahuvīdhā raṇe*) we have the simple

A further trick of the charioteer is that of driving in such a way as to make a particular kind of noise. Perhaps no more than what corresponds to our individual trick of tread is meant, but we find that an unseen charioteer is recognized simply by the noise he makes in driving. This may be merely the grandeur and loudness of the sound, and it is withal in a 'tale of old' that the fact is mentioned;* but as a man used to the track can recognize one locomotive out of a hundred by ear alone, though bell and whistle be not used, I see no reason why in a chariot-age the same fineness of ear should not be possible, even if in one case the individuality lies in the engine and in the other in the engineer's method. Loudness of noise alone is often approvingly alluded to (e. g. R. vi. 79. 11).

I have already spoken of the eagerness with which a decent knight slays his foe's charioteer. The ensign and charioteer are often aimed at first, and these with the horses being laid low, the knight-to-knight combat first begins. Every scene will give examples of this statement, and a few references will suffice.† It was a very mean and cowardly practice, and engaged in without compunction. The driver was absolutely helpless. The opposing knight looked on him as he did on the horses, and shot him to stop the car. No qualms of honor seem to have been felt; yet the driver was the most unprotected man in the field. The 'code' had not touched him. Even as against the opposing knight, thus destitute of horses and driver, the combat was unfair; but this is the regular usage.

An important casual occupation of the trusted charioteer lies in the office of herald or ambassador, nominally under safety, but endangered by a wrathful prince. Deprecating possible wrath, he was supposed to repeat verbal messages, while acting rather as an agent sent to confer.‡ As daily herald to town from camp goes the charioteer of old Dhritarāshtra, and appears as an old friend of the king. So in the Rāmāyaṇa a charioteer, *sāvathī*, is sent with a message to the king (ii. 57. 23). Regular news-seekers were the spies, always taken for granted in each camp. The news of Arjuna's vow is carried across by

gati; in vs. 3, Gorresio reads *maṅḍalāni ca vīthiḥ ca jihmāḥ sarpagatis tathā, darṣayantāu bahuvīdhān sūtasāmarthyajān guṇān*; while B. (adhy. 109 here) has *gatupratyāgatāni ca* in the second pāda. The Rāmāyaṇa has a simile not very flattering to the charioteer: 'this city deprived of thee will be like a *pṛtanā* whose leader (*vīra*) is slain, and where the charioteer alone is left (in the war car),' ii. 51. 5. A simple manœuvre in R. vi. 90. 10 consists in bedusting the foe (*cakrotkṣiptena rajāsū rāvaṇam sa vyadhūnayat*).

* Nala recognized by his *rathanīhsvanaḥ*, iii. 73. 33-34.

† vi. 72. 26 ff.; 77. 70; vii. 134. 13.

‡ Compare Ulūka, in v. 161 (see above, p. 164).

spies to the other camp (vii. 74. 1). The news of defeat is brought the king by messengers called *vārttikāh*; not by the *sūta* that had been the daily reporter of events.*

We have also to notice that the *sūta* or professional driver was retained in peace as a musician, and seems in this capacity to have been employed as a regular eulogizer in feasts and processions, along with *bandins* and *māgadhas*.† Of the number of charioteers employed by a wealthy potentate we can form no estimate. The Epic says that Yudhishtira, when king of Indraprastha, possessed eight hundred *sūtas* with *māgadhas*, perhaps only musicians.‡

The *sūta* had not only to drive but to attend to the horses, put them up, take care of them, and, after battle, draw the arrows out of them and doctor them (v. 180. 1).

The chariot-steeds: Aelian tells us that the art of managing horses was not common, but a science confined to a special class. The Indian horses, according to his statement, are directed by a bridle, but not hampered by barbed muzzles or curb-bits.§ This statement is contradicted by Arrian's report, and is in itself of doubtful interpretation, as *χαλκός* || may be the rein with the bit, or the rein alone. The particular emphasis laid on the *ἐπιστήμη ἱππική* is worth our attention, as we shall see it well grounded by Epic proof.

The most popular war-steed is the horse (*aśva*, *haya*, *turaga*, *rathavāha*, *vāha*, etc.). Mules were, however, often employed, and seem to be admired especially on account of their great speed.¶ Camels are used as steeds only in peace; elephants, only when ridden. Horses are ranked as 'pairs' or as single steeds, the yoked two reckoned as an individual.** The relative position of the chariot-pair has been spoken of above; two horses seem to have been kept close to the pole by a yoke, and supported by two outsiders; though it is possible that we have in the *caturyuj* a double-yoke, one behind the other.††

* *vārttikāh kathyamānas tu mitrāṇām me parūbhavaḥ*, x. 4. 33.

† iii. 257. 1, etc.: see below, on music.

‡ iv. 70. 18. He had also ten thousand elephants, and thirty thousand chariots (ib.).

§ *ἐχουσι . . . τὴν ἱπερίαν ἄβασάνιστον*.

|| *ādāna*, said to be bit or snaffle in the older days, for which *khalina* was substituted, means only harness, apparently. On this and on the Puranic bridle, see Indo-Aryans, ii. 335.

¶ Two best horses are reckoned equal to four best asses in making a bargain: iii. 192. 51.

** The chariot-horses were properly so called. Thus, a king who had been hunting returns *crāntayugah crāntahayah*, 'with the pairs of horses and single horses tired out,' i. 78. 15.

†† *rathā sarve caturyujah*, vii. 60. 2. Cars are generally alluded to as *caturyuj* if any magnificence is intended: compare (v. 86. 6) 'I will give him sixteen cars yoked with four horses apiece.'

In case the ordinary arrangement is practiced, two horses are submitted to the yoke (*dhur*), and two run loose, only held by a strap fastened to each end of the fore-axle.* The characteristics of horses most extolled are youth, swiftness, and color. We have seen the age of three years mentioned with approbation,† and I may add that white horses are especially prized for swiftness, though other colors are conspicuous; some so diversified that one cannot help conjecturing that quaggas or zebras were imported and called horses. 'Swift as thought,' *manojava*, is the standing epithet of good steeds.‡ As I have given some attention to the art of the charioteer, it is only fair to say that the horses also were so well trained that they heeded every word, and are even claimed to have known enough to spring up before the knight and confuse him without being directed.§ This is a unique exhibition, however, and professedly a story only, giving us also (three verses before) an instance of the susceptibility of the Hindu horses in their falling upon their knees before their master. But elsewhere, in scenes of grief, as in Homer, we find the horses weeping.|| The prompt obedience of the steeds must be taken as true if we believe the wheeling-feats described. They must also fear no noise whatever.¶

Besides these characteristics, certain marks are praised, twists of the hair in various parts of the body, especially one on the forehead (*lalāma*). Such marks were probably explained in the *acvasūtra*, aphorisms on horses, which are mentioned with others on cars and elephants (ii. 5. 120). A full description of desirable steeds says: 'the best horses, lean, powerful, patient of the road, with fire and force, of good breed and manner, with wide nostrils and large jaws';** but the following list of 'markings' is probably interpolated.†† The most famous horses

* *pārṣṇivāhāu*, x. 13. 3. See above, p. 237.

† Abhimanyu's colts, *hayāḥ . . . trihāyanāḥ*, vii. 36. 9. They are decked with gold ornaments (ib.).

‡ Horses do not appear to be shod, but constant notice is taken of the 'terrible noise of their hoofs:' as, for example, in vi. 105. 13, *khuraçab-
daç ca sumahān*.

§ iii. 71. 23, *te hayottamāḥ samutpetur athā 'kūçam rathinam mohayann
iva*: the singular participle for the plural, probably because confused with the proper common use, where *mohayann iva* refers to the knight, as in ix. 58. 23 (compare P. W. s. v. *rathatūr*).

|| vii. 192. 20, *hayāç cā 'çrūny avāsrjan*; also R. vi. 57. 25.

¶ They must be 'patient to each sound,' *sarvaçabdakṣamāḥ*, or *turaṅ-
gamān çauṅkhavarānān sarvaçabdātīgān raṇe*, vii. 162. 3. 'Patient of the
arrows' is another laudatory epithet (*vinītaçalyāḥ turagāḥ*), vii. 112. 56.

** Virāhamihira (see next note) says horses should have long necks, and short ears, lips, and tails (66. 1).

†† iii. 71. 12 ff. Of the following sixteenth verse N. says, 'this verse is sometimes omitted': the marks are twelve in number, two on the head, two on each flank, two on each side of the chest, one on the crupper, and one on the forehead, in the spurious verse: in verse fourteen, ten

come from the Sindh country or from Kamboja; of the people of the latter country the pseudo-Epic speaks as among the finest horsemen. 'Western horses' in general are highly prized, but those of Sindhu and Kamboja are most mentioned. The latter are called 'speckled,' an epithet often applied, however, to any horse.* Sāindhava alone means a horse, as well as a man of Sindh.

Nearly as famous appears to be the steed of Balhi.† From the north and west countries Arjuna bought horses of parrot and peacock color, as well as those termed *tittiri*, partridge-colored, *mandūkākhyā*, frog-like, *kalmāṣa*, speckled.‡ Red is also a great favorite in horses, Droṇa's steeds being called 'red, powerful, pleasant to drive, like coral, copper-mouthed.'§ Common appellations are black, golden, moon-colored, horn-colored, flamingo-colored, bear-colored; but the finest of all were Arjuna's own divine steeds, and these were white.||

The reins and goad (the latter, of three pieces) have been already spoken of, in connection with the charioteer. Besides the straps of the harness, the horses sometimes wore leather robes and a net, probably as armor. So also a wooden breastplate seems to have been worn. Such is perhaps the *vraçchada* (vii. 23. 36). The bridle-bit¶ appears to be the same word as the Greek *χαλιδός*,

āvartas are mentioned. The commentator regards these as 'faulty' spots, which is better than to mention twelve and call them ten, as does Williams. These horses are of the famous Sindh breed. Compare for the *āvartas* iii. 161. 24, where N. renders *vimalākṣāḥ* by *daçāvartaçud-dhāḥ*. Bṛh. Sainh. 66. 2 ff. and Ag. P. 288. 1 ff. give ten good and ten bad *āvartas*, depending on the locality of the twists in the hair.

* ix. 8. 22; iii. 269. 6, etc. Compare xiii. 118. 13, *syandaneṣu ca kambojā yuktāḥ paramavājinaḥ*. On the color, compare vii. 23. 74; vi. 79. 50 (*karbura*). In B. Ā. Up. vi. 1, as a type of noble spirit 'a great and lordly horse of the Sindhu country' is used. Bhagadatta (with his Yavanas) has what are called *ājñeya* horses, blooded animals, also called in other descriptions swift and noble as companion epithets. Compare ii. 51. 15; v. 4490 (B. om.). Such *ājñeyas* had also the crown-prince of Hāstina: 'you have all heart can desire,' says his father, 'blooded horses,' etc., ii. 49. 9.

† *bāhika*, *bāhijāta*, i. 221. 51; v. 86. 6, etc.; R. i. 6. 24.

‡ ii. 27. 27; 28. 6; also extolled in 51. 4 (with parrot-noses); 61. 22.

§ iv. 58. 4 (*tāmrasyāḥ*). Cf. vii. 132. 29. Droṇa's horses are 'blood-red' (*rakta*); so *çoṇa* in vii. 191. 32 ff.; yellow (*palālakāṇḍa*-color) in vii. 23. 35.

|| Compare viii. 77. 3, (*açvāḥ*) *himaçaṅkhavarṇāḥ suvarṇamuktāmaṇi-jālanaddhāḥ*; vii. 118. 4, *çaṣvaṅkhavarṇāḥ* (C. 4687, *çaṣipūṅkha*); viii. 50. 5, *haṅsavarṇāḥ, çauṅkhavarṇāḥ*; viii. 76. 36, *sitābhavarṇāḥ, asita-prayuktāḥ*; ix. 11. 41, *hayāḥ . . . suvarṇakakṣāḥ . . . ṛkṣavarṇāḥ*; viii. 79. 59, *çvetāçvayuktam . . . sughoṣam ugram ratham (arjunasya*: compare viii. 38. 12, 'fifty white steeds,' with eighteen more in verse 13; also viii. 37. 26). More might be given, but will not profit us. The various flowers (decorations with which, *āpiḍa*, are common) with which the color of horses vies are given in vii. 23. 6, 24, 28 ff. (cf. R. vi. 19. 46, *kāṅ-canāpīḍā hayāḥ*).

¶ *valgā* for *raçmi* is later and doubtful (vii. 27. 23=1217, v. P. W.) for Mbh.; *kavi*, late for *khalīna*, is not found.

but the comparison is etymologically unsound, so that it is more reasonable to suppose with Weber that *khalīna* is a borrowed word, or one of independent origin.*

Outside of these useful trappings† we have a number of purely ornamental ones, such as the tail-bands mentioned in viii. 34. 30. One passage unites 'tail-bands, plumes, breast-harness, bits, ornaments of silver, brass, and gold'; but the last are not explained.‡ The plume, therefore, was not wanting, made of the tail of the *bos grunniens*, which is usually an adornment of the palace, one of the royal insignia, carried by princes upon the field (*cāmara* or *vyajana* and *vāla* together); here an ornament of the horse, probably worn on the head;§ often with the *kaksā* or *kaksyā*, the girdle or girth-band, which, like all else capable of decoration, is represented as adorned and bejeweled. The manes, *satā*, must be long.¶

Horses have names, as elephants have. Krishna's double team of four Kambojan steeds is often mentioned, the two pole-horses bearing the names Čaivya and Sugrīva, and the two outsiders called Maghapuṣpa and Balāhaka.¶

Special skill in driving horses is claimed by all the knights, though a distinction is attempted by Karṇa, where he says 'Čalya is better than Krishna; I, than Arjuna; Karṇa knows the heart (art) of horses; Čalya, too, has knowledge of steeds.'**

The number of horses has been spoken of above. One hundred horses draw a demon's eight-wheeler (vii. 175. 14), where probably no real fact is reflected. Yudhishthira's car in peace (but called a *jātro rathavarah*, or car of victory) is described as dragged by eight horses, and covered with a net and with bells.†† One well shot arrow slays a horse: for example, 'the

* *rathāc caturyujo hemakhalīnamālīnaḥ*, i. 198. 15. The gold nets are mentioned in v. 155. 10; vii. 9. 15. For goad and breastplate, see pp. 248-52; *kaṇṭaka*, armor for horse, in viii. 34. 33.

† The machinery of the horse is shortly grouped in one compound as *īśādaṇḍakayoktrayugāni*, 'pole, harness, yoke,' vii. 167. 13 (the 'half-yoke' is applied to horse or car, *ratho vidhuraḥ, hayāḥ . . . vidhura-grīvāḥ*). The reins are called usually *raṣmayah*, but *abhiṣu* (*grahaḥ*), viii. 32. 19; vii. 48. 29, is also used.

‡ *vālabandha, uraṣchada, khalīna*, viii. 24. 63; *prakīrṇaka*, 19. 43.

§ *Sq* ix. 9. 12: compare viii. 27. 33; vii. 163. 22, see cavalry.

¶ Compare vii. 184. 42, where gold yokes are on the horses; and the following *keṣarālumbībhir yugāḥ*. Long *satā* in vii. 175. 15.

¶ iii. 20. 13; x. 13. 3, etc. The last two are the *pārṣṇivāhū*.

** *hayajñāna* is a general term, viii. 31. 59 ff. Already noted is Čālihoṭra (compared to Mātali, Indra's charioteer), who knew the truth of the pedigree of horses (*hayānām kulatattvavit*, iii. 71. 27; Ag. P. 288). In respect of horse-diseases I have noted only xii. 284. 54, where horses are afflicted with *randhrāgata*, but I do not know what that means; it seems from the commentator to be a throat-trouble.

†† *kiṅkiṇījāla*, ii. 61. 4. The net here of the car, not of the horses, is more rarely spoken of, and one is often inclined to doubt whether it is the horse-net or car-net that is meant. It is generally so vaguely used as to leave the matter uncertain. But compare vi. 63. 13, *ūrvegeṇa saṅkarsuṇ rathajālāni*. Bear-skins or tiger-skins often protect the cars.

standard with one arrow, the two charioteers (*rathayantārāu*) with two; the *triveṇuka* with three; the bow with one; the horses with four,' where as many horses as arrows are implied.*

Mules are used in war, though occurring oftener in peaceful scenes. When harnessed they are apparently dressed like the horses, and are also covered with the same gold trappings (*hemabhandā*). Black-haired mules in a white chariot make a princely gift.† The ass, *gardabha*, is yoked to a *ratha*, but here a peaceful wagon is meant; the ass is goaded on the nose as the man walks beside it (xiii. 27. 10). Generally when a long journey is to be performed with great speed, mules or asses are taken. In one case a wagon, *yāna*, is dragged by mules going fourteen *yojanas* a day; and some 'black-necked huge-bodied asses' fly a hundred (*yojanas* in a day), a feat performed by Nala's horses also. Asses fattened like camels (also used for draught, xv. 23. 1 ff.) on various nuts, and brought as tribute with camels and horses, are mentioned.‡ *Yogo yogah!* is the common cry for 'harness up,' our 'putting to' coming near to the original.§

The knight of the war-car: A few words in regard to the personal position of the knight of the chariot, before we turn to the cavalry and elephants, or examine the arms of all these fighters. The well-born knight, *çūra*, sometimes *vira* (though

* vii. 156. 83 ff.: compare iv. 57. 36; R. vi. 69. 38.

† *dadyān çvetam acvatariratham yuktam anjanakeçibhiḥ* (*kṛṣṇakeçibhiḥ*, *acvataribhir yuvatibhir vā*, N.), viii. 38. 5 ff.

‡ Fourteen *yojanas*, v. 86. 12; *çatapātinaḥ*, ii. 51. 25; Nala's horses, iii. 71. 72. *uśtravāmih puṣṭāh piluçamīngudāih* (as tribute), ii. 51. 4. Compare i. 144. 18-19, *rāsabhayuktena syandanenā çugūminā tvaritam gatvā*.

§ *yogah!* or *sajjikuru!* literally 'the yoking,' 'get ready'; so *yogam ājnāpayāmāsa*, 'he ordered the horses to be put to,' viii. 11. 3. Compare *sajjikuruta yānāni ratnāni vividhāni ca*, xvi. 7. 11; so *kalp*, as in R. vi. 34. 20, *kalpyatām me rathāḥ çighraṁ kṣipram ānīyatām tataḥ*. Compare also xv. 22. 19 ff., where the king is to leave town, and cries to his assembled officers *niryātayata me senām prabhūtarathakuñjarān*, and to the guardians of the women *yānāni vividhāni me sajjikriyantāni sarvāṇi çibikāç ca*, the latter term being equally applicable to the palankeen (the women travel in *yāna* or *çibikā* usually, ib. 23. 12 and xii. 37. 41; compare R. vi. 99. 18, *Sītā* in a covered *çibikā*; *sarvā rathagatāḥ kanyāḥ*, vii. 60. 2, is, from context, not opposed); whereupon all cried *yogo yoga iti and yujyatām iti*. Compare for different conveyances, *yāna*, R. ii. 111. 45; of an army, R. ii. 124. 20. So for the order R. ii. 101. 33, *āmantrya sānyam yujyatām ity acodayat*. In ib. 36 are mentioned *vividhāni yānāni bhṛhanti ca laghūni ca*. In Mbl. iii. 73. 31, *mocayitvā* is unharnessing, 'loosing' the yoke, after which the chores were done (*upacarya çāstrataḥ*). The *narayāna* or team of men (xii. 37. 40) may be nothing more than a sedan-chair carried by men in its general use (for it seems a common name, for a genus), and does not belong among the war-vehicles. The women in xvi. 7. 33 follow Arjuna on *acvayuktāi rathāih* and *gokharoṣṭrayutāih*. *Çakata* is the same as *yāna*, but especially a load-wagon.

this may not imply nobility), is separated by various grades from those around him, and his performances as a fighter are, so to speak, adjusted to these grades. In nearest proximity is the charioteer, his friend it may be, but socially beneath him. Around him are certain followers and retainers. Of these, supposing him to be a prince or high noble, we must make three divisions. First and nearest stand his 'wheel-guard,' usually one knight each at the sides of his car. These are no humble followers, but his equals in rank, although, as examples show, often his inferiors in age. It is an honorable office for young knights so to 'guard the wheels' of a great champion, and in all probability, remembering the adolescence of many of these young warriors, it was a post sought for them by their parents, that they might not only be taught how to fight, but be protected in the battles by the presence of the champion. Thus Abhimanyu seems to be put under the care of Yudhishtira. The knight is the head of his clan. He is the captain of a large family body. But in the vast hosts depicted in the Epic, we find knights or kings standing at the head of whole hosts, comprising not only the family or clan but hired troops. These *bhṛta* or mercenaries form the third group behind the knight. They are of no importance except as a mass. The knights pay little attention to them, and stand to them in a merely formal relation. But between these two—the family friends or near relations guarding the wheel, and the foot-herd behind, *padānugāh*—stand the nearer 'followers' of the knight. These are comprised under the name of *anugāh* or *anucarāh*, and differ from the closer friends as from the vulgar. Among the *sānikāh* or general soldiers, the *anugāh* were the knight's particular backers. I think we shall not err if we take the *anugāh* or *anucarāh* to mean those immediate followers representing what remains of the clannish corps of an older age. The *anucara* is perhaps nearer than the *padānuga*, and therefore differentiated from him; but he seems to be the same as *anuga*.* There seems to be a certain personal familiarity between these 'followers' and their knight, explainable only on such an assumption. At the knight's death they invariably flee; they are bound up in his success or failure. The *anuga* is often beloved, and we find Karṇa weeping when he sees his *anuga* Durmukha slain, just sent forward to his assistance (vii. 134). As his name denotes, the *anuga* is strictly a 'follower,' to whom conversely the knight is a *purahsara*, 'leader.'† To illustrate the con-

* vi. 118. 44 speaks of the *anucarāh* as all being slain, as if a small body. See the general analysis, above, p. 222.

† *anugāmin* is sometimes used for the shorter form; *rathapurahsara* as a fixed epithet, xii. 332. 42.

nection between knight and followers it may be noted that, in the River-Vision (the most poetical chapter of the whole Epic), each knight returns to earth for a time, appearing to the eyes of his friends, 'bearing the same standard, and with the same car and dress,' as of old; but after the vision has lasted for a little it fades away, and each ghostly warrior returns to his own place in the world of the dead 'with his steeds and with his *padānuḡāḥ*,' so that these accompany him after death, as before. Here the whole general multitude that had died is meant.*

One knight often drives just behind another to protect him, the Hindu notion of defense being not to impede the darts of the protected, still less to guard him from shots if he were a brave knight, but simply to support him from behind, to be ready to aid him in need. Thus Bhīma, wishing to protect the king, 'went behind the king, alone, guarding him in the rear.† This is the normal position of the 'protecting' knight, who is not really a pro-rector at all, but a rear-guard to a single person. The *anuḡāḥ* occupied this position as a body. Then came the foot-followers. Compare the foremost hero followed by *çūrā ye ca teçām padānuḡāḥ*, viii. 96. 32; *çūrāḥ* are the *anuḡāḥ*.

The knight's adversaries are generally of his own class. If he becomes *apratirathah*, or has no 'foe-man worthy of his steel,' he rushes about the field till he meets one. Incidentally, as it were, he may shoot a few hundred common soldiers. He never makes a premeditated attack upon the foot-soldiers alone, but when their chief is killed, of whom they are, like the horses, an appendage, they ought to disperse; and if they do not, they are shot as nuisances, not as antagonists. Especially is this the case with the 'heel-catchers,' or soldiers deputed to annoy his rear. These are legitimately shot as cowardly villains, though they never appear to do much harm.‡

The knight in his chariot is equal to an army. Frequently we find thousands running from one mounted hero. In the case of a national hero, of course, no bounds are set in description. 'Through fear of Arjuna everybody, even the knights, ran away; the horse-riders abandoned their horses; the elephant-riders, their elephants—falling from war-cars, elephants,

* xv. 33. 13 ff., 17. In this verse (*savāhāḥ sapadānuḡāḥ*) *vāha* might almost be taken in the sense proposed by Bühler for the passage quoted above from Vasishtha, 'with their companies and personal followers.' But the ordinary meaning suits the passage.

† *prsthē rakṣan*, viii. 82. 14.

‡ viii. 75. 15, etc. The *pārṣṇigrāhāḥ*, 'heelcatchers,' gave their name to the one of the practical divisions of a king's 'circuit.' See above, p. 131, and compare *tasya pārṣṇīm grahīṣyāmo javenā bhīprayāsyataḥ*, iv. 53. 17.

and horses' (vi. 55. 25-26). In this way we often find the war-cars in heaps,' 'crowds,' etc., and a confusion so great that the phrase frequently turns up 'there was no chariot-path in that place:' so dense the crowd as to be impenetrable.* I close this view of the charioted knight with a description of action in car-fighting, *rathayuddha*, found in the seventh book (vii. 103. 28 ff.). 'Then much enraged, and licking his lips,† he looked, but found no spot on the foe's body not protected by armor. Nevertheless he shot; with sharp, well-delivered, deathlike arrows he rendered lifeless the steeds, and slew both the side-drivers; he cut the foe's bow and his quiver; he cut off his hand-guard (*hastāvāpa*). Then the ambidextrous knight proceeded to destroy the chariot, splintering it with arrows. Next the foe, deprived of his war-car, with two sharp arrows he pierced; pierced by arrows was he through both hand-guards in the flesh beneath the nails.‡. Then the kingly foe was tormented, and flight became his chief desire; but unto him in that extreme of need flocked his best bowmen, anxious to rescue (their king) overwhelmed by the darts of their foe. And the conquering foe they hemmed in with thousands of chariots, with harnessed elephants and horses,§ with floods of thick-packed footmen; so that neither the knight nor his charioteer nor the chariot was to be seen, for the rain of the arrows and the billows of the people. But the great knight by the power of his arrows broke that protecting array (*varūthīnī*), and wounded the elephants, now crowding about him. Smitten were the elephants, and smiting they rushed upon his chariot; but firm in all that tumult stood the car.'

B. *Cavalry*.—I find in the Epic no word corresponding to this heading, but several for 'horse-riders' (*açvāroha*, *hayāroha*, *hayārohavara*, *vājīn*, *sādīn*), all meaning 'those mounted on a horse.'|| This fact shows the use of the cavalry. Zimmer says that horse-riding is known to the Vedic age, but finds no mounted cavalry in battle. In the Epic age we have, indeed, cavalry, but unorganized.¶ The mounted soldiers are recognized as a body (*kulam*) apart from others, of course, but do not act together. They appear as concomitants of the war-cars, dependent groups; but separate horsemen appear every-

* *Vṛnda*, *vrāta*, *vañca* (*rathānām*) are found: compare vi. 63. 12. *polhayan rathavṛndāni vājivṛndāni ca*; and viii. 60. 30; 56. 58; iv. 53. 16. etc.; *nā 'sid rathapathas tatra*, vii. 187. 20, etc.

† *ṣṛkkinī parisamlihan*, a common expression.

‡ *hastatalayoḥ*; *nakhamañsāntareṣubhiḥ* (= *sandhir aṣaḥ*. N.). C. omits this last expression, and the next also.

§ *kalpitāḥ kuñjarāḥ huyāḥ*; usually *kṛpta*.

¶ Compare for terms vi. 46. 29; 55. 25; 63. 15; 71. 16; viii. 21. 23, etc.

|| Pāṇini gives us *açva*, but this is not necessarily cavalry.

where. Their employment was much influenced by that of the elephants. A body of horsemen is routed by an elephant. They were therefore detailed in small numbers to guard the war-cars and keep on the flanks of their own elephants. To the latter, indeed, they are formally assigned, but seem generally to be circling about the chariots.

Horse-back riding is so common, in peace as well as war,* that we are rather surprised at the indifferent riding displayed; for the cavalry-men are mainly conspicuous through falling off their horses, quite often from fear alone. They are generally grouped with the *hastisādīnah* or elephant-riders, as a force antithetical to the main strength of the army, the car-men. Thus, two knights drive on their cars 'with horses and horse-riders, as if with rushing swans;' and we read of riders (violating the code!) fighting with the chariot-men, 'piercing their heads.†' The verses preceding, with the swan-metaphor, describe the cavalry-horses as carrying plumes and *āpīḍa*, which the commentator takes for quivers, but which probably means garlands of flowers.‡ The same passage adds the fate of 'many riders of horses' slain by one knight 'with well-knotted arrows' (vi. 46. 23).

The horse-riders form a sort of aides-de-camp, and are dispatched with messages by the king, not being ordinary cavalry-men, but knights on horseback attending the monarch.§

Although the horse-riders are supposed to attack only their like, they contend with the chariot-men, as we saw above, and fight from rear and side the elephants which they dare not meet face to face; as the 'mountain-beasts,' when maddened by the fight, repeatedly overturn both war-cars and horse and rider together.||

In one instance, the horsemen attack the other horsemen with darts, but immediately after they attack a charioteer in the same way.¶ In another case, a knight overthrows car-men

* Riding was a common amusement. A son says to his father in i. 100. 61: 'You seem to be in ill health: you look green and poorly; you don't go out a-horse any more' (*na cā 'çvena viviryāsi*).

† vi. 46. 22, *açcār agryajavāih kecīd āplutya mahato rathān (rathāt ?), çirāṅsy ādadīre vīrā rathīnām açvasādīnah*.

‡ *hayāir api hayārohāç cāmarāpīḍadhārībhīh. haṅsār iva mahāve-gār anyonyam abhivādītāt*, vi. 46. 20 (*cāmarakalāpa*, N.). The *sādīnah* (seated equites) are opposed to the *pādātāh* (pedites), and to the *rathīnah*, those in petorrita. Compare vi. 71. 43; 73. 43; 75. 25; 79. 61; vii. 145. 36; viii. 28. 19, 22. 'Those on the shoulders of elephants' (*gajaskandhāh*) stand opposed to the foot-soldiers and to *rathopastha*- and *vājīprsthā*-men, viii. 78. 55 (here, as usual, the form *pādātāh*).

§ vi. 120. 28: cf. *çūrā hayasādīnah*, vi. 105. 11 (here a body-guard).

|| *sāçvārohān hayān kāñçeid unmathya varavāraṅgāh, sahasā cikṣīpuh . . . sāçvārohān viṣānāgrār utkṣīpya turagān gajāh, rathāughān abhimṛṇantaḥ sadhvajān abhikāramuḥ, etc.*, vi. 46. 26-27.

¶ vi. 57. 11, 19.

from their car and the riders from their horses' backs, more commonly said of the riders.*

The horse-riders are the fighters especially spoken of as 'drunk with fighting,' *yuddhaçāunda*.† The arms of the cavalry-men are usually darts only, but we find also spears and knives or short swords used by them.‡

As the riders fight alone, when killed they fall unnoticed, and their horses run loose, increasing the uproar and confusion (vi. 105. 21 ff.). Their most efficient aid was given when they were hurled against the foe after the elephants had become useless, and the throng was too dense and mixed for the employment of war-cars. Then the agile and single horsemen could do good work on the herd of frightened foot-soldiers, unimpeded by fear of heavier foes (so in ix. 23. 60 ff.). The formal and unreal arrangement of the army distributes ten or one hundred mounted horsemen as a guard to each elephant (see below).

The horsemen are represented as falling asleep on their horses' backs when the fight has been continued too long, with the elephant riders and charioteers keeping them company in weariness.§

Outside of regular cavalry-men, we find that the chariot-knights and kings often flee on horses when their cars are disabled, and no other refuge presents itself, such as leaping into a friendly car (the common escape) (ix. 25. 23).

The horse of the cavalry-man was not driven by a goad, as was the chariot-horse, but by a whip. This (described as gilded) was fastened to the wrist of the rider, leaving his hand free.¶ The whip gives us a figure in describing a fiery-tempered man, 'restless under that word as is a fine horse under the whip.'¶ It is doubtful whether saddles were used; but the bridle and bit are to be assumed, as in the case of the chariot-horse.

* vi. 108. 33. Compare the like accounts in vi. 63. 15: *sādīnuç cā 'çva-prṣṭhebhyaḥ* a knight knocks down with his club: as he does the elephant-riders, infantry, and all other opponents, 'like an elephant grinding down reeds' (*naçvalāni*, ib. 14).

† R. ii. 125. 14. Also of barbarians on elephants, Mbh. vii. 112. 17.

‡ vii. 165. 21, *sādīnaḥ sādībhiḥ sārđham prāsaçaktyrṣṭipānayaḥ samāgacchan*. Compare arms of elephant- and horse-riders as *prāsa, mudgara, nāstriṅga, paraçvađha, gadā*, R. vi. 52. 11; *prāsa* especially for horse-rider is assumed, R. vi. 49. 67; and above, vi. 57. 19.

§ 'Some fell asleep on the backs of their horses, some in the chariot-nest, some on the elephants' shoulders,' vii. 184. 38.

¶ *budđhāḥ sādībhujāgr̥ṣu suvarnavikṛtāḥ kaçāḥ* (along with beryl-handed *añkuças* for the elephants), viii. 58. 30. The chariot-horse was pricked with a *pratoda*, the elephant with a *tottra* and an *añkuça*, and the cavalry-horse was driven by a *kaçā*, vii. 134. 6.

¶ *vaco na mamṛṣe . . uttamāçvaḥ kaçām iva*, ix. 32. 36. Compare viii. 21. 23, and R. ii. 16. 22, *vākkaçayā* (Epic, loc. cit., *vākpratodena*) *pa-rīpūḍitalaḥ kaçaye 'ca hayaḥ sālhus tvarāvān*.

Probably the frequently-mentioned blankets found on the field served as saddles. The riders wore breast-plates and turbans besides their arms.*

C. *The elephant-riders.*—The common names for the elephant used in the Epic, *gaja*, *nāga*, *dvīpa*, *hastin*, *karṇū*, *karin*, *dantin*, *drivada*, *mātāṅga*, *kuñjara*, *vāraṇa*, *pota*, for the most part serve merely as plain descriptive adjectives ('the twice-drinker,' 'the handed one,' 'the tusked one,' 'the defender,' etc.), and are synonymous.†

These beasts were employed *en masse* as a moving wall in attack at the outset of battle, as a standing wall in defense, and, thirdly, as individual foragers through the confused crowd of blood-seeking desperadoes that make the back-ground of every battle-scene. More rarely, they were used by respectable knights in a civilized manner. But, as generally presented to us, we find them mounted by a gang of low soldiers sitting on the shoulders of the beast (*gajaskandhāḥ*), who were armed with knives, daggers, pots of oil, stones, and other weapons and missiles, with which to strike the soldiers beneath. The *gajā-rohāḥ* or *hastisūdināḥ* were also set to catch the victims below by the hair and then cleave their necks, or to slip forward upon the tusks and slay the horses or men that the weapons of the beasts might miss. The cavalry are especially forward in attacking elephants, but always covertly. It required a special study to be master of an elephant, and the 'elephant-science'

* In viii. (21. 23) 24. 66 (horsemen armed with darts, swords, spears, and wearing *kañcuka* and *uśūsa*); the *khalīna*, coverings, etc., of vi. 54. 59 ff., might belong to any horses. I hesitate to take *pīṭhaka* in i. 84. 21 as 'saddle,' (as P. W. suggests). The commentator understands a royal team (*rājayogya*), and describes it as one drawn by men; the *narayāna* we have had above. The context would favor a vehicle, perhaps like *ṣibikā* in the next verse, which would sufficiently explain the 'seat' (*narayānaviṣeśās takhatarāvā iti mleccheṣu prasiddhāḥ*), and give the same meaning of couch as in *pīṭhikā*, e. g. R. v. 13. 54. The *pīṭhamarda* (iv. 21. 33) does not necessarily imply a saddle, as the seat may be a blanket (*kambola*), or *aṣvāstara*, *paristoma*, *rānkava*—all these being used on the horses, 'spread over them' (vi. 96. 74); although in itself we might well regard *pīṭha* as the saddle, were it not for the negative evidence of lack of such things in descriptions teeming with everything wearable by horse or driver. In vii. 23. 37 we find of a chariot's steeds *rakmapīṭhāvākīrṇā hayāḥ* (C. *prṣṭha*, v. N.): taken by the commentator to mean yellow-backed steeds, but certainly not here saddled. But compare from the Puranic period Var. P. 96. 10, *aṣvāḥ . . . kāñcanapīṭhanaddhārohāir yuktāḥ*. *Paryāna*, saddle, is not used. Compare *padma* of elephants, below. Worth noting is the fact that the earliest Greek allusion to India contains a reference to what some interpret as saddled camels used like horses. (Aeschylus, Suppl. 284; cf. Hd. iii. 99.) In vii. 112. 55, horses are made to drink wine before the fight.

† The *gajāroha* rides the *dantin*, vi. 55. 25, etc.; and the *gajāroha* rides the *kuñjara*, xvi. 7. 36.

was an important part of military discipline.* The weapons usually employed against the elephant are (iron) arrows; but the statement sometimes made in the Epic, that a knight kills an elephant with one arrow, like so many others of like nature, must be taken with the latitude that Hindu longitude demands. The remark of Arjuna that he can kill the Kirāta with the end of his bow,† as a man does an elephant with the end of a sharp stake (of iron), shows perhaps that this was the method of disposing of them if they became ungovernable.‡

The great chiefs, princes, kings, mount elephants so rarely

* *gajaçikṣā* with *nītiçāstra*, i. 109. 19; compare viii. 38. 16, *hastiçikṣa-kāir vinitāh*. The art consisted as much as anything in keeping one's position. Compare vii. 87. 19, where the 'harnessed and cruel' elephants (*varminah*, *rāudrakarminah*) are described as 'ridden well' (*suvirūdhā hastyārohāih*). In attacking one crawls under and smites in vii. 26. 23 (*añjalikāvedha*).

† Compare xvi. 7. 62, *dhanuṣkoṭyā tadā dasyūn avadhīt*.

‡ Compare the arrangement of the elephants in the day's opening array, described in the battle-orders above. In mid-battle such a compound line is also spoken of as the 'line of elephants,' attacked by one knight (*nāgānikam*, vi. 115. 29); but ordinarily only disordered single beasts are found. The descriptions are much alike; the riders' reaching down, seizing by the hair (*keçapakṣe*), and beheading the foe, is spoken of in vi. 57. 14; where also, 11 ff., we find the cavalry attacked by *prāsa* and the elephants by *nārācā*, (iron) arrows, and, 16, the 'hero knowing well the battle' crawling out on the tusk, *kariviṣānastha*. The *viro raṇaviçāradaḥ* and *gajaçikṣāstravedī*, here so called, shows more respect for this kind of fighting than our disgust can appreciate. The training is required not only of the elephant leader or keeper (*mahāmātra*), but of the riders, who are 'experts' in this sort of fighting (viii. 22. 3), and, as this verse shows, in part foreigners (*mekalāḥ koçalā madrā daçārṇā niṣadhās tathā, gajayuddhesu kuçalāḥ kaliṅgāḥ sāha*). Compare vii. 112. 28; xii. 101. 4, *prācyā mātaṅgayuddhesu kuçalāḥ kūtayodhinah*. The verse viii. 78. 55-6 shows the ordinary position of these riders to be on the shoulders of the elephant, as distinct from those upon the back of the horse, or the 'lap' of the war-car (*kṛtvā çūnyān rathopasthān vājipṛsthān . . . nīrmanuṣyān gajaskandhān*). For the fight of elephant against elephant we have the proverbial comparison *pratyudyayāu rathenā 'çu gajam pratigajo yathā*, viii. 86. 21, and an example in vii. 26. 36: for the way in which the beasts trampled and tusked their adversaries while themselves attacked, one of many examples: *mahāgajān pārçvataḥ pṛsthataç cāi 'va niçaghnur huyasādinaḥ, vidrāvya ca bahūn açvānā nāgā viṣāñāiç cā 'pare, jaghnur mamduç cā 'pare, sāçvārohāñç ca turaṅgān viṣāñāir çiryādhitū ruṣā, aparā cikṣipur vegāt pragṛhya . . .* viii. 28. 20 ff. Like accounts in vii. 153. 5; vi. 46. 27. For weapons used, see more particularly below. Arjuna's comparison of his *dhanuṣkoṭi* to the *çulāgra* with which an elephant is killed is found iii. 39. 48. It may be a sword. The tusk itself is called pole-tooth, *iṣādanta*, from its size, v. 86. 7 (*lāṅgala*); the same verse containing the oft-noted rut-mark of this beast (compare i. 221. 53), with the implication, further, of eight attendants for one elephant being the proper thing: *nītyaprabhinnān mātaṅgān iṣādantān prahāriṇah, aṣṭānucaram ekākam aṣṭāu dāsyāmi . . .* The capture of elephants is noticed in R. vi. 62. 35, *arthāir arthā nibadhyante gajāir iva mahāgajāḥ*: not, therefore, by females, as Strabo asserts. Vāyu P. i. 16. 19 alludes to the training of wild elephants by a hook.

that we may be entitled to infer that the practice of a king's fighting from a great howdah (*vimāna*) on an elephant's back is later than the other methods of car-fighting, and that mention of it will be among the later additions. It was probably first customary in peaceful jaunts, and then extended to war; the latter must have been synchronous with abdication of warrior prowess in the main; yet we find a few instances of elephants being ridden in war, notably by the Yavana prince.*

The elephants were attended by 'protectors,' both the animal that served as general 'guard of the herd,'† and the human flank-protectors, of which we find four, one for each corner of the beast.‡ But we also find seven car-men, guard of one elephant, as the normal number.§

The still more formal distribution of forces gives a rather different picture of the relative use of the elephant. This account groups all the fighters engaged, and may be here given in full. The elephants are looked upon in this passage not as an independent array, but as adjuncts to the knights in chariots, ten or fifty about each car. Here we find that seven men (not in chariots, as above) attend each elephant, two leading it by hooks (*avikuṣadharāv*), two carrying bows, two carrying swords, one carrying a spear and club (*çaktipinākadhrt*). According to the same description, the distribution of horse-riders was thus: if each war-car had ten elephants, then each elephant had ten horse-riders, and each horse-rider in turn had a guard of ten foot-men, *pādaraksāh*; if each car had fifty elephants, then each elephant had one hundred horsemen, and each horseman seven foot-men.||

* Compare i. 69. 13. *tañ (rājānam) devarājapratimam mattavāraṇa-dhūrgatam . . niryāntam anujāgmire*. In war we find a prince on an elephant in iv. 65. 6 (the beast is slain forthwith by one arrow in the forehead). Duryodhana enters the war thus, vi. 20. 7. Compare Bhagadatta, vi. 95. 33 ff.; vii. 26. 19 ff.; and Wilson, iv. 294. The Greeks give a special account of the Hindu elephant (see Arrian) and manoeuvres with them, partly confirmed by our text (see I. A. vi. 239).

† *gajayūthapa*, vi. 54. 41, etc.

‡ *gajānam pādaraksāh*, vi. 46. 13; four in iv. 65. 6: these are knights in chariots supporting a prince who rides an elephant.

§ vi. 81. 14. *nāgenāge rathāh sapta sapta cā çvā ratherathe, anvaçvañ daça dhānusa dhānūske daça carminah*. Compare xvi.*7. 36, *kuñjarāv gajārohā yayuh . . sapādaraksāh samyuktāh sántarāyudhikā yayuh*.

|| So in v. 155. 16 ff. The Agni Purāna gives only fifteen footmen, and other accounts also vary, as three horses and five footmen are sometimes quoted. Three bowmen were on an elephant, according to Megasthenes. Compare Wilson, iv. 292 ff. The Matsya array numbers 8,000 chariots, 1,000 elephants, 60,000 horses, in iv. 31. 33. A saint sets the example of having 100 elephants to each car, and 1,000 horses to each elephant, vii. 60. 3-4. The truth of all this reckoning is simply that we have different orders recommended at different times, by different persons, and this late arrangement of the Epic itself is purely formal, and self-contradictory, if we take it as a law.

These 'mountainous beasts' (viii. 85. 4, etc.) are armed with spikes and iron harness. They wear a *kakṣyā'* or girth about the middle, and carry flags, *vaijāyantī*, emblems, hooks, quivers, guards, neckchains, bells, wreaths, nets, umbrellas, and blankets, possibly with rings about the feet.*

The *tottra*, prod, and *aṅkuṣa*, hook, are used to urge and direct the beast. To these we have perhaps *kaṅkaṭa* to add, as a goad.† The elephant is at his best when sixty years old, and then a type of male vigor; gift-elephants are so spoken of, this being the perfect age.‡ But even a young elephant is formidable: 'then he became a young elephant' is a self-explaining metaphor on the battle-field.§ No special sagacity is shown by the elephants, except in the burning of a forest, where they try to squirt the fire out (i. 223. 80); but they are celebrated, as the horses are, for their endurance of noises when well-trained (ii. 61. 16); and, like the horses, they weep in battle.|| They are occasionally called by pet names. Droṇa names his

* Compare above, and v. 152. 16, *gajāḥ kaṅṭakasamāhāḥ, lohavar-mottaracchadāḥ*, with the like description of metal armor in xii. 100. 7-8. Compare R. vi. 111. 10, *hemakakṣyābhīḥ saghaṅṭābhīḥ kareṇubhīḥ*; and R. v. 80. 32, *kaṅṭakavarma*, of elephants. See, too, Mbh. vii. 36. 34; and the (gold) *jāla* or net fastened to the elephant in vi. 20. 7. The *kaṅkana* or foot-ring, iii. (C.) 15757, is *kiṅkiṇī' (-bhūṣaṇaḥ)* in B. 271. 22. The *grāiveyā(vi)*, necklaces, were probably for use as well as ornaments; they are associated with 'bells and spears' (vi. 54. 54; cf. 96. 69). The coverings, as in the case of the horses, go by various names, *kambala, āstara, āsturaṇa*, etc., and are of wool or goat-hair (*rāṅkura*: the best woolen stuff, *āvikaṃ*, from the mountaineers. Pārvaṭīya, v. 86. 9). Colored woolen blankets, *kuthā*, are also common (vi. 57. 26; viii. 24. 64). *Paristoma* may be a bolster; it is found with the other coverings on carriages and elephants, and is said to be of different colors. The elephants themselves are dark (-blue) or speckled, *gajā nīlāḥ* of vi. 59. 15, etc. Indra's white elephant does not appear. *Padmīnaḥ* qualifying *gajāḥ* may mean speckled. It might also mean 'bearing a high saddle': literally, 'furnished with (something like) a lotus,' used usually of spots on the forehead. But in i. 198. 16, N. defines *padma* as an eight-cornered, eight-pillared saddle, i. e. a howdah. Compare 'the gold-girdled, wreathed, gold-decked *padmīnaḥ*' elephants of ii. 61. 15 (N. here 'speckled'). In vii. 115. 55, *vimāna* is howdah (later *varaṅḍaka*). In the first passage the tusks are gilded. The bells are called 'sharp-sounding' (*paṭughanṭāḥ*) in i. 221. 54. Gold girdles and flags also in R.; e. g. *gajāyodhā gajāḥ caī' va hemakakṣāḥ paṭākīnaḥ*, R. ii. 101. 35. Compare Mbh. vi. 60. 4.

† *Kaṅkaṭa*, e. g. vii. 187. 47, may mean breast-plate or goad. The *tottra*, vii. 134. 6: *aṅkuṣa*, vii. 29. 17 (*sarvaghāṭi*); in ix. 20. 16, both of these urge the 'elephant-king'; compare vi. 45. 5; and also ib. 55. 32 (for cattle, *aṣṭrā* is the proper goad). The 'sound of bells and elephants' goads' is here mentioned. The goad, like the whip, is gilded, vii. 148. 46. Compare vii. 29. 19b-21a (C. omits).

‡ *saṣṭihāyanāḥ, prabhinnāḥ*, iv. 31. 31, etc. As a gift, compare viii. 38. 9.

§ *bhīṣmo poto 'bhavat tadā*, vi. 81. 45; *poto* as 'an elephant of ten years' seems too young.

|| *aṅṛuṇi mumucur nāgāḥ*, ix. 23. 24.

elephant for his son.* A sort praised in vii. 112. 17 is *āñjanaka*. The metaphor of the horse impatient under the whip is repeated in the case of the word-wounded knight enduring contempt as little as an elephant crazed by the hook.† Their terrible noise is often alluded to.‡

D. *Weapons*.—The distinction between offensive and defensive weapons is naturally not to be attempted in all cases. I divide for the sake of convenience, and shall treat with the strictly offensive weapons the non-offensive appurtenances of the same.

The arms inevitably first are bow, quiver, and arrow, as one group.§

1. The bow: This is the weapon *κατ' ἐξοχήν*, for, as in the Veda, *āyudha* is both the general word for weapon and, without limitation, for the bow.¶ More specific names for this weapon are the commonly used words *dhanus*, *cāpa*, *çarāsana*, and (from their material) *kārmuka*, *çāriṅga*.¶

* *açatthāme'ti hi gajaḥ khyāto nāmnā*, vii. 190. 17. The name, from its assumed derivation, fits an elephant better than a boy, and we might also, regarding the age of each, imagine that the boy was named for the elephant, but it is said otherwise: *açeasye 'vā 'sya yat sthāma nadataḥ pradīço gatam, açatthāmāi 'va bāto 'yam tasmān nāmnā bhariṣyati*, i. 130. 48-49. The immortal elephants all have names, the most famous being Indra's Āirāvata. Compare v. 99. 15, and the verse *āirāvataḥ puṅdarīko vāmanaḥ kumudo 'jjanah, puṣpa-dantaḥ sarvabhūmah supratīkaḥ ca diggajāḥ*, Am. Koç. 1. 1. 2. 5; Ag. P. 19. 27; Br. Sañ. 32. 1; K. Nīt. xvi. 8; Lassen. 1. A. i. 364.

† iv. 66. 1. Compare the same figure, R. ii. 39. 43 (*toltra*).

‡ *bṛhīta*, ix. 9. 14; 55. 42. The Brh. Nār. P. 10. 15 ff. gives *hreṣita* as the sound of horses; *bṛhīta* as that of elephants; (*am* as that of bow and arrow (compare *tañku*, *damaru*, doubtless onomatopoeitic), and *phū* as the noise of the war-car. In closing this topic, the exact statements of the *dhanurveda* in the Agni Purāna on the use of the steeds, elephants, and arms employed may be quoted as appropriate, though not finally explaining the more vague statements of the Epic. Thus, at the end of chapter 251 we find three horses given to the car: two hook-bearers, one leader, two shoulder-riders, and two swordsmen given to each elephant; previous to this we have a purely Epic list of ordinary arms, and the statement that the sword is worn on the left, the quiver on the right, the noose is ten hands long, the arrows are twelve *muṣṭis* long, the bow is four hands, and smaller for the foot-soldiers; the soldier should shoot low, etc. The divisions of weapons, etc., as in the Epic (compare Ag. P. 248. 1 ff., 24, 36 ff.; 249. 2 ff.; 250. 1 ff.; 251 to end).

§ Rājendralāla Mitra remarks, Ind. Ar. i. 297, that *dhanurdhara* (bow-holder) is even to-day applied to one that knows how to achieve 'success in other walks of life.' This art being well learned indicated a perfect warrior. The bow is at all times the type: e. g. *vāmah* . . . *çreṣṭhaḥ sarvadharmamatīm*, R. v. 30. 5 (see below, on *Dhanurveda*). Bow, arrow, and breast-plate are the weapons and defense of the early period. Compare Āit. Br. 7. 19 (Weber, Ind. Stud. x. 30), *athāi 'tāni kṣatrasyā 'yudhāni yad açvarathaḥ kavaca iṣudhanva*.

¶ *sarvāyudha*, vii. 175. 12; the bow, vi. 118. 43, etc.

¶ The form *dhanvan* (*dhanva*) is rare, but occurs in composition: *agradhavā*, viii. 65. 1; *dr̥ghadhavā*, vii. 61. 9 (compare *dr̥ghavedhana*, sure shot, in *nimitte dūrapātīve laglutve dr̥ghavedhane* . . . *bravītu* . .

The 'bowman' is often synonymous with 'charioteer,' but may be used of footmen in the field.* The end of the bent bow was the place whence, as the descriptions show, the arrow was shot; and I take it this means that the bow was bent into a circle, so that the arrow head seemed to lie back of the two bow-ends.†

The favorite material for making this weapon is the *kārmuka* wood, and this word used alone as adjective indicates the bow.‡ The horn-bow appears, however, to have been the best, for it was this that Vishnu used.§ The Greeks report at an early date the use of cane bows by the Hindus, as well as of iron-tipped cane arrows.|| The length of the bow is several times spoken of as *tāla-mātra*, a 'palm' long, which, when compared with the numerical qualification employed in *śaḍaratnī*, may probably be interpreted as six cubits in length. But we hear of the bow of a demon being a cubit broad and twelve cubits long, and the shooting-strifes for a wife in the Epic and in the Rāmāyaṇa alike would indicate an (unusual) use of very heavy bows: the scene in the Epic representing far-distant shooting; that in the Rāmāyaṇa, expressly a weighty bow. According to Egerton, five feet is the ordinary length of the Hindu bow (generally of bamboo).¶ As in the Vedic age, the knight held the bow as high as possible: that is, with the shaft level to the eye, and well forward, pulling the arrow back to his ear; and he must therefore have raised the bow perpendicularly, not horizontally, and not have pulled, as did Homer's heroes,

viṣeṣam, vii. 74. 23; *dhanva* in *dhanurdharāya devāya priyadhanvāya dhanvine* . . . (*namaḥ*), vii. 202. 44. Like *ṣarāsana* is *ṣarāvāpa*, a name of the quiver (not the 'bow,' P. W.) from regarding it as a storehouse of arrows. Examples in vi. 90. 61; vii. 188. 21 (*ṣarāsana* and *ṣarāvāpa*): cf. viii. 77. 42 (*dhanuḥkācām ṣarāvāpām* . . . *nadīm*); vii. 14. 12; 156. 177.

* *dhanvin* = *rathin*, vii. 103. 33. The term connotes even a slave in R. ii. 92. 15. But the usual use is as in vii. 34. 17; R. vi. 35. 10, *dhanvī rathastho 'tiratho 'tivīraḥ*, 'a bowman, a charioteer, a splendid charioteer, a splendid hero.'

† The expression *dhanuṣkoṭyā 'bhicoditāḥ*, 'hurled by the bow-end' (viii. 35. 17), is to be taken more prosaically, as merely indicating the strength of the bow. *Dhanuṣkoṭi* is in the Vedic language *ārtū*. The later language has *aṭani* as the notch on the end, perhaps a dialectic equivalent.

‡ *kārmuka* as bow, iv. 38. 11; 64. 2; 43. 11, etc.; compare *kārmuka*, M. xi. 139.

§ *ṣārṅga*, viii. 79. 23, etc.

¶ Hd. vii. 65.

¶ Arjuna's bow is called *tālamātra*, i. 189. 20; v. 160. 108; Droṇa's is a *śaḍaratnīdhanuḥ*, i. 167. 25. Another palm-estimate is that of *vyāyā-masaham atyartham trṇarājasamam (gāṇḍivam)* in iv. 40. 6, where the bow is also (7) gilded, and 'without holes' (*avraṇam*). Compare *tālamātram dhanur gṛhya*, vi. 49. 35; *tālamātrāni cāpāni*, vii. 45. 16. The demon's long bow is described in vii. 175. 19. Compare x. 18. 6, a like bow of five *kiskus*.

to the breast. The great bow so pulled looked like a crescent, or, in view of its terrible appearance, is likened to the weapon of Indra.*

Arjuna alone is 'left-handed' (*savyasācin*), or, more truly, ambidexter, and uses either hand to draw the string.†

The string (*jjā*) of the bow should be made of *mūrva*-grass. It is a mistake to suppose that (as the Nītip. teaches) the bow was strung with two cords at once. The cord is noosed at each end, and consists of different strands, but bound together into one string. The sound of the bow-string twanging on the hand-guard of leather is often alluded to as one of the common noises of battle.‡

* The expression 'up to the ear' is used either of bow or of arrow. Compare viii. 90. 57, *tato 'rjuno dvādaśabhiḥ sumuktāir varāhakarṇāir niçitāiḥ samarpya, nārācam āçivīsatulyavegam ākarṇapūrṇāyatam utsasarja*; ix. 28. 5, *ākarnaprahūtaḥ (çaraḥ)*; viii. 83. 39, *supunḥkena suyantritena susaṃçitāgreṇa çareṇa ākarṇamuktēna samāhūtena (çāraḥ . . çiro jahāra)*; vii. 47. 9, *rukmapunḥkhāiḥ . . ākarṇasamacoditāiḥ*; vii. 156. 184, *mumocā 'karṇapūrṇena dhanuṣā çaram*; R. vi. 51. 75, *karṇāyata viçrṣṭena çarenā 'nataparvānā*; R. vi. 79. 16, *bhāgam ākarṇāt pūrāyitvā sasarja*. The bow is 'full' when rounded; then the epithet is carried over to the arrow. Compare II. iv. 123 for the Homeric view: *νευρή μὲν μαζῶ πλάσειν*. The size and shape are indicated, as stated above, in vi. 44. 17; vii. 38. 18; 40. 33; 124. 35; 156. 111, *āyatakārmukah*; 167. 46; 169. 28. Gāṇḍīva (Arjuna's bow) looks like a wheel of fire, it is bent so far into a circle (*agnīcakra*, iv. 64. 14). Compare R. vi. 51. 87, where the arrow is joined to the *āgneyam astram*, and both it and the bow 'gleam' (*javāla*). The circle is expressly stated to be the shape taken by the bow. Compare references above with i. 133. 3; and vii. 160. 47, *manḍalīkṛtakārmukah*, 'one whose bow is bent into a circle.'

† vii. 143. 34. In vi. 59. 96, *vīcakarṣa dorbhjām mahādhanuḥ*, we have an exceptional act, probably uncalled for by actual necessity, as the bow was of course stretched back by the hand, or even by the fingers alone: *çaram . . . aṅgulībhir vyakarṣata*, i. 182. 59.

‡ In iii. 23. 3; vii. 90. 25, etc., we find the *jjā māurvī*. Compare viii. 21. 23, *māurvī tālatre nyahanat*. The *jjāçata* of viii. 90. 98 speaks in fact against a plurality of strings (general verses on the use of the bow-string, *jjāvadhāna*, etc., ib. 99-100). Arjuna's bow has one string noosed at each end, *jjāpāçu* (compared with the two *upadhāna*), iv. 35. 16. When one bow-string breaks, another has to be tied on, iv. 59. 9: *yojāyāmāsa navayā māurvī gāṇḍīvam*. Compare iii. 168. 76, *ajarām . . jjām . . gāṇḍīve samayojayat*. The *mūrva* string constantly used in the Epic is partly replaced by a string of hemp and hide in the later Agni-Purāna; and here metal as well as horn and wood (or 'iron and horn mixed') is employed in the making of bows (which are further, according to this authority, four cubits in length); but the bamboo is most extolled. This passage, Ag. P. 244. 4 ff. (quoted without reference by Wilson and R. Mitra), might there have been contrasted with the Epic usage distinctly earlier (compare *dhanuṣi çarāṅç ca diptān māurvīç ca* in iii. 23. 3, etc.) Some technicalities may be mentioned here. Drawing the bow is *vīkṛçya*, *utsrjya*, *ānamya*, *vidhuvan*, *viçphārayan*; the shooting of the arrow is *viçrjan*, or a compound of *as* or of *sic*, 'casting' or 'emission'; *çyu* is also used in the same way. Of the bow-string we find *vīkarṣan*, 'stretching'; *avasrjya*, 'letting go'; in case of a knight ready to shoot, *avamrjya*, 'fingering the bow-string,' is used. *Sajya*, *sajja* are used of the bow, but as well of the arrow. Compare for

As to the decorations of the bow, it is generally described first as being 'pure,' that is spotless, and then as 'of gold' or 'golden-backed:' by which we may understand some kind of gilding or gold ornamentation; and this is probably meant when 'gold bows' are spoken of by later works, although among metallic arms. Not only was the bow painted many colors (i. 225. 8, 9), but it was ornamented with all sorts of gold figures, 'drops of gold,' insects, elephants, etc., distributed (*vibhaktāh*) upon its surface; representations also of the heavenly bodies are to be found upon it; and even gems of value were set in the wood.* The range of the bow (*bānugocara*; *dhanu-antara* is a technical measurement)† is not described as very great, but the force of the shot is represented as terrific. It is difficult to say whether the many stories of heroes slaying elephants and horses with an arrow apiece, overturning chariots, and transfixing armed knights, are all due to poetic exaggeration, or may be based upon relatively good shooting power. Reading as from the point of view of the later writers' knowledge, we should not be inclined to acknowledge any great dexterity in the use of the weapon. The knights are portrayed as wonderful in the strength and rapidity of their shots; but their shooting except for this is rather ineffectual. Their aim was apparently less good than their quickness in reshooting, although a few cases of good shots are mentioned, and the practice of amusing one's self by shooting into the foe's open wounds is largely indulged in by the heroes, and argues well for their skill. But had they really had any great expertness, they would not have wasted so many arrows before killing each other, in the single duels; for, in

the ordinary use *tāv anye dhanusī sajje kṛtvā çatrubhayanīkare*, vii. 170. 43; and, for illustrations of the above uses, see P. W. s. *sajja*, and compare vi. 79. 9; 74. 1; 101. 42; 109. 13; 81. 38; vii. 16. 36; 127. 28; 145. 51; 183. 51. In vii. 2. 23-29 (warrior well described) we find *cāpānī* and *jyāh saimahanopapannāh*, of the different string-strands. Compare also vii. 191. 3, *dhanur jāitram ādāya jaladavīhsvanam dṛdhajyam*, etc. *Adhījya* is not often used. An instance is viii. 20. 25; *dhanur athā dhījyam kṛtvā*. The setting on of the arrow is *samdhāna*. The bow is always unstrung when not in use. The technical use in R. seems to be about the same as in Mbh. Compare R. i. 77. 38, *samdhāya'sa çaram cāpam vicakarṣa . . vikṛṣya . . tad dhanuḥ saçaram* (analogy with *saj-jam dhanuḥ*, compare ib. *vijya*). *Sajjīkuru ratham* (xiii. 53. 30) shows further extension, also used of other objects: compare *sajjay* and *sajjī-bleū*.

* In vi. 100. 13, and often, we find the expression 'bow with a golden back' (*hemapṛsthām dhanuḥ*), while the animal-ornamentation is described, e. g. in iv. 42. 1 ff., as if figures were placed at equal intervals, the 'drops' (*bindavaḥ*) being the simplest form. A white bow ornamented with the figures of five leopards is here mentioned. Gems on the bows (as on most of the weapons of the knights) are common: compare vii. 168. 11.

† Compare *dhanuḥ* in *dhanuḥçataparīñāhaḥ*, R. vi. 44. 36, etc.

spite of 'all-protecting armor,' several vital points were exposed, and we often read of one knight wounding another with several successive arrows, yet doing no serious damage.*

This brings us to the point of regarding the skill most praised in handling the bow. We find it is the 'quickness and lightness' that the great heroes of the bow are famous for (not sureness), and that the quickness consists in the ability to discharge several arrows at once, as the Hindu says: that is, perhaps, an apparently unintermitted discharge, owing to the quickness of stringing. Thus, for instance, the Hindu conception of the last quotation would be a simultaneous shooting of three arrows. The fiction is carried further. Five hundred arrows are sometimes shot 'in a twinkling,' or expressly 'with one movement.' Thence the common formula describing a fierce fight: 'the sky became clouded with the arrows' of two contestants. A technical term, *hastavāpa*, 'hand-throw,' was used to characterize this art. The weakness of the special shot was doubtless due to practicing this general discharge of arrows. Wonderful marksmanship, as we understand it, seems to belong to the accretionary legends of the Pāndus, as in the tournament, the description of the *svayamvara*, the unlucky rival of Droṇa, etc. (see below, on Science of the Bow.)†

The noise of the bow and twang of the string are objects of the poet's attention; and a favorite scene in the story is the motionless admiration of a whole army gazing upon two heroes engaged in a bow-duel. We notice in such duels that, though the bow is beloved and has a pet name, yet it is often rejected in mid-fight; so that we must suppose the war-car furnished with many bows.‡ The bow itself is often chopped in two with arrows. A single arrow may be driven with force

* Compare viii. 51. 36, *karṇaḥ . . . bhīmasenam tribhūḥ śarāḥ, ākarṇamūlam vivyādha dṛḍham āyama karmakam*, etc. Here the bow is drawn as hard as possible, and three arrows pierce the foe, but no great harm is done.

† *hastavāpa* in v. 23. 22 (C. 706, *cāp*.t) denotes an output of sixty-one arrows; but five hundred at once is mentioned in v. 60. 16, and again in v. 90. 29 (*ksīpaty ekā na vegena pañca bāṇaśatāni*). As an example of the sky becoming clouded with arrows we may take vii. 139. 45. Arjuna is especially famous for *lāghava* and *sāuśhava*, no one excelling him in this 'lightness and quickness,' whether using *ksura*, *bhalla*, *nārāca*, or *vipāśha* (different arrows), i. 139. 6-7; compare ix. 22. 16, etc. The 'well-governed arrow' of viii. 83. 39 may be of aim, but is more likely of force—unless, for *svyantritah*, we read with P.W. *supatritah*.

‡ The dual of bow may imply simply the double bow: that, is with two curves. We find this e. g. R. ii. 106. 11, *kuru sajje ca dhanuṣi kavacam dhārayasva ca*.

enough to go through a man's head and come out, falling to earth behind him.*

The 'law' of the warrior commands that the archer shall attack only the archer. This law is a fiction. Nothing is more common than for a knight first to slay his foe's helpless charioteer and then his proper antagonist. With the fall of the driver the horses usually become unmanageable and flee. 'With arrows drawn to the ear the knight slew the charioteer,' after which the horses galloped away with the empty car.†

2. The quiver. We have several names for this companion of the bow. The most general is the old *iśudhi*, 'arrow-holder,' named with *dhanus* and *jyā* in many places, but not particularly described. It is probable that an expert warrior using many arrows had a pair of large quivers, perhaps fastened together. We could thus explain the common dual use of the word.‡ Discarding impossibilities, the quiver appears usually to have held from ten to twenty arrows. It was fastened (*baddha*) on the right of the back. Other terms for the quiver alone are *tūṇa* or *tūṇira*, while *niśaṅga*, 'hanger,' may be both sword and quiver. The word *upāsaṅga* also means a quiver, but is applied to the larger arrow-holders fastened to a horse or an elephant, although used also of men.§

* The noise of the string and bow: compare vii. 8. 18; 9. 36; 32. 41; 38. 13 (*niśpesana*, *jyāghosa*, *jyātalanirghosa*, *-svana*). In vi. 53. 10 we find, for instance, the scene alluded to above, the army gazing silently at two archers; and here more than one bow is used. So, after one bow is cut in two (*cāpanā dvividhā ciccheda*), we find a second seized (*anyat kārṇukam ādāya*, vi. 45. 29). Compare the like scene, *tridhā ciccheda*, follow by *athā nyad dhanur ādāya sāyakāṅga caturdaśa*, vi. 45. 33; or the same in ib. 73. 5; 101. 46; viii. 77. 57 (a new bow and sixteen arrows). The force of the arrow is shown, as said above, by transfixing a body in arms and reappearing, in vii. 156. 184 ff.; 113. 50.

† vi. 72. 26. Regarding the time a bow lasted, we may assume from their constant destruction that they were unenduring, unless of horn or metal. No positive statement can be made. Arjuna's age rather than his bow's is indicated by iv. 43. 6 ('sixty-five years Arjuna had the bow'), as the latter is divine. (In regard to the age of the Pāndus, compare the curious expression in v. 48. 27, *çiṅṅu kṛtāstrāṇ açiṅṅuprakāṅcān (draṣṭā) pañca çūrān*: relationship more than age is implied).

‡ Singular in viii. 16. 34, etc. Dual in i. 225. 22; v. 60. 12; ix. 62. 9 (*maheśudhī*), etc., of Arjuna's equipment, and the accompanying piece to his large bow, *Gaṇḍiva*. Cf. *baddhvā tūṇau dhanuspāṇīḥ* of a hunter, R. ii. 65. 17.

§ Compare viii. 27. 29; vii. 29. 16; ix. 24. 13; vi. 48. 29. The *upāsaṅga* (vi. 106. 22 ff.; vii. 148. 42; viii. 19. 42; 58. 26, etc.), when represented as in the chariot, is probably a receptacle more like a box than a real quiver. The commentator says that the *niśaṅga* was the quiver of a foot-soldier; the *tūṇira* was the same, only larger; the *upāsaṅga* was a *tūṇa* 'carried by horse or elephant;' see below). *Upāsaṅga* is, however (e. g. iv. 42. 6), used of a knight's quiver, 'golden arrows in a golden *upāsaṅga*' (according to N., the feathers are here called hairs, *sāhasrā lomavāhinah*). The chariot-quivers in the Rāmāyaṇa may be *tūṇa*, of which thirty-two in one car are casually mentioned in R. vi. 51. 18. So plural *tūṇirāḥ*, vii. 29. 16.

The *kalāpa* is the quiver with its arrows, one word comprising both, and often antithetical to the bow (*kalāpāni dhanūṅṣi ca*). The ornamentation of the quiver appears to have been, as in the case of the bow, by raised figures of animals. How it was made we are not informed.*

3. The arrows. The Epic describes arrows of two chief sorts, *vāinava*, 'made of reeds,' and *āyasa*, 'made of iron.' Bone arrows appear rarely in late parts. The oldest and commonest names are *iṣu* (ἰός) and *çara* (reed). Like the first in meaning is *astra*, 'missile,' united with it in *iṣvastra*, the bow, and in the expression *kṛtāstra*, which, like *dhanurdhara*, denotes a fine archer, and is an honorary title of a good knight. Like the second in meaning, but of later use, is *bānu*, a reed, but employed also of iron arrows; while the very common *çalya* means the arrow-point, and thence the arrow as a whole.† Beside these we find *bhalla* and *pradara*, the latter rare, and meaning literally a 'splitter;‡ the former common. The arrow of iron was usually termed *nārāca*. Other less common forms are discussed below.

In regard to the employment of the arrows there is little to be learned, in spite of the long descriptions in the Epic. As said above, they were used to embarrass or slay the foe more by numbers than by the skilful use of one. Nothing is more common than an incredible number of arrows flying across the field between two champions; and a 'rain of arrows' or 'flood of arrows,' forming a 'network' of darts, ensues whenever two heroes contend.§

The arrows generally used were, according to indefinite but frequent descriptions, large, long, heavy, sharp, strong, able to pierce armor, capable of slaying elephants, horses, etc. But we find, besides these long (reed) arrows and heavy (iron) ar-

* Compare *pañcaçārdūlalakṣaṇaḥ kalāpaḥ*, iv. 43. 15 (compare ib. 42. 8, *kalāpacāpa?* read *tūpa?*). The comparison in iv. 45. 7 shows us nothing (the commentator adds *niṣāṅga*).

† *Astra* and *iṣu* are each etymologically merely a *missile telum*. *Sāyaka*, arrow or dart, conveys the same idea. *Iṣvastra* occurs in the pseudo-Epic and Drona (p. 224), but is not a battle-word. Late also is *kāṇḍa*, 'joint,' in the sense of arrow. Compare *tatre 'svastram aḅarot*, xii. 2. 18; *saviṣam kāṇḍam ādāya mṛgayāmāsa vāi mṛgam*, xiii. 5. 3. From *iṣ* we have also *iṣikā*, probably merely a reed magically used, not strictly an arrow: while the root of *astra* gives us further *prāsa*, 'a projectile,' also a common synonym of any arrow. Compounds of these words are *iṣukāra*, *iṣvāsa*, and *upāstra*, all rare words, the arrow-maker, the arrow-thrower, the little arrow (?).

‡ Compare viii. 76. 16, *nārācānām dve sahasre ca vira trīṇy eva ca pradaraṅgām*.

§ Compare vii. 19. 17, 18, *çaravarṣa*, *çaravrṣti*, *çarajāla*; vii. 160. 41, *bānāugha*. The war-cars are often lost to sight in these rains. Hence *çalabhāḥ* as epithet and comparison, thick as flying locusts, iv. 53. 20, etc.

rows, an arrow 'one span long' made of reed, meant for fighting at close quarters, where it could be more 'quickly 'put to' and discharged.*

The normal length of the arrow was that of the axle of the war car. Bound with sinews (*snāyu*), and well feathered, it has a 'terrible end,' whether made of reed and tipped with steel or wholly of metal. In the reed the epithet 'well-jointed' (*suparvan*) points to the joints of the reeds being well smoothed. Three joints are recommended. The feathers used were of various kinds; hawks, flamingos, and herons furnish the sorts most used, various birds being sometimes represented in the feathering of one arrow.†

The sharpness of the arrow is naturally often alluded to, the point (*mukha*, *vaktra*, *agra*) and edges (*dhārā*) being 'sharp as flame,' or 'sharp as a hair,' for they were 'whetted on stone.'‡

* *vāitastikā nāma śarāḥ*, used as described in vii.191.42; compare id. ib. 122.60; R. vi.49.49. The 'putting to' or 'setting on' of any arrow is (*yoga*, 'fastening,' or, more commonly) *nīdhāna* and *sandhāna*. Compare *sandhiteśavah*, 'with arrows fitted to the bow,' i.132.69; and here, too, *lakṣya* (cf. *lakṣa*) as the target (68); *śakyaṁ reddhūm lakṣyam* (77); but *samāhitāḥ śarāḥ* are arrows shot all at once and falling together). *Astrayoga*, in iv.2.20, etc., is the art of shooting.

† Later authorities specify three cubits as the arrow's length (Nītip., etc.). Egerton says the usual length is two and a half to three feet (Handbook of Indian Arms, reviewed in Ind. Ant. 1886, p. 24 ff. I have not seen the work itself). The Epic gives the axle of the war-car as the norm: an item that might determine the size of the chariot, if one could trust the correctness of the later writers as authority for the Epic; this, however, we are not entitled to do. Compare *raṭhākṣamātrār iṣubhīḥ*, vii.166.18; 175.19. The *snāyu* fastened the arrow-head to the shaft. Compare *pitāḥ . . snāyunnaddhāḥ suparvāṇaḥ pṛthavo dīrghagāmināḥ, vāṇavāḥ cā 'yasāḥ cō 'grāḥ . .* etc., in vii.99.7 (where the commentator explains *sūkṣmaarmagrāḥ*): a description comprising about all that we can learn of the arrow barring the feathers. For the *parvan*, compare *samnataparvabhīḥ*, iv.35.15; vi.112.26; and *nataparvan*, itself the arrow, vi.117.44; vii.129.27. The favorite feathers seem to have been long hawks' feathers, with which the arrows are 'dressed' (compare *vāsa*; *kaṅka*-, *barhiṇa*-, *dīrgha*-, and *śukapatrābhūḥ pūrvar ardhāḥ suvāsasah, uttarār āyasaḥ pitār hemapuṅkhāḥ, cilācītāḥ*, iv.42.10). With *gārdhrapatra* (vii.119.41) and *kaṅkapatra* (*ḥṛdi vivyādha saṅkruddhāḥ kaṅkapatraparicchadāḥ . . śarāḥ*, vi.101.41) compare vii.125.28 and 29, *gārdhrapatra*, and *kaṅkabarhiṇavājitāḥ sāyakāḥ*; also ix.28.5, the same, followed by *čilādhātāḥ*. In iv.43.18, *triparrāṇaḥ*.

‡ Compare *śītār agniçikhākārāḥ*, vii.104.32; and *čilāçita*, vi.110.38, applied to an arrow. *Lomavāhin*, etc., 'sharp as a hair,' is common, e. g. iv.63.6 (but compare N. in note above). It is not strange that this edge can cut the bow of an adversary (e. g. vi.112.26), for the head seems not to be a point so much as a blade. With *čilāçita* compare the frequent epithet *çilimukha*, used as name of the arrow in general, and especially applied to iron arrows (*çilimukhāḥ . . bānār niçitāḥ . . āyasaḥ*, vi.114.35; 111.35; 113.40; *śraraçapuṅkhāṇ çilimukhāṇ çilāçitāṇ cikṣepa*, viii.28.4. This epithet is also applied to the sword (see below).

The other end of the arrow is adorned with what is often called the 'golden' *puṅkha*. When applied to a 'knife-arrow,' we find the *puṅkha* of silver. To drive the arrow up to this part was a special feat. The *puṅkha*, then, was a metal end attached to the main shaft, and was probably added for the purpose of making a securer notch (the notch itself being called *kudmala*), and opposed to *gr̥ṅga*, the sharp end (viii. 34. 18-19): a hold alike for string and feathers. Oiled arrows are often referred to, and fire may have been applied to them thus oiled, as we find them spoken of independently as 'glowing;' but I am inclined to think that, if arrows really lighted had been used, more than this epithet would remain to prove it; for the 'glowing,' like the 'flame,' of an arrow is poetical for heat, and probably refers only to its sharpness* and its fiery touch; and the word is used where no fire is necessarily imaginable (as of a sword), and where none is certainly discoverable. Moreover, these 'glowing arrows' never kindle wood. From the effect, then, or lack of effect, I think it doubtful if fire was used; though the mention of 'ignited' arrows in Manu may induce some to interpret *dīpta* as really enkindled.† The question whether poisoned arrows were used in war has been, I think, unsatisfactorily answered. Wilson says that (bamboo or wood) arrows were not poisoned except in the chase. This is one of those statements, based on a study of ideals, that must be modified by facts. The last part is not wrong; in the chase poisoned arrows are alluded to in the pseudo-Epic quotation given above, where we read of hunting with 'poisoned arrows'; yet it is mentioned elsewhere that hunting was done with 'pure' (i. e. unpoisoned) arrows, showing such sometimes to have been the case.‡ But as to war, the law forbidding poisoned arrows,

* Compare Antig. 1085, ἀφῆκα . . καρδίας τοξείματα . . τῶν σὺ θάλλπος οὐχ ἰπεκδραμῶσι.

† *tāḷadhāuta* (vii. 139. 2), of arrows, properly 'dipped in sesame oil.' Fire like arrows are mentioned vii. 120. 19; so *ṣarā dīptāḥ*, iii. 23. 3. The oil was probably for loss of friction, used of *bhalla* in general, viii. 25. 9 (*dhāv*, 'wash in oil,' v. 19. 3 ff.). In ix. 28. 5, *ṣūlādhātāḥ* (*ṣarāḥ*) is 'polished by stone.' In Manu, however, *agnijvalitatejana*, 'with the joint ignited,' vii. 90, may mean 'with sharpness of fire,' used figuratively, but from the context seems literal. That the 'glowing' often means merely sharpness may be shown by such examples as viii. 90. 68 (note also *avakrāga*); R. vi. 51. 73, *niṣitam bāṇāṃ jvalantam iva tejasā* . . *ādāya dhānuḥcreṣṭhe yojayāmāsa*. Compare in the following vs. 87: *jaṅrāha ca ṣarāṃ tikṣṇāṃ tam astreṇa ca saṃdadhe, agneyena tato 'streṇa yojayāmāsa sāyakaṃ, sa jajvāla mahābāṇaḥ*. Compare, too, R. vi. 69. 3 ff.: 'the sharp feather-clothed arrows' are *ṣikhisaṃsparṣāḥ*. In R. vi. 54. 49, all sorts of weapons are *dīpta*, i. e. bright or sharp: compare ib. 59, *pradīptāsyaḥ* . . *anye*, of men; and R. vi. 58. 44, *dr̥ṣṭvā ṣūlāṃ jvalantam*.

‡ Wilson, iv. 355 ff. Compare iii. 36. 45, *caranto mṛgayāṃ nityaṃ cūddhāir bāṇāir mṛgārthinaḥ* (perhaps 'bright'). Poisoned arrows for

and the Epic's special statement that one 'honorable fight' took place where 'poison' was not used, show that *lipta* or poisoned arrows were generally employed.* It is also possible that the common epithet 'resembling a snake' may refer to the poison, though perhaps better understood of the sharp bite, the whizzing sound, and the darting motion.†

More than this in regard to the arrows used in the Epic must be confined to the special uses of the different sorts, though we are here chiefly driven to the interpretation of the name for the kind, and the special peculiarities of each mentioned. For, as a general thing, the arrows are alluded to in the mass, and only here and there do we find particular descriptions. The meagre accounts show us, however, many more names than we can interpret. Probably several of these are merely epithets applicable to different sorts: thus, the *gokarṇa*, 'cow-ear,' may be of any material, and the gold tips of the 'reed' may be equally applicable to the horn-arrow. I shall, then, only attempt to gather what I have noted of each, without believing that the individual description should be confined to the arrow described. Only important is the construction of the possible Hindu arrow, though I regret not finding more details.

Bhīma's favorite arrow was the 'crescent-head,' with which one can cut a head from a body, or divide a bow in two. This, the 'very sharp' *ardhacandra*, is frequently named with others, the 'broad,' *aijalika*, the *vatsadanta*, *bhalla*, etc. (vi. 92. 33; 94. 3; vii. 21. 21; 115. 27). The *vatsadanta* is named about as often as the *ardhacandra*. It is, from its name, a calf's-tooth-shaped arrow, and from the descriptions is particularly sharp. One wards off an onrushing foe with it (vii. 25. 40). It is classed with the little known 'broad *vipātha*' (iv. 42. 7; vii. 38. 23), and its action is, perhaps, as well as anywhere, thus exhibited: 'He laid the tooth-shaped arrow on the string

the chase are assumed in later works. Compare, too, on this point N.'s and Medini's interpretation of *grījanam* (on *grījanakādayah*, xiii. 91. 39), either as *viśadigdhastrahatapaścūmānsam* or as *viśadigdhaṣor mānsam*.

* M. vii. 90, *digdha*; Mbh. vii. 189. 11 ff., *lipta*. Compare xii. 95. 11, *isur lipto na karṇi syāt*.

† *prāmuṅcat puṅkhasaṅyuktān charāu ācīviṣopamān*, vi. 74. 2. Of warrior or of arrow, iii. 33. 86, 87; 40. 12; of arrow, iv. 59. 13 (*ṣarāir ācīviśākārāir jvaladbhir iva pannagāḥ*): compare ib. 64. 6, and viii. 90. 57 (*nārācam ācīviśatulyavegam utsasarja*). R. vi. 68. 5, *saṁdhāya ṣarān ācīviṣopamān munoca niṣitān . . sarpān iva mahāviśān*. Also R. ii. 66. 1, *ṣaram uddhṛtya dīptam ācīviṣopamam*. There is here no thought of fire. We may add on *dīpta* the application in R. to the moon, a car being compared to the moon in glory which is *dīpta*, i. e. brilliant—or, as is apologetically added, *prajvalan (iva) śriyā*, as if 'on fire with beauty,' R. vi. 31. 29-30.

—swift as the wind it was—he drew it back until it touched his ear, and Śātyaki he pierced upon the belly. Right through the body's guard it cut, and through the body—the arrow with its feathers and its metal butt—and dripping with blood it entered the earth' (vii. 113. 49 ff.).

The *kṣurapra* is a knife-shaped arrow: that is, with a blade-head; and, like all these broad arrows, it cuts, if need be, a head from a body. It is spoken of as excessively sharp, and seems to have the legally forbidden 'ears,' or prongs bending back on the fish-hook plan.* We have in Droṇa's leadership a list of arrows comprising *nārāca*, *vatsadanta*, *bhalla*, *añjalika*, *kṣurapra*, *ardhacandra*; and again a 'half-*nārāca*,' with *nārācas* of iron.† The *nārāca* here mentioned is of iron, and is, according to another passage in the pseudo-Epic (xiii. 104. 34), distinct from the *nālīka* (where we also find the *karṣin* or 'be-eared' arrow differentiated from the *nālīka*). The expression *kṣudra-nārāca* is here employed, literally 'small.' We find an antithesis between these again expressed in the battle-scenes, and in the Rāmāyaṇa the *nālīka* and (*bahu*-)*nārāca* are differentiated as if dissimilar.‡

The *nārāca* has a gilded or silvered point, and is perhaps the special name for the *bāṇā āyasaḥ*, or iron shafts, mentioned above. It is generally defined as wholly of iron, but is described as 'feathered' (iv. 42.6). The *nālīka*, of reed nominally, may perhaps also have been of metal, as this is the name in modern literature of the iron musket.§ The sharpness of the *nārāca*, its smallness compared with the reed, its gold or silver point and gold *puñkha*, are the main characteristics dwelt upon in this weapon.||

Respecting the word *sāyaka*, although literally merely a projectile, it appears to be in most cases confined to the sense of

* Compare viii. 25. 3, *kṣurapreṇa dhauṇṇ chittvā tāḍayāmāsa karṣinā: sutūksheṇa*, ib. 36. Also vii. 21. 28 (*kāyāt . . . apāharac chiraḥ*); 28. 7; vi. 113. 32, 41.

† vii. 187. 45: *ardhanārāca*, ii. 51. 35. like *ardhāsi*, 'short sword.' The first list in vii. 115. 27-28.

‡ Compare the lists above with R. vi. 20. 26 (*et circa*); R. iii. 34. 10, *nālīkanārācāis tikṣṇāḡ-xīc ca vikarṣibhiḥ*.

§ *kuladhātūgra*, of *nārāca*, iv. 61. 35. The same in *jāmbūnadāgra* of the *bāṇa*, iv. 65. 3 (*jāmbūnadapuñkhaçitra*, ib. 4). For the *nālīka* or *nālīka* as musket we must turn to wholly modern compositions, the war-manuals published by Oppert (which are veiled with old verses taken from the Epic and law, more or less distorted). *Āiṣika* of *astra* (compare the *āiṣikam parva* in the *Sāuptika*) tells us nothing. These special names may all be regarded as species of the general *sāyaka*, most commonly used in such expressions as 'the terrible arrows,' without nearer explanation: as in viii. 37. 28; iii. 23. 3, etc.

|| Compare vi. 111. 46; ib. 108. 29. and often, without description.

arrow. But the same word is used of a sword, and the instrument is now and then spoken of as flung.*

Out of the various lists of arrows which are mentioned as encumbering the ground with other arms,† we may occasionally find descriptive epithets applied to names that are themselves nothing more than this. Thus *mārgana* is defined as an arrow, and we may say that it is characterized as a 'sharp' arrow;‡ but the information must simply be referred to the arrow in general; for *mārgana* itself is only an epithet of the 'eager' arrow. Our knowledge, then, except in a few cases, is not increased by such descriptions. Names and names only are the *pr̥ṣatka* and *anjālika*, often mentioned as (epithet of) arrows, meaning apparently in one case that the arrow is speckled, in the other that it is barbed. *Vipātha* seems also to be a general term for arrows; but further than being broad, of iron, and yellow, i. e. gilded, the arrows thus named bear only universal characteristics. A further universal epithet of any arrow, often used as name, is 'the feathered one' (*patrin*).

The same passage containing the description of *vipātha* speaks of 'boar-ear' arrows: that is, arrows forbidden by the law-books, with barbs at the heads, but often spoken of in the Epic.§

I referred above to the poisoned arrows spoken of by the poet in one scene as discarded in honorable fight. But the list of dishonorable weapons here alluded to shows us many that must have been in use, though legally (perhaps later) forbidden. The 'ear arrows,' poisoned arrows, goat-horn arrows, needle-shaped arrows, arrows of monkey-bone, of cow-bone, and of elephant-bone; arrows so fractured as to break in the flesh; 'rotten' arrows; and crooked arrows; while the *nālīka* is also, strange to say, here spoken of with the implication of baseness in its use, which the commentator explains by defining *nālīka* as an arrow that enters breaking in the flesh, and cannot be withdrawn on account of its small size.¶ The Rā-

* For the arrow-sense, compare vii. 38. 6; vi. 117. 42 (*ayōmukha*). As sword, compare *vāyāghrakoṣe nihitah*, iv. 42. 11-12, ornamented with bells, and called *ṣīlīpr̥ṣṭha*, *ṣīlīmukha*: that is, the general *sāyaka* includes even the *khaḍga*. In vii. 25. 57-58, the *sāyaka* is a general term for anything thrown.

† Such lists as occur in v. 152. 15 ff.; 155. 3 ff.; vii. 25. 57 ff.; 178. 23 ff., etc.

‡ vi. 118. 48; vii. 145. 68, *tikṣṇa*.

§ *varāhakarnavyūmīcrāḥ ṣarāḥ*, iv. 42. 8.

¶ *karnī*, *nālīkaḥ*, *līptāḥ* (*viṣene 'ti ṣeṣaḥ*), *bustikaḥ* (or *bastakāḥ*), *sūcī*, *kapiṣaḥ*, *gavāsthīḥ*, *gajāsthījāḥ*, *saṃśīṣṭāḥ*, *pūṭīḥ*, *jihmagāḥ* are the epithets applied to the condemned arrows; while it is added that the approved weapons of all were 'straight' and 'pure' (*ṛjūny eva viḥuddhāni gastrāṇi*), vii. 180. 11 ff. *Bastika* or *vastika* is read and explained by N. very artificially, as a loose-headed arrow shot into the bladder (*vasti*);

māyaṇa shows here, as it generally does in the battle-descriptions, thoroughly Epic usage.*

We must suppose either that the barbed, poisoned, torturing arrow scorned in the law code of Manu and late Epic was a new invention of that period, or else that it was used from ancient times, and gradually began to be inveighed against by the popular law (Manu) and Epic, as too cruel for a more advanced age. The latter seems more reasonable.

Next to the bow and arrow in importance are the club, sword, and spear. I shall examine these separately.

2. The club. This weapon appears to be more used than the sword. But its more primitive character is further shown by the fact that some heroes hold to the club as their favorite weapon, and none do so in the case of the sword. Bhīma, Çalya, etc., are particularly famed as club-men. No one is noted especially for sword-skill. But usually both of these are merely reserve-weapons. As much skill is required in club-fighting as in bow-fighting. Set duels of club-men are often described, but the use of the sword is more adventitious. If the hero goes into battle at the beginning of the day, his chariot contains swords and clubs as well as bows; but no hero, discarding the bow, enters battle with the sword as his first weapon, whereas we find this occurring in the case of the club. Thus Bhīma, virtually on that day the leader, advances at the beginning of one day's battle at the head of the army armed with the club as the main weapon.† When ordinary combatants find that their arrows fail to kill the adversary, they usually leap down and rush at each other, not with swords, but with clubs. It is the first weapon in general esteem next to the bow.

Like the bow, the favorite club bears a pet name, as in the case of Krishna's *kāumodakī*.‡

but he mentions *bastaka* as another reading. Probably, comparing the following, this is correct, and the arrow is one with a head shaped like a goat's horn. The 'needle' arrow has a great many barbs, not two alone, like that called 'be-eared.' The 'monkey' arrow may be of bone or of iron (from its color), according to N.; the latter is preferred by Medinī. These bone arrows are explained by the commentators as poisoned.• The three constant debts of the Hindu are in the Rāmāyaṇa temporarily increased by one through poetic application of this common figure: 'debtless in respect of arrows and bow shall I be to-day in battle,' says Bhārata's foe (*çarāṇām dhanuṣaḥ cā 'ham anṛṣo 'dya mahāraṇe*), R. ii. 106. 28.

* E. g. *ksurārdhacandropamakurṇibhallāiḥ çarāṇḥ ciccheda*, R. vi. 36. 77 : cf. *ib.* 49. 49, etc.

† vi. 19. 32.

‡ One example suffices, but names will be found generally for favorite weapons. In Krishna's case, the discus is the pet weapon, but the club is nicknamed *kāumodakī nāmnā gadā*, i. 225. 28 (the *vajranābhaḥ cakrah* in 22).

The best description of the use of the club is given in the account of battle between Duryodhana and Bhīma, where the club is used with tricks and 'circles' of passes to such an extent that it is plain great skill was required (ix. 55 ff; 57. 16 ff.). In fact, it seems as if the highest skill and greatest amount of practice was spent on the management of the war-car and the club; the bow being ordinarily used, as said above, with more attention to speed than to nicety of aim (although *bānavedha*, or exact aiming, is spoken of as an object of endeavor). This club-fight quotes the law that 'no Āryan strikes below the navel' (see above, p. 233); the event shows that the Pāndu hero managed by a clever turn to break both the thighs of his adversary; but he is greatly blamed for the act.

The club is called by several names, most commonly *musala* ('pestle') and *gadā*. Judging from here and there, a distinction seems possibly to have existed between these two forms of clubs (cf. vii. 25. 58-59), but what the difference is cannot be determined from the Epic. The *pināka* also seems to be a general term for the club, but is usually confined to the weapon of the deity, and may mean a bow, as it is later identified with the trident-spit, *ṣūla*. But beside these we often find *parigha*, explained by modern works as a catapult, but in the Epic an iron-bound club flung with the hand. In the descriptions of the club we find much that repeats the ornamentation of the bow, with some added particulars. Its general form seems to have been that of a tapering post, girded with iron spikes, and hence heavy and sharp, sometimes plated with gold, or, according to the extravagance of the poet's fancy, bejeweled. For the simple truth of the primitive club, we may subtract the glitter, and leave an iron pillar, cruelly made terrible with sharp corners and inserted spikes. It was carried upon the shoulder, and appears in this form to have been used only by the well-born. Probably its great size and weight prevented its popularity as much as anything; Bhīma, its greatest lover, being at the same time the strongest of the Pāndus. The descriptions of this weapon are generally quite uniform, and amount to a heavy inlaid gold-plated sharp-cornered club of iron girded with spikes.*

* The following passages corroborate this: *kāncanāṅgadabhūṣanā* (*gadā*) *adrisāramayī gurvī*, ix. 32. 37; *skandhe kṛtvā 'yasīm gadām*, ib. 38 (R. vi. 55. 12, *gadā sarvāyasi*); *caikyā 'yasi gadā jātarūpaparīṣkṛtā*, ib. 39; *caikyā gadāh*, vii. 163. 21; *gadāh . . vimalāih paṭṭāih pinaddhāh svarṇabhūṣitāih*, vi. 87. 29; the gilded knobs (*samutsedha*) are particularly referred to, iii. 271. 4; *gadā bahukaṅṭakā*, R. vi. 28. 36. The number of edges is six or eight (*śaḍasri*, *aṣṭāsri*), and the club as a whole is often compared either to the *daṇḍa* of Yama, or to the *açani* of Indra (v. 51. 8; ix. 55. 18, 25 to end; in v. 51. 24, 28 the iron club is damas-

Besides the above-mentioned ornamentation, we find the club decorated with bells, of which a hundred are mentioned.* The simple staff or cudgel is used as a club-weapon. Sometimes it is of iron, sometimes of wood, but generally defined as iron. Several weapons not more nearly defined appear to belong here, as battle-clubs.† To prepare for a club-fight, one binds up the hair, and fastens on a breastplate and helmet (ix. 32. 60 ff.). The conflict could not take place except on the ground; the cars are sometimes unexpectedly left, but often by mutual agreement, to fight with the club.‡

The following scene (vii. 15) will illustrate the method of fighting as generally described. Çalya and Bhīma, both celebrated for their skill, face each other. 'No other than Çalya can withstand the sweep of Bhīma's club; and who other than Bhīma can support that of Çalya's? Bound about with golden

cened, four *kīṣku* long, with fair sides, six-cornered (but in ib. 24 'without ears,' and described as a *çataghñī* of heavy iron: see below). The length of a heavy club flung at the foe is represented as four *kīṣkus* also in vii. 134. 10, as above, adorned with gold *aṅgada*. According to i. 19. 17; vii. 25. 58; 157. 9; 162. 27; 178. 12, 22, the *parigha* is nothing but an iron club thrown by the bearer. It is described here as 'sharp and horrible,' and is itself discharged at the head of the foe (*mumoca*, vii. 157. 9). There is no difference as to size perceptible between the kinds, for the *parigha* is large, but (vii. 178. 12) *atikāya*, or enormous, only as a demon's weapon. But the iron gold-bound *musala* seems smaller perhaps in ix. 14. 29-30 (*ayasmayam musalan cikṣepa parighopamam*), since the larger is that naturally used as comparison. Compare the demons' *bahuvyāmāḥ parighāḥ*, in R. vi. 44. 34 (with simple *gadāḥ* and *musalāni*). In this passage *sālaskandha* is also (a beam used as) a club. It is possible that, in vi. 117. 28, *hematālena mahatā bhīsmas tiṣṭhātī pālayan* may refer to the size of Bhīshma's club, but probably his signum is meant.

* vii. 178. 14 (*çataghanṭā*). In this case also the weapon is 'like fire,' probably from its bite, or its gems' glitter. Compare the 'glowing clubs,' *gadāḥ pradīptāḥ*, of R. vi. 17. 27. So the gold-plating presumably induces the comparison with Indra's *açani* (*açanīprakhyā gadā*, vii. 15. 6, etc.), quite as much as size or force.

† Thus, v. 51. 22; vii. 22. 22, *āyasena danḍena* (with other arms). Even *kadāṅgara* is interpreted as a *danḍa*, and seems to be a missile (vii. 25. 58; omitted in C.). Perhaps the unknown weapon called *kalāṅgala* (iii. 15. 7) is the same as *kadāṅgara*. *Laguḍa*, explained by Pischel as a Prakrit word (Bezz. B. iii.), and rendered by *ayoghana*, appears to be an iron club. *Sthūna* is an iron pillar (*kārṣṇāyasa*), vii. 156. 14, and is flung like other clubs.

‡ This jumping out of the car to fling something (a *rathacakra*, for instance) is common, and is the regular procedure when the horses are slain. The hero then drops the bow and rushes out with the club. Compare vi. 53. 28, *sa cchinnaḍhanvā viratho hatāçvo hatasārathih*, *gadā-pānīr avārohat khyūpayan pāuruṣam mahat*; the same in vii. 99. 26; and similar is ix. 11. 41 ff. Compare vii. 167. 8, where one is exposed and in danger from an unexpected assault of this sort. Bhīma is particularly fond of rushing out in this way, viii. 93. 23 ff. Less often the sword is so used, as in viii. 13. 29 (*virathāu aṣṭyuddhāya samājugmatatur āhave*). The club is often hurled at the foe along with other common missiles; and e. g. in vi. 48. 92 it is flung at a war-car.

plates (or thongs, *pattāih*) shone Bhīma's club, and Çalya's. Like a flash of lightning gleamed each club as the two warriors circled and manœuvred; for like two circling bellowing steers they rushed about each other. Vainly they stood and fought, while fire came from out their clashing clubs, but neither yielded. Then back they stepped, retreating each eight paces, and like two angry elephants again charged on each other with their mighty iron staves; that blow bore neither, and down to earth fell each; till Çalya's friend rushed up to aid, and the fight of the two was ended.*

3. The sword. The Epic age seems to represent the epoch where the bow is yielding to the sword. The latter is known earlier; it is used, but not so much, like the club, as a secondary weapon. But in the pseudo-Epic the sword has become the emblem of authority. Justice is now incorporated in the sword (*asi*). This weapon in the final Epic reigns supreme; the bow is an instrument more of the chase than of the battle. In like manner, in the earlier accounts of divine weapons bestowed upon man, the bow is the chief gift; in the later Epic and last interpolations, the deity's gift is a sword. Indra presents Arjuna with the bow Gāṇḍiva; Çiva presents him with the sword Pāçupata. Again, the bow is the first aggressive, the sword the defensive, or secondary aggressive weapon.

The sword, it is further worth noting, is often no more an implement of hand dexterity than a missile, to be cast like a javelin.† The former use occurs often, but the latter is still more common. Thus, we have seen above that it is synonymous with

* In this scene each hero has a *gadā*. The circles and manœuvres are, as in the war-cars, called so technically. Compare 14, 15, *mārgān maṇḍalāni ca sarvaço viceratuḥ*; and the expression in i. 69, 23, *gadā-maṇḍalatattvañāh*, 'one well acquainted with the club-circles.' In our passage, verse 28, the *lohadanda*, 'iron staff,' is the equivalent of *gadā*. The stepping back eight paces for a new charge is regular. Compare ix. 12, 20, where the same occurs. The four methods of club-fight spoken of in i. 68, 12-13 (*catuspathagadāyuddhe sarvapraharaneṣu ca, nāgaprṣṭhe 'çvapṛṣṭhe ca babhūva pariniṣṭhītaḥ*) are defined by the commentator as *prakṣepa*, *vikṣepa*, *parikṣepa*, *abhikṣepa*; that is, flinging at the foe from a distance; engaging at the point of the club; revolving it about in the midst of foes; and smiting the foe in front. Of *gadā* as a projectile fired by gun-powder (Nītip.) there is of course no trace; nor of *parigha* as a battering-ram (ib.) requiring many to move it. For *mudgara*, see below. Compare further above, p. 253, note.

† The quotation from the Agni Purāna given by Wilson (iv. 291, quoted by Rāj. Mitra, Indo-Ar. i. 297) indicates that the sword was regarded in that work as inferior to the bow. In this case, the sword strictly as a missile must be meant. The form given the sword in the pseudo-Epic cannot be explained simply by regarding it there as a type of Justice. That it is such a type means that the weapon was held in honor. I am inclined to think that the Purāna's preference is more formal than real, for the sword is here also the more conspicuous weapon.

sāyaka, or rather, regarded as a species of *sāyaka*, the general term for missile, but at the same time is ornamented with bells and set in a tiger-skin sheath. As an illustration of this use, compare the verse: 'he was then overwhelmed by (a number of weapons cast at him, namely), sharp arrows, clubs, pestle-clubs, spears, post-clubs, darts, and swords, all spotless and sharp' (iii. 204. 24).

We might translate *khadga* here as scimeter, and add *asi* and *nistrinça* as other common names of swords, but whether there is a distinction between these is not apparent. The *asi* may be a sabre (often called *mahāsi*, *dirghāsi*, 'long sword') and *nistrinça* a short sword, but I find no Epic data for establishing a difference.*

The sword-belt (*mekhalā*) sustained the sheath (*koça*), wherein the sword hung on the left side. The warrior was then one 'whose sword is fastened on,' a common epithet of the knight.†

The sword can scarcely have been so weak that a dart could pierce it, and we have to understand poetic exaggeration, perhaps, when in honor of a knight we are told that he cast the dart *viçikha* so well that it cut a sabre in two.‡ The Epic writers represent the sword and other offensive iron weapons as being a special product of the western countries.§

We find, as observed above, that the sword is secondary to the bow and to the club. Thus, to give one instance, when Dhṛishtadyumna's bow and club fail, he uses his sword and shield, decorated with a hundred moons (vii. 191 25). The *asipatha*, or 'path of the sabre,' is often spoken of as the way cut through a crowd by a desperate fighter (compare *rathapatha*). Not much can be learned of the sheath and hilt. The

* *Karavāla* meaning sword (-hilt?) is merely an epithet, 'hand-protector.' *Nistrinça* is, according to native etymology, a sword less than thirty fingers in length, but is called 'heavy' in iv. 42. 16. *Asi* is rendered sabre by Rāj. Mitra, who compares *ἀκίνακς* (Indo-Ary. i. 316) and gives some modern illustrations. He compares Bṛh. Saṁh., which (50. 1 ff.), with the Ag. Purāna (244. 23), specifies the longest sword (*khadga* in both) as fifty digits, the shortest as twenty-five. When *asi* is used as a counter-part to the bow, no special kind seems meant: e. g. R. ii. 107. 3, *kim atra dhenuṣā kāryam asinā vā sacarmaṇā*.

† *te ca baddhatanutrāṇāḥ . . kuçacirino māurvimekhalino virāh*, vii. 17. 23 (where the *mūrva* girdle is used for a religious purpose); *nadhakhadga* is synonymous with *naddhanistrinça*, both apparently used for sword in general. In Indo-Aryans the sword is called *khāṇḍā*!

‡ *viçikhena sutikṣṇena khadgam asya dvidhā 'karot*, vii. 156. 85. The epithet sharp (*tikṣṇa*) is often applied to the *viçikha* (but cf. P. W.).

§ Thus, in ii. 51. 28, the tributaries give *aparāntasamudbhūtān dirghāsin ṛṣṭiçaktiparaçvadhān*, 'long-swords and spears and battle-axes made in the west.'

former was of leather,* and called *koça*; the latter is said to be of gold or ivory, and is called *tsaru*.†

The sword was ornamented, like the club, with gold drops or other ornaments.‡ The word *dhārā* may be applied to the sharp edge of the sword, or to the point, as in *çaradhārā* like *asidhārā*.§

The dexterity with which the sword is used is extolled (vi. 90. 42), and it could not have been of very great weight, partly because it is used with great quickness (see below), and partly because it is forever breaking in the user's hand.¶ In the following passage, describing the use as a reserve arm, the *nistrinça* is synonymous with the *asi*: 'then these two, being now deprived of their chariots, rushed together for a strife with the sword (*asi*). And they shone as they bore the good swords' (*nistrinça*: viii. 13. 29-30). The description goes on to give the 'circles' and manœuvres employed by the contestants. Similar use as a reserve-arm will be found in other passages. In all, the knight leaves the war-car 'bearing sword and shield.'¶¶ Such sword-manœuvres are not described in detail, but they are in part mentioned by name, and further explained by the commentator. In one passage twenty-one manœuvres are accredited to one warrior, the technicality indicating lateness.**

An able warrior may advantageously pit a sword against a bow. The man is usually represented as running amuck through the ranks, slashing everything he meets, even to the parts of war-cars. But sometimes a regular duel takes place

* Later of silk, like the silk sheath in Mṛcch. (Indo-Ar. i. 319).

† *dantatsarūn asin*, ii. 51. 16; *hematsaru* of *nistrinça*, iv. 43. 21. The sheath was of cow-hide, rhinoceros-hide, tiger-skin, etc. In iv. 42. 12 ff. we have an elaborate description of the sword: the *sāyaka*-sword in a tiger-skin sheath; the scimeter, *khaḍga*, in a cow-hide sheath (*gavye*); the *sāyaka* again in a *pāñcanakhe koçe* (sheath made of the skin of a five-clawed animal); and the *nistrinça* with the *sāyaka* in a gold sheath. In regard to the position of the sheath, see below (x. 8. 59), under protective armor.

‡ iv. 42. 16, *hemabindubhir āvṛtaḥ* of *khaḍga*; the general word is *vigraha*.

§ *khaḍgena çitadhārena*, viii. 23. 9. Compare iv. 42. 11.

¶ *bhaganistrinçaḥ*, vii. 14. 74; the knight thereupon takes to flight.

¶¶ *khaḍgacarmadhṛt*, vii. 47. 21; compare ib. 48. 35. But *carma* may (pseudo-Épic) be the sheath, as in *nīlacarmāvṛtāḥ khaḍgāḥ* (xii. 98. 29), 'swords enveloped in dark leather.'

** Most of them are at once intelligible. Swinging the sword about, or over the foe, guarding by a false movement, approaching, touching, forcing the foe's guard, twisting to one side or the other, retreating, clashing, assault from above, below on an exposed part, flashing quick passes, sheathing—the meaning of the last three movements (*bhāratam*, *kāuçikam*, *sāvataṁ*) depends wholly on the commentator, vii. 191. 37-40: cf. vi. 54. 50. The 'hundred and one flights' of the crows in viii. 41. 25 ff. are in plain mockery of these manœuvres of sword and war-car. The Agni Purāṇa swells the sword-manœuvres to thirty-two (251. 4).

between the sword-bearer and bow-bearer. Thus, in one passage, Bhīma 'seizes a sword and a bull's hide shield (*ārṣabhāṃ carma*) decorated with gold stars and crescents, and meets his antagonist who stands 'fingering the bow-string' and at last shoots. But Bhīma cuts the arrow in two with the sword.*

The sword appears to have been worn at all times, as a fully equipped knight is described as 'bearing a breastplate and arrows, and a sword and a bow.†' But while fighting in the car, the swords were very likely hung on the side. In the Rāmāyaṇa (vi. 51. 18), we have a war-car described wherein were thirty-two quivers, many bows and clubs, and two swords, one on each side, with hilts four hands long, themselves ten hands.

In the latest portion of our poem, the pseudo-Epic claims that the bow is the 'first' weapon and the sword 'the foremost.‡'

4. The spear. This weapon in its various subdivisions is one of the most important in Hindu warfare, and deserves a special paragraph, although it does not belong so essentially to a knight's furnishings as do the three arms mentioned above. But if we include together the chariot-spear, the lance, the many undetermined arms that must for lack of finer distinction also be called spears, and finally the javelin, we have a species of arm constantly and very effectively used.

Rājendralāla Mitra has devoted half a page to this weapon, and attempts no distinction or definition (Ind. Ary. i. 312). I am not sure that I can add much to his nothing in the latter point: but although, from the matter drawn upon, liable to force a distinction, I should like to say in advance that the poets often use words synonymously which may strictly have been applied to different objects.

* vi. 54. 26 ff. This feat of Bhīma's 'preserved the army;' and characteristic of the naïve account is the added remark, that Bhīma shouted with joy when he had performed the act. Shouting was the constant practice, either for pure joy or to inspire fear. The 'sister of the sword' (*asidhenu*, stiletto) is not worn by Epic kings, as Nītip. enjoins. It belongs to a late age. The *māuṣṭika* (dagger) and *ūli* seem also absent; and I think the *kūṭahkaḍga* (dagger) is peculiar to R. (vi. 80. 4).

† vii. 111. 51: compare R. ii. 49. 5, *tataḥ kalāpān saṁnahya kṣaḍgāu baddhvā ca dhanvināḥ jagmatuḥ*.

‡ Bhīshma, being asked what the best weapon is for all kinds of fighting (*kin svit praharaṇam creṣṭhām sarvaṃuddheṣu*), replies that the sword (*asi*) is *agryaḥ praharaṇānām*; the bow is *ādyaṃ*. He further makes the sword, *asi*, the type of justice; the Pleiades are its constellation; Agni is its divinity, etc. One sees that the later view obtains here (xii. 166. 3 ff., 82 ff.). The sword is par excellence the weapon. Compare what precedes this, where it is said that one man with a sword is able to protect himself, if his bow be broken and horses slain, against bowmen, club-men, and spear-men. Contrast with this the bow as the real weapon of the Epic knight, and also of the earlier law-books. In Manu the bow is still the chief weapon, as it is in the early Epic.

The *çakti* was a spear or javelin particularly used as an adjunct to the bow by the warrior in the chariot. Hence it often receives the name of 'chariot-spear.*' This weapon is made of iron,† and is represented as cast after the club-casting had failed.‡ Like the 'golden' club, we find the *çakti* spoken of as of gold: that is, with gold plating or gilding, and with beryl adornment at the same time.§ The continuation of the last passage quoted tells us that, after the 'terrible firm iron spear adorned with gold and beryl and like unto the rod of Yama, had been cast, it was cut into two pieces by arrows. The same event occurs elsewhere.|| Besides, the spear was adorned with bells.¶

The spear was grasped with both hands, and flung at the opposing war-car. We see in the car-use that, as I said of the arrow, the epithet *dīpta*, glowing, may be used without implying fire; that the knight 'discharged the glowing war-car-spear' can only be taken poetically. In the following, we see the special use of the *çakti*, or chariot-spear. The knights in the war-cars 'flung the chariot-spear.' 'He seized the spear, the mighty, with gilded staff, but made of iron—and this spear of great power he flung, hurling it forth with both his arms.' 'He, standing in the war-car, seized the chariot-spear of golden shaft, of sharp point, spotless—hurling it aloft he flung it—and it entered the heart of the foe.'*** The spear, like other weapons, for smoothness' sake was oiled.†† In distinction from the weapons that killed many, the *çakti* is termed 'slayer of one;' for, once used, it was lost.‡‡

* Although the Petersburg Lexicon correctly explains the *rathaçakti* as a 'banner-staff' in the passage which it quotes (*rathaçaktiṅ samāçritya*, H. 9363; like *dvajayaçṭim samāçrītāḥ*, vi. 101. 48), the general use is that of a weapon.

† *āyasī çaktiḥ*, vi. 104. 30; *sarvapāraçavī*, 116. 52.

‡ *hemapaṭṭā gadā*, the golden-plated club, is flung first; then the *çakti*, ib.

§ i. 194. 7; vii. 186. 42; vi. 111. 11.

|| In vi. 53. 14; 54. 111, it is cut into three pieces (the description coinciding with the last).

¶ *sarvapāraçaviṅ çaktim . . saghanṭam prāhinot*, vii. 92. 66: eight of these are casually mentioned, vii. 106. 29; or even one hundred: *çataghanṭā çaktiḥ*, iii. 286. 3 (different kinds of spears, iii. 290. 24).

*** I group the texts quoted together: *rathaçaktiṅ dīptām mumoca*, x. 6. 13; *rathaçaktiḥ samutkṣipyā*, vii. 32. 58; *dorbhyām āyamyā* (in vii. 107. 16) is like *dhanur āyamyā*, stretching forth and aiming with the bow; *sa rathe . . tiṣṭhan rathaçaktim parāmṛçat svarṇadaṇḍām akurṭhāgrām sunirmalām, samudyamyā ca cikṣepa . . sū tasya hṛdayam . . bibheda*, ix. 10. 38. In xii. 4. 18, *rathaçakti* is grouped with arrows and other missiles. One sees, the use is almost constant, like the epithets. Compare R. vi. 80. 23-24, *çaktir dīpyamāṇā svatejasā tolitā mahātmanā*. In ib. 32 (cf. 87. 25) we find *aṣṭaghanṭā çaktiḥ*: see above.

†† *tāiladhātūḥ sutejanāḥ (niṣpetur vimalāḥ çaktyaḥ)*, vi. 87. 28.

‡‡ *ekagnī* (opposed to *çatagnī*), vii. 133. 2.

We thus obtain a fair idea of what the poet conceived the *çakti* to be. It must have been rather large and heavy, and seems more a spear than a javelin. The other members of this genus are not so explicitly explained. They are evidently not so commonly used, and have not, so to speak, so much individuality. Commonly we find them in a group of fallen weapons (with perhaps the *çakti* among the number), and can only describe them by saying that they, therefore, could not have been synonymous; and, being occasionally called 'sharp,' and generally represented as 'flung,' they must have been sharp and flung. This is not very satisfactory. It is, perhaps, from a vagueness in the poet's mind that we are thus left in doubt. Chief in number appear to be among all the *pattiça* and *rsti*, the *kunta*, the *kaṇapa* and *kunapa*.

The *pattiça* may also be an axe. But from the ordinary use I take it to be a spear used by the knight; while the *rsti* seems to belong more to the common soldiers, and is perhaps a javelin, though the commentator takes it to be heavier than the *çakti*. The *kunta* has the special addition of iron, and may be a pike used for thrusting, against the inevitably hurled javelin. The high-born knights are represented at the opening of the war as girded with breast-plates and *ariṣṭa* (protective magical plants), with girdles (*kakṣā*), helmets, shields, swords, and *paṭṭiça*. A commentator to Manu defines *rsti* as a sword, not a spear. All the war-passages I have noticed, however, make the *rsti* a projectile. It is associated with a quiver in one passage that I do understand. Of the *kunta*, 'lance,' as of *kaṇapa* and *kunapa*, the passages I can offer show only an iron projectile, without nearer description. Late works make the *pattiça* only a battle-axe, two-bladed; the *kunta* a six-sided lance, six or ten cubits long (Nītip).*

* The *pattiça*, sharp, flung, vi. 96. 57; 106. 22 ff.; 118. 39 ff.; vii. 25. 58; 44. 14 : compare iv. 32. 10, *asibhuḥ paṭṭiçāḥ prāsāḥ çaktibhis tomārāir api . . samrabdhāḥ samare . . nijaghnur itaretaram*. The armor of the knights is given in v. 155. 12 ff. (in distinction from the common soldiers). *Baddha*, here used of all arms, means not 'fastened' but 'furnished.' In this passage, *rsti* seems a common weapon, opposed to the knightly *pattiça*, and differentiated from *rstika*, immediately following (18). In v. 152. 15, we have *rstayas tūnasamhūtāḥ*. N to M. ii. 138 gives the idea that *rsti* may be a sword. Compare v. 155. 3, *saçaktikāḥ saharṣṭayāḥ (çaktika = çakti)*, of the soldiers in general. The (*ayas*-)*kunta* or iron lance (?) is mentioned in vii. 148. 45; viii. 19. 34, etc. *Kaṇapa*, *kunapa* are spoken of in the same passages and in i. 227. 25; and with them is associated the 'sharp' *kampana* or dart, vii. 156. 141; vi. 57. 24; 76. 4 ff., etc., but I can get no description out of the passages, except that they are all on occasion *kṣepanīya* or missile weapons (vi. 76. 6). *Goçirṣa*, in vii. 178. 23, is probably a spear, not an epithet. In Nītip. the ring and cow-horn spear are emblematic of a king, another indication of Droṇa being late. These references, serving as examples, might be multiplied without further information gained. The gods fight with 'spears (*çakti*) of different kinds,' i. 30. 47 ff. *Çakti* is the generic name.

5. Other offensive arms. Those already mentioned seem the most often referred to, most conspicuous arms of the knights. But equally common, and often united, appear the bare names of a number of weapons now to be quoted. They are scarcely divisible into classes, and their uses merge into each other. Indiscriminately hurled at the foe, or passing into the proper function of the next, confusion follows examination.

The knights have practically arms distinct from those of the common soldiers. But they are represented as using each and any. Only the base tools of the low-born they keep from—not throwing pitch and oil, not harassing the foemen—but all real arms are ready to their hand, stored in the war-car, used when needed. These general arms the Hindu divided into four classes. The division is late, schematic; but, though not explained, is familiar to the Epic: 'the four kinds of great weapons,' to which are added 'and the divine' (weapons). As a group they are termed 'the fourfold weapon-collection'; but arms are of 'various sorts,' and so various that many will not be confined to one rubric.* The gods have just such arms as men have, only they have some more powerful than most men; but knights, by the help of magic or divine intervention, may equal them in the use of arms.† Foreigners have some peculiar customs, and use many arms as specialists more aptly than natives. The different accomplishments have been explained above. To note is the excellency in Manu of special sections of India; in the pseudo-Epic, of outside nations, particularly. In the war-scenes also the arms of foreigners are noted as peculiar. Many are special to the 'barbarians.' Studying native interpretation, it is clear that the uses of many of these arms were unclear to the expounders. Use and form are differently interpreted. Many are totally unknown. The following are the chief weapons of secondary importance, not arranged according to the native four classes, but by their apparent importance and frequency of use. First may be mentioned the *bhāndipāla*, for which I see no evidence that it is a sling or a tube-blown projectile, as later writers will. It appears to be missile, flung by hand, and is usually associated with darts, hammers, clubs, etc. A varied reading in one passage confirms this by showing us the wooden handle attached to the weapon.‡ The *tomara* is a dart of iron, either straight, or, less often, a straight shaft

* viii. 7. 6, *mahāstrāṇi . . . caturvidhāni . . . divyāni cāi 'va*; *astragrāmam caturvidham labdhvā* (learning), iii. 309. 18; *vividhāni castrāṇi, nānācastrāṇi*, i. 19. 13; 32. 13.

† Compare the commonplace weapons of the divinities in i. 30. 47 ff., etc., and see below.

‡ The *bhāndipāla* is mentioned in v. 19. 3; vi. 96. 57 ff.; 106. 22 ff.; vii. 25. 59; in v. 155. 1 ff., *çūlabhāndipāla* is discarded by N. for *çāla-*, as the wood of this tree makes the handle.

bearing at the end a hook. This latter is probably the spit- or trident-*tomara*. * According to the commentator, it has a wooden handle. Interesting is the confession conveyed in the special kind of dart called *viṣatomara*, 'a dart bearing poison'; doubtless to be taken literally.* The *tomaras* are represented as gilded, and must have been light, as they are compared to fiery locusts. They appear to be javelins, and are flung by the hand. But the commentator explains one sort as an arrow (see below). One is mentioned as an iron gilded staff, capable of piercing an arm and coming out beyond. Its sharp point is particularly emphasized.†

Less important missiles are the hammer, axe, spit, and other less definite weapons, as follows. Although the axe and spit would antecedently not be regarded as missiles, their use in the Epic makes it necessary to group them as such.

The hammer, *mudgara*, is of iron (*ayoghana*), and is distinctly a missile, being cast with the *laguḍa* and with stones (*upala*). The divinities, as shown in the Indra-Vritra scene, employ the *mudgara* along with the sword and spear, etc.‡

The axe, *paraçvadha*, *kuliça*, is often mentioned as a missile. It might be termed a royal weapon, being chiefly used by nobles. The battle-axe (*kuthāra*) is Paraçu-Rāma's pet weapon. A distinction (unknown) is made between *paraçu* and *paraçvadha*.§

Çiva's weapon, the trident, is imitated among arms by the *çūla* or spit, a missile of iron, but not very effective, and easily cut in two. The *çūlaçakti* is a trident-headed spear.¶

* Both the *aṅkuçatomara* and *viṣatomara* are found in the list of weapons in v. 155.1 ff. The ordinary *tomara* is found *passim* in all heaps of weapons.

† vi. 113. 39; vii. 25. 58; 165. 36; viii. 27. 15 ff.; i. 19. 12: fourteen are flung at once, 'sharp as the sun's rays,' in vii. 29. 7: compare *tomarān agnisamkācān chalabhān iva veçitān* (*mumoca*) in xiv. 75. 13, where they are as usual cut to pieces by arrows.

‡ xii. 282. 14. In vii. 25. 58 ff., *ayoghana*, defined by N. as *laguḍa*, is distinct from *mudgara*. *Kūṭamudgara*, R. vi. 37. 51; 75. 25, seems to be a hatchet rather than a hammer. I have not noted it among Epic arms. It may be, in the usual sense, concealed, a trick-weapon, but is possibly another kind of hammer. Compare *mudgarāḥ kūṭakhadgāç ca*, R. vi. 30. 4. According to the Nītip., the *mudgara* is three cubits long, weighing over a thousand pounds.

§ v. 19. 3; vi. 96. 57 (*ayaskuntāḥ paraçvadhāḥ*); 46. 13; vii. 25. 59; Rāma's axe, xii. 49. 33; a distinction in *paraçu*, iii. 160. 58 (*paraçvadha*, flung); and in *kuliça*, iii. 20. 34, from *paraçvadha*, 88. Here N. gives *vajrāni*, thunderbolts, as the meaning of *kuliçāni*. *Paraçu* is properly nothing but a woodman's axe. Compare R. ii. 111. 10, *drumo yathā vane paraçunā kṛttāḥ*. So *dātra*, v. 155. 7, is merely a sickle.

¶ The last quotation from the third book (iii. 20. 33 ff.) mentions *gadā*, *hala*, *prāsa*, *çūlaçakti*, *çakti*, *paraçvadha*, *kuliça*, *pāça*, *rṣṭi*, *kaṇapa*, *çara*, *pañña*, *dhruçunḍi* in a heap. For use stated above, compare vi. 92. 27; ix. 21. 24: *triçūla*, trident of Çiva, vii. 202. 42. Vishnu has the *akera* and *çārnga*, Çiva the *çūla* or *pināka*.

The *bhuçundī*, defined in the Petersburg Lexicon as 'a certain weapon,' is a projectile hand-weapon, used with clubs, spits, etc., and is made of iron. More definite statements fail me, although the weapon is often mentioned.*

The *prāsa* (*prāça*), from its name a projectile, is sharp and broad, as well as spotless. Its edge is particularly spoken of (see lists above), but I see no Epic reason for claiming that the *prāsa* was the same as the quoit, or the trident. Wilson says it is the 'quoit, or the same as *kunta*.' Later 'works than the Epic make the *prāsa* the same as the discus, *çakra*, or a spear of seven cubits.

Among projectiles we must reckon the claw-knife or concealed knife (*nakhara*, *vāçī*), besides the simple knife (*kçura*), *used as projectile, or as a kind of hand-weapon with which to tear out the eyes of a foe. The lower classes of fighters are armed with masses of weapons of all base sorts, such as pitch, burning oil, etc., that do not probably come under the head of weapons at all. They were carried by the infantry (xv. 23. 4), and by bands of men on the elephants.† It is interesting to note how such a list as this, attributed to all the soldiers, contradicts the whole spirit of the military 'code.'

Not to be flung, but to be held before one, and to pierce and bore the foe's body, are the *çalākā* and *çanku*, said by the commentator to be identical. They are apparently sharp pointed stakes, perhaps of wood (vii. 25. 50; vi. 46. 34).

Before passing to the subject of defensive armor, we have yet to examine the so-called fire-arms and divine weapons. As a close, however, to the general offensive weapons already described, it may be well first to give collectively, and in the manner in which the Epic describes them, the general weapons thought of as necessary for a well-equipped army. The collective impression thereby given us is stronger than that pro-

* iii. 15. 8; vii. 25. 58; ix. 45. 111. See the quotation iii. 20. 34, above. The *çūla* and *bhuçundī* are mentioned as equal to *çūla* and *pañña* (together with the word *çūlavarça* as epithet uniting both) in iii. 170. 3. It seems a sort of spear, used most commonly in close standing with *pañña*, *çūla*, etc., as here. One passage represents iron spears, quoits, stones, and *bhūçundīs* as raised high in the air with the hand and thrown, i. 227. 25. R. has a companion to the *bhuçundī*, namely *trikaṇṭaka*, which, I take it, is a late equivalent for *çūla*, meaning trident (R. iii. 28. 25).

† A list is given in v. 155. 'Hair-catchers,' balls of hot iron, sand, oil, pots of poisonous stuff ('snakes'), cords, nooses, concealed knives, etc. *Kāṇḍadaṇḍaka* may be a regular weapon (trident). Ploughshares (*sira*) are found here, and baskets with pans of coals. The noose, *pāça* or *raju* (cord), is used to throttle the foe. Some such noose seems to be used by the knights as a lasso in viii. 53. 24 ff., called a *pādabandha*, or *nāgam agram*, 'snake-weapon.' Compare with this R. v. 46. 15, *astrapāçair na çakyo 'ham baddhum atyāyatāir api*.

duced by the separate individuals. We see more clearly the Hindu conception of an army. In quoting these groups, the explanations already given may be incorporated without comment; in doubtful cases the commentator's word is accepted, and indicated by quotation-marks; in the few new unwarlike implements used as weapons, however, a word is added.

A typical sea of weapons is casually presented in the following passage (vii. 178. 23 ff.): 'they rained upon each other with a stream of weapons—iron clubs, spits, swords, knives, darts, arrows, wheels, axes, iron balls, staves, cow-horns, mortars,' etc., with a last resort to trees torn up,* and other native resources of half-demoniac beings such as here engaged.† In this passage, under 'clubs,' we have four kinds mentioned, (*gadā, pariṅha, pināka, musala*); lances and darts are trebly named (*prāsa, tomara, kampana*); arrows are of three names (*bhalla, cara, nārāca*); and there remains the cow-horn and *bhindipāla* (the former doubtful), and the mortar (*dūkhala*); with iron balls that are probably slung or dropped heated on the foe.‡

But perhaps the best example may be drawn from the opening of the battle-scenes, already referred to for many special kinds of arms. Here we read how the great mass of soldiers drew out in array, and what the arms were: of the common soldier first, and then specially of the knights (v. 155. 1 ff.). 'Now the king drew out his forces and divided his eleven armies according to their highest work, their medium ability, and their worthlessness.§ Then they advanced, armed and provided with the chariot-planks,¹ with large quivers,² with the 'leather protectors of the war-car,' with javelins,⁴ and 'quivers for horse and elephant,'⁵ with the foot-soldiers' quivers,⁶ with metal spears,⁷ with heavier wooden-handled spears,⁸ with flags and banners,⁹ with heavy arrows,¹⁰ with cords and nooses,¹¹ with blankets, with hair-seizers;¹² with jars of oil, molasses, or melted butter, sand, and snakes;¹³ with lighted (?) powder of pitch,¹⁴ with bell-hung spears or swords,¹⁵ with 'water heated by iron balls,' and stones,¹⁶ with spits and spears,¹⁷ with 'missiles of wax melted,' and hammers,¹⁸ with trident or spiked staves,¹⁹ with ploughshares and darts (javelins) that are poisoned,²⁰ with 'bas-

* Compare R. vi. 55. 28; also ib. 61. 20, and often

† The *rākṣasa* usually fights with ordinary arms, but he is not a fair fighter; he is stigmatized as *kūṭayodhan*, vii. 179. 21, but more, on the whole, for his tricks than for his weapons.

‡ As an appendix-group add vii. 148. 36 ff.; ix. 45. 108 ff. (*praharaṇāni kīrtiyamānāni śṛṇu*).

§ *sāra, madhya, phalgu*. The commentator says 'stationed in the van, center, and rear'; but this is the consequence of their division by quality. *Phalgu* is worthlessness, not rear: compare vii. 11. 24, *mahā-camūh phalguṣeṣā*, 'the miserable remnant of the great force.'

kets with which to fling hot balls, and the box containing these balls resting in the baskets,²¹ with hooked-lances,²² with wooden breast-plates,²³ with weapons concealed in wood,²⁴ with 'blocks of wood with iron spikes,²⁵ with tiger and leopard skins 'for man and war-car,' with dart and horn,²⁶ with crooked javelins, with axes, spades, and oil of sesame and flax,²⁷ and gilded nets.^{28*} Such was the array of the Kurus, excluding the chariot-description following, where we also find javelins, bows, etc.

These weapons are all retained or discharged by the hand. No mention of the *nivartana*, or property of (discharging, *pratyoga*, and) recovering missiles, would lead us to suspect a specially adept band of lassoists or boomerangists, though the exercise of this art gave rise to the *nivartana* superstition, and the latter is elsewhere in the Epic one of the forms of magic power gained by religious meditation. The nooses rarely come prominently into action. They were cast from the raised hand. The iron balls do not appear to be more than one of the be-

* ¹ *anukarṣa*; ² *tuñīra*; ³ *varāthā*; ⁴ *tomara*. ⁵ *upāsāṅga*; ⁶ *nīṣāṅga*; ⁷ *çakti*; ⁸ *ṛṣṭi*; ⁹ *dhruva*, *patākā*; ¹⁰ *çarāsanatomara*, 'a very heavy arrow discharged by a bow' (not a hand-*tomara*, javelin); ¹¹ *raju*, *pāça*; ¹² *paricchada* and *kacagraha*: both are doubtful; perhaps *paristara* should be read and *karagraha*; in either case the first word is equivalent to *āstarāna*, blankets or coverings of some sort; and the second word, if not hair-catcher, is hand-catcher (*kaca*- is the usual word: compare vii. 36. 25, N. '*añkuça*'); *vikṣepa* is added to show that it is a weapon cast upon one (perhaps also the *paristara* is, if equal to *āstarāna*, the round-circling weapon, boomerang: compare Rājend. Ind. Aryans, i. 314; *āstara* is boomerang in the Nītiprak., but no form of this sort is found, I think, in the Epic as a projectile); ¹³ *tāilagudāvāluka* and *āçivī-saghata*; ¹⁴ *sarjarasapāṅsaraha*. I am not quite sure of the meaning; ¹⁵ *ghaṅṭaphalaka*, on sword or spear or even shield, perhaps, *phalaka* is board or blade; ¹⁶ *ayogudajalopala* (the natives and admirers love to extract cannon, or at least catapults, from every mention of iron ball and stone; the commentator here explains the use of the iron balls reasonably, but thinks the stones must have been flung by 'machines': they were flung by hand); ¹⁷ *çāla*- or *çāla-bhundi-pāla* (see above); ¹⁸ *madhūcchīṣṭa-mudgara*; ¹⁹ *kāṇḍadaṇḍa*, = *kaṅṭakadaṇḍa*, or v. l. *daṇḍakaṅṭaka*, same meaning; ²⁰ *sīravīṣatomara*; ²¹ *çūrpapīṭaka* (compare what was stored in the chariot, besides quivers and breastplates, in R. ii. 39. 19 ff., *piṭaka* with *khanītra*; and ib. 37. 5, *khanītrapīṭake* . . . *saçīkṣe*, baskets with cords); ²² *añkuçatomara* (or javelins, as before); ²³ *kīlakavaca*, doubtful, perhaps *kīlakrakaca*, saws in wooden handles; ²⁴ *vāçī* or *vāṣī* (see above); ²⁵ *vṛkṣādāna*; ²⁶ *ṛṣṭi* and *çṛṅga*: '*ṛṣṭi* is a hand-missile used among the Dravidians, crooked, with wooden shaft (*phalaka*): *çṛṅga* is curiously defined by N. as 'a means of freeing (killing) one bleeding when smitten with a club; but it may mean a horn to void excrements in' (compare the weapon [?] *huḍa* or *hula*, in the list of iii. 15. 5. defined by a commentator to Manu, reading *huḍa* for *guda* in M. iii. 133, as a double-edged sword; but the Epic commentator, in iii. 284. 4, defines it as a privy-horn, *mūtrādyaṭsarjanārtham çṛṅgam*); ²⁷ *prṣa* (*bhalla*), *kuṭhāra*, *kuddāla*, *tāilakṣānumasarpis*: the last also explained as protective oil-cloth; ²⁸ *rukmaçāla*.

loved missiles mentioned as stone, sand, pitch, potted snakes, etc., etc.—crude and brutal roughness all.*

The barbarians are not worse than the natives as to their arms, but are occasionally spoken of in an angry way as using un-Aryan methods. What could be more Aryan, however, than the arms poured out upon Arjuna by the barbarians in general (*mlecchas*)! 'They cast upon him the eared reed arrows and iron arrows, the javelins, darts, spears, clubs, and *bhīndipālas*' that the Aryans themselves used.† But we learn that the Kirātas use poison (and appear to be blamed for it!); that the Kāmbojas are particularly 'hard to fight with'; that the barbarians generally are 'evil-minded'; that the Çakas are 'strong as Indra' (vii. 112. 38 ff.); that the barbarians generally use 'various weapons'; that the Kāmbojas, again, are 'cruel and bald'; that the Yavanas carry especially arrows and darts; and that the mountaineers, Parvatīyas, are proficient in throwing stones, an art the Kurus are asserted to be unfamiliar with.‡

The pseudo-Epic groups several foreign excellencies in warlike matters under one head, and enjoins that each allied nation shall use its own arms. 'Let each man fight according to his native usage. The Gāndhārāḥ and Sindhu-sāuvīrāḥ use claw-knives and darts (quoits?) (*nakharaprāsayodhinah*); the Uçīnārāḥ are good at all weapons; the Prācyāḥ are excellent at elephant-fighting (*mātāṅgayuddha*); they are also deceitful fighters (*kūtayodhinah*); the Yavanāḥ and Kāmbojāḥ, with those

* The iron balls are flung with clubs, as in vii. 178. 23 (quoted above). As they serve to fill the list of the city's possessions, N. naturally translates *guda* (as usual) by *golaka* in iii. 15. 8, helped thereto by *agni*, just before. But adornment and defense are united here throughout, and *sagudaçrīgikā purī* may as well mean 'with ball-tipped horns' as with a machine no one ever heard of for casting iron balls. It is useless, however, for these commentators to see that the iron balls and other 'powder'-implying 'machines' are always flung by hand. This they pass, and translate always from the modern point of view of late works that have specialized these terms. As we saw above, the hot balls were probably brought boxed in baskets (on the elephants) and dropped. Oil fires and heated sands are used in mid-battle. Such a combination as *sagadāyogudaprāsāḥ* (carried and discharged) would alone decide the matter to an impartial judge. We have here (vii. 36. 24) simply 'clubs, iron balls, and darts,' as hand-missiles, and certainly, as so explained, no more awkward than a pot of snakes. Compare vii. 25. 59, *pāṇsuvātāgnisālīlār bhasmalosṭṛṭṛṇadrumāḥ*. The nooses are used as said above in ix. 45. 109 (*pāçodyutakarāḥ keçī*). The plough-share (*sira*) is Balarāma's pet weapon; *halāyudha* is a common type. In ix. 60. 9 an attack is actually made with the plough-share, *lāṅgala*. It is not infrequent as an ordinary weapon. Compare the list *halaçaktigadūprāsacarmakhaçgarṣṭitomara*, vii. 112. 15. Worth noting is the omission of *lavitra*, scythe, enumerated among *amukta* in Nītip., since we find this neither as weapon nor as car-defense, though knives protect divine cars.

† *karnīnāḥikanārāçais tomaraprāsaçaktibhāḥ, musalān bhīndipālāiç ca*, viii. 81. 12 ff.

‡ vii. 119. 14 ff.; 121. 14 : *açmayuddha, çīlāyuddha*, ib. 31-45, 36, 32.

living near Mathurā, are expert in kicking (or, boxing? *niyuddhakuṣalāḥ*); the Dākṣiṇātyāḥ are especially swordsmen (*asi-pānayah*)' (xii. 101. 1 ff.).

As to the use of eared (barbed) weapons generally, of which I have spoken under the head of arrows, it is worth noting that just what the law in this regard forbids is found again and again; and that, on the other hand, the like pretension to firearms on account of the later use of *nalika* is utterly impossible for the Epic, on account of its use as simple arrow or projectile by hand.*

I have quoted above the absurd statement that all the Kurus were ignorant of the art of stone-fighting, as contrasted with the mountaineers, who are especially 'stone-fighters.'† But our last reference to the rude and irregular fighting of all combatants will dispute this statement. For when two fighting fail of weapons, they take to aught their ingenuity suggests, 'dirt, fire, water, ashes, stones, wood,' and so forth, and then attack with the fists.‡ Fisticuffs, alternating with hairpulling, biting, etc., ends in a wrestling match. If this does not succeed, he whose attendants can help lets them run up and cut the other's head off.§ In another scene we have resort to fists and feet at once when clubs give out; and such expressions as 'nail to nail,' 'hair to hair,' 'tooth to tooth,' show the close position of combatants.||

The divine weapons, with the question of certain 'machines,' will now be discussed. It is not the writer's fault that these are grouped together. They have been implicated by others,

* *karṇinālīka*, *varāhakarṇa*, *vikarṇa* are species of one genus. Compare note above, and vii. 166. 23 ff.; 170. 35 (*vipāṭhakarṇinārācāli*, with *kṣura*, *vatsadanta*, etc.): vii. 47. 20 (*taṁ karṇinā tādāyud dhṛdī*); ib. 48. 1 (*sa karṇināḥ karṇinā karṇe punar vivyādha*); vii. 169. 9 (*karṇināi kena vivyādha . . .*).

† *parvatīyāḥ pāṣāṇayodhinah* (-*pāṇayah*), but *kuravaḥ sarve nā śma-yuddhaviçārudāḥ*, vii. 121. 14 ff., 81.

‡ vii. 25. 58 ff.; i. 19. 17.

§ *padācoraḥ samākramya sphurato pāharac chirah*, viii. 28. 38. Fisticuffs (*muṣṭiyuddha*), hair pulling (*keçagraha*), are esteemed less scientific than wrestling (*bāhuyuddha*); for the last has its termini technici, and yields little to the art of weapons. Compare the *prṣṭhabhaṅga*, *sampūrṇamūreçhā*, *pūrṇakumbha*, attitudes of wrestlers, in the Jarā-sandha scene, ii. 28. 19; and compare the famous wrestling of Bhīma in iii. 11. 62 (repeated in iv. 22) and iv. 13.

|| vii. 177. 45. Compare viii. 49. 80: *koçākaci yuddham āsūl dantādanti nakhānakhī* (like *rāthārathi*) *muṣṭiyuddham niyuddham ca*. Compare, for the last, *niyuddha* 'feet-fight,' vi. 76. 4, *asiyuddhe niyuddhe gadā-yuddhe ca* (with arms following). As *nakha*, 'nail,' passes into *nakhara*, 'claw knife' (e. g. vii. 19. 32, *vipraviddhāsīnakharāḥ*), so *muṣṭi* seems to pass into a 'dagger' in *muṣṭika* as used later, but in the Epic this *muṣṭika* equals *muṣṭiyuddha*. The same irregular paroxysmal fighting characterizes the battles in R.: 'tearing hair, biting ears,' etc., with much noise in every scene: e. g. R. vi. 37. 50; ib. 54. 57 ff.; 98. 25.

and so closely that for convenience' sake it is better to speak of them together. For the Hindu warriors, not content with earthly arms, received from spiritual powers or Powers certain 'divine arms,' which are clearly magical and demoniac. They had, too, what they called 'machines' and 'hundred-killers.' The later Hindus acquired gun-powder, and employed earlier terms in a new sense. Machines and hundred-killers were converted into cannon, rockets, etc. Naturally the next step was made by European scholars. The divine weapons become in their hands only gunpowder-weapons. For, as with all heavenly manifestations, fire is spoken of with the divine weapons. This rational and radical explanation is pleasing because it is radical. We do not believe in divine weapons, and are glad to have a rational explanation. Nevertheless, our Hindus did believe in them. They never ventured to interpret divine arms as fire-arms. We cannot, then, deny their fire-divine-arms as products of their poetry. Whether these really existed is of no consequence. The question is, did they conceive of fire-divine-arms as probable and natural. They did, and they also imagined divine arms without fire. Thus, a bow or a sword is a 'divine arm' when given by God, or endowed by the might of the user's piety with superhuman power. Fire is not, therefore, a necessary concomitant of divine arms. Hence no reason exists for supposing that earthly fire manifested in a weapon first suggested 'divine arms.' What, now, to the Hindu are the divine arms? They are mentioned as a matter of course in very many battle-scenes (e. g. vi. 74. 6). Arjuna uses them when hard pressed on all occasions. How does he use them? He meditates them into existence. They are weapons of magic. Many other heroes have them.* Now they are two-fold, as said above. Either like the 'weapon of Parjanya,' weapons fashioned in heaven and endowed by the gods with power; or the ordinary weapons, bewitched by spiritual mastery of nature. They are not always fiery. 'Fiery' is not always a mark of divine weapons. Two results flow from these considerations. Fire is used not of fire, but of the swift sharp biting power of a weapon. Prayer and meditation inspire the most ordinary weapon.†

* The later literature is also given to the employment of mystic arms. Compare their use (*āgneyam astram*, etc.) in acts one and five of the Utt. Rāmācarita.

† vi. 117. 36, *divyāny astrāni sahcintya prasādhāya . . sa tūir astrāir mahāvegāir dadāha . . .* vi. 119. 16; vii. 16. 25, *tam çuram āryavartinam mantrāstreṣu kṛtācramam*, etc. *Parjanyastram* in vi. 121. 23. The *açani*, made by God, and furnished with eight bells (*aṣṭaghanṭā*), is flung and caught in battle, vii. 156. 157. A like weapon made by Rudra, with eight wheels, is of iron, vii. 175. 96; the *nārāyaṇa-astra*—end of vii., especially adhy. 201—is late, like the eight-wheeled one:

We may here consider more particularly some of the weapons appearing most fire-like. The 'wheel of fire' is a quoit-disc, which we have seen among heaps of ordinary arms on

the *astram āindram* is more common, vii. 157. 37-39 (see below). The arrow cast by Arjuna, in viii. 90. 103, is 'fire-like, terrible, with snake-like poison, stone-hearted (*açmasāra*), and divine,' for he discharged this 'saying a prayer over it' (*abhimantrya*). So in vii. 201. 16 ff., a weapon incanted becomes an *āgneyam astram*, 'a fire weapon,' but it is only a 'glowing arrow' for the bow (*abhimantrya çaram dīp-tam*). Arjuna's specially divine weapons are a sword and a bow. But he has besides a number of others; and in fact they are unlimited; for, whenever he chooses, he says his incantation and makes ordinary arrows divine. Compare iii. 245. 17, 26, 25 (*divyāstrapramantritāḥ . . khacarāḥ*). Karna's God-given earrings and mail (iii. 300-311) are exchanged for an ordinary spear (*çakti*), but so inspired that it returns to the hand when it has been discharged and slain many; this spear may only, like Pāçupata, be used in extreme need (iii. 310. 33). Arjuna's weapons, being most prominent, may be mentioned here in a group. He has the *sthūnakarna*, *indrajāla*, *sāura*, *āgneya*, *sāumya*, *çabdavedha* (loc. cit.). He has the sword of Çiva and the *antardhāna* of Varuṇa; the *vajram astram* and *açanis* (thunderbolts, lightnings); the *sammohana* that gives distraction; the self-discharging returning weapon called 'Brahmā's head.' Compare iii. 40. 15; 41; iv. 66. 8; iii. 44. 4 (in ib. 100. 11, the *vajra* is *saçasri*); i. 133. 18 (*brahmaçiro nāmā'stram saprayoganivartanam*); other divine arms from Prajāpati, Indra, Agni, Rudra, in iv. 64. 23; the divine weapons of Arjuna, like those in the Rāmāyaṇa (R. i. 30. 23), turn and address their master, iv. 45. 26-27. By the *āgneya* or Fire-weapon he made fire; by the *vārūna* or Water-weapon, water; by the *vāyavya* or Air-weapon, air, i. 135. 19 (which shows the *āgneya* as Fire-weapon, not as fire-weapon); *pārjanya*, *bhāuma*, *pārvata* follow: the *antardhāna* causes disappearance; by their aid he becomes short, tall, etc. Arjuna gives an exhibition of his god-given arms, the bow, the arrows, the horn (Deva-datta), etc., in iii. 175. 1 ff.; and in vii. 30. 15 ff., as an exhibition of magic, Çakuni showers down from the sky all sorts of weapons, *laguḍāyogudāçmānaḥ çataghnyuḥ ca saçaktayaḥ*, etc. (*asthisamūhi* is interpreted 'with bone *phalaka*'), in all twenty-four, 'and other weapons.' Observe that clubs and spears as well as *çataghnis* characterize the downfall. The *bārhāspatyam āgneyam* given Arjuna by Droṇa is hurled at the Gandharva, and burns the car, glowing, i. 170. 31. But following this we see the magic reappear. In iii. 170. 30 a *mādhavam nāmā'stram* is added to the list, and in v. 96. 42 we find that all the divine tricks are placed in the bow Gāṇḍīva, for *kākudīka* (puts the foe asleep, in 183. 16-18 with waking, *sambodhana*), *çuka* (confuses), *nāka* (maddens), *akṣisantarjana* (incantation), *sanitāna* (uninterrupted flow of darts), *nartaka* (*pāçūca*, makes the foe jump), *ghora* (*rākṣasa*, horrible qualities), and *ānya modaka* (the foe kills himself by putting stones in his mouth), all rest in the bow. They are purely magical. There are, by the way, three especially divine bows: Varuṇa's Gāṇḍīva, Indra's Vijaya, Vishnu's Çārṅga (horn-bow); but Gāṇḍīva is the best bow, as Sudarçana (Vishnu's discus) is the best general weapon (to unite two accounts in v. 158. 4-5; 54. 12). Droṇa's arms are the *āindram*, *vāyavyam*, *āgneyam*, etc., iv. 58. 52. In R. we find a hero rather exhibiting disdain of these arms: 'fie on my divine arms,' he cries (R. v. 34. 15). The mantras used for any purpose of incantation are from the Atharva-Veda (*imam mantram gṛhāna tvam āhvānāya divāukasām*; and *mantragṛmah . . atharvaçirasi çrutah*, iii. 305. 16, 20). In R. i. 30. 4 ff. is a huge list of these and similar divine arms. Compare ib. 24. 12, where there are also 'arms unknown to the gods' (*devāç ca na vidur yamī*)!

any battle-field. It became the weapon of Vishnu, and hence its divine character. Perpetually we have the old common quoit, flung like a hammer by men, and the new spiritualized divine weapon, with its attributes transferred again to the human arms. But, fire or not, no one can claim gun-powder for it. It is picked up and flung, and caught, and cuts off a head. It is flung along with battle-axes and arrows and swords; it is cut in two—it is an ordinary missile weapon, undescribed, except in the case of the divine copy, which is fiery, sunlike, with a thousand spokes (rays).*

We may turn now, having seen how purely poetical are the divine arms, to those instruments of war the names of which a later age employed to designate powder-weapons. The iron ball, *ayoguḍa*, which, we have seen, is not to be differentiated from the mass of ordinary projectiles,† is claimed as a ‘cannon’-ball, because there is mention made of ‘machines.’ But we can safely leave the ball till we establish the ‘machine.’ We saw in the paragraph on the Hindu city that these machines, *yantra śataghnī*, were posted as part of a city’s defense, and in all probability were employed to cast heavy shafts or let fall stones, as they are posted so as to command approaches below. They are (when their position is specified) not at the gates, but above them. That the *yantra* or *mahāyantra* is found in the camp is, when we remember that the camp is conceived of as a miniature city, not enough to make us believe it a field-machine for projectiles; that it is rarely found on the field, and then not possibly used as a cannon, substantiates its powderless character. On the other hand, negatively, it is inconceivable that such primitive arms as are used throughout the war in the Epic account should have been employed contemporaneously with powder, guns, and cannon; it is further inconceivable that, had they been used, they should not have been mentioned as such in a way to leave no doubt in the reader’s mind. Of this perfect silence in regard to the use of guns and cannon on the part of the poet Oppert gives a very naïve explanation. He says of the use of gun-powder, that it ‘was so common that it was not worth mentioning.’ Finally, it is positively against the use of these

* *āgneyam astram . . cakram lebhe*, vii. 11. 21; *cakram divyam sahasrāram agrhāt . . ksurāntam . . sūryābham maniratnavibhūṣitam cikṣepa*, vii. 175. 46: but compare *iśān dhanūṣi khudgāiś ca cakrāni ca paraśvadhān . . . ciccheda*, viii. 47. 12: with the *śataghnī*, in viii. 27. 32. The discus, i. e. of Vishnu, is again, in contrast to these, described as magical; it returns to its owner, is five cubits long (v. 68. 8. *sāpahnava*, *vyāmāntara* [2] = ‘*sasāmhāra*, *pañcahastā*). It is also called *rathāṅga*, as the *cakra* is literally a wheel.

† Compare *ayoguḍa* with *prāsa*, *gadā*, etc., in the quotations given above.

arms as described to explain them as fire-arms. A good conclusive instance is found in the use of the word that Oppert takes to mean a gun—really one of the barbed arrows we saw so frequently used. The barb called the ‘ear’ Oppert cleverly explains as the lock, trigger, etc.; but when we read ‘they cannot draw the arrow of speech out of a man’s body, although they draw out barbed reed arrows and iron arrows,’ we refuse from the connection alone to think it possible that ‘barbed reed arrows’ has already passed into the meaning ‘guns.’* To take these weapons in order: the ‘fire-weapon’ or ‘fire-wheel’ I have already shown to be a divine weapon, and the fire transferred to the ordinary discus, which is constantly used as a common hand-projectile. The *nālīka*, *karṇinālīka*, constantly in connection with *nārāca*, the ordinary iron arrow, is nothing but the genus to a species called ‘boar-ear arrow’ (*varāhakarṇa*), and is used by knights standing in their chariots shooting with their bows.† The *çataghñī* (or *-ghñī*) has often been noticed in the groups of projectiles. The gunpowder-champion assures us that it is a rocket or something of the sort in late literature, or even a cannon, and must be the same in the Epic. It means a ‘hundred killer,’ against the spear as a ‘single-killer’ (see above). We saw, however, just now, that if a spear is properly spiritualized it can also kill its hundreds and return to its owner. In the Epic use it is a simple projectile. It is flung by hand (Wilson denies this), and, like a sword or a spear, is ‘split to pieces’ by the arrows of the foe. Just as a sword or spear is ornamented with bells, so a *çataghñī* is ornamented with bells. It forms one of a group of missiles, darts, arrows, etc. As common arrows are called glowing, so the *çataghñī* is ‘bright’ and ‘horrible’; but even a bow is like ‘a wheel of fire.’ Fire-comparisons are employed for poetic effect. Only a prosaic or forced interpretation would allow us to render ‘fiery’ as really ‘of fire.’ A knight seizes a quantity of *çataghñīs*, along with quoits, balls, and stones, for throwing purposes. The demons, indeed, employ these, but so they do all other mortal arms. The name is used as a strong argument, but we must not forget that, if ‘hundred-killer’ seems to imply a projectile that explodes, a

* v. 34. 79, *karṇinālīka-nārācaḥ* opposed to *vākçalya*.

† Compare the quotations given above under ‘arrows,’ and add e. g. *karṇinālīkanārācaḥ çhādayām āsa tad balam*, vi. 106. 13, of a bowman; *karṇinārāca*, *varāhakarṇa*, *nālīka*, as arrows in vii. 179. 14; *rathinac ca rathāir ājan karṇinālīkasāyakāḥ, nihatya samare virān*, vi. 95. 31; so, too, viii. 81. 12. Arrows are like fire, but in the same breath like poison, both tropical: *viçāgnipratimāḥ*, vii. 156. 128, a point discussed above. Observe also that in *nalikā* we have one word, in *nālīka* another; and that the true word for ‘gun’ is the later form *nalīka*, which is not in the Epic at all. Compare Oppert’s Weapons, pp. 11, 63.

common hook is called an 'all-killer.' Moreover, this very name is applied to Bhīma's ordinary club.*

The *yantra* or *mahāyantra*, the machine. This is asserted to be a cannon. Let us examine its actual use in the Epic.

In the battle-scenes, the *yantra* is a contrivance of almost any kind. It is a restrainer or protector, and serves as armor or holder of a fastening; † as the rope or the holder of a banner; ‡ it is even a drumstick (vii. 23. 85); it is shattered (among the ordinary arms cast at the enemy), as if of fragile nature (vi. 96. 71); it is generalized as any contrivance, e. g. as a divine discus (i. 33. 3); it is part of the trappings of a war-car, the bands of the chariot (vii. 147. 88); it is a common projectile, flung with *ṣaṭaghnī*, *cakrā*, *gudopala* (iii. 284. 30); even with the epithet *mahā* it is only one of a list of ordinary arms (v. 152. 15). Outside of war it is a 'contrivance in mid air' (a hanging target: *vāihāyasa*, i. 185. 10). It is used to sail a boat with (i. 141. 5). There are other 'movable' machines for the water (i. 128. 40: *yantrāṇi sāncārikāṇi*). But it is used for hoisting heavy things with, as in the Harivaṅṣa, 'he raised the great bow

* *Ṣaṭaghnī* as a simple projectile, flung, and split by arrows, vi. 113. 39 ff.; 96. 57 ff.; ornamented with bells like sword and spear, *ṣaṭaghaṅṭhā ṣaktiḥ*, iii. 286. 3; *ṣaṭaghnīḥ ca sakiṅkiṇīḥ*, viii. 14. 35; compare ix. 17. 46; use as hand-projectile: 'Nakula cast a spear at him; Sahadeva, a club; Yudhishtira, a *ṣaṭaghnī*,' and Čalya cut all these to pieces with his arrows, ix. 13. 22, cf. 26; used with darts, blocks of wood, and other like weapons, vii. 133. 44 (compare R. vi. 65. 21, use same); called *su-ghorā*, *citrā*, vi. 119. 2; other weapons called fiery, vii. 138. 21; 115. 30; 119. 32 (bright like fire, a bow like a wheel of fire); even in a chariot-spear and sword (but *rathaṣakticakra* N.) we are told that the sword is a 'divine gleaming sword, like fire,' drawn from its sheath 'like a snake from its hole,' x. 6. 13-15; use with *cakra*, etc., *pariḡḥya ṣaṭaghnīḥ ca sacakrāḥ saguḍopalāḥ*, iii. 284. 31 (where it is added they flung them with a movement of the arm); exactly so in ix. 45. 109-110, *pariḡhabāhavaḥ*, *ṣaṭaghnīcakraḥastāḥ*; the demons, again, in iii. 169. 16, use *ṣaṭaghnī*, with *bhuṣuṇḍī*, etc.; the ending *ghnī* is found in *ekaghnī*, a spear, vii. 183. 2; cf. *ṣatrughna*, a dart, vii. 156. 132; the hook called 'all-killer,' *sarvaghatī*, in vii. 29. 18 (*aṅkuṣa*); Bhīma's club is *niṣkarnā āyastī sthūlā supārṣvā kāncuṇī gadā ṣaṭaghnī ṣatanirhrādā*, v. 51. 24. The *ṣaṭaghnī* is usually among city defenses, e. g. iii. 15. 7. The 'two-wheeled and four-wheeled' *ṣaṭaghnīyaḥ* of vii. 199. 19 can only be explained of poetically applied meteorological phenomena, like the other heavenly appearances there mentioned, where lights, and clubs, and quoits, and iron balls appear in all directions, and are the result of magic power. We might even take *catuṣcakrā dvicakrāḥ ca* (*ṣaṭaghnīyo bahulā gadā*) as special phenomena. I have admitted the bare possibility of ignited arrows under the word *dīpta*, but can find such use only of arrows or similar weapons 'as if' glowing with fire, *agnikal-pāḥ* . . . *pradīptāir iva pāvakāḥ* (*yodhāḥ*), etc., implying only this if we study the connection in which, as here, vii. 112. 51, such phrases occur. Compare the club in vii. 15; viii. 25. 15.

† vii. 90. 22; 93. 70; viii. 93. 9.

‡ vii. 92. 72, *yantramukta iva dhvajah*; R. ii. 84. 8, *yantracūta iva dhvajah* (compare R. vi. 20. 19, *dhvajāḥ iva mahendrasya rajayuktār acēṣṭatām*).

with power as if an iron *yantra*’; or as in the Epic’s first book, where a *yantra* is employed to move a mountain and set it on the tortoise.*

But the *yantra* is generally a defense in a fort (ii. 5. 36), over the gates of towns (iii. 15. 5; xii. 69. 45), where the use is nowhere explained, except as by the later commentators taken to be machines to cast iron balls with powder, i. e. cannon. Here they are at most catapults.† The so-called *astrayantra*, instead of meaning cannon, means a manœuvre in fighting (as a technical term).‡ But the *yantra* is not unknown on the field; hence its peculiar properties, had it had any, could not have escaped notice (vi. 17. 33; 54. 55, 61; with *tomara*, *tūnīra*, etc.). Again, we find that, when elephants are on a peaceful march, they carry *yantra* already ‘strung,’ with other weapons.§ The later division of the army as six-fold, including ‘treasure and *yantra*,’ applies to any machines (see above). The noise produced by the *yantra* may be thought, in spite of this number of disproving examples, to favor the meaning of cannon. For we read ‘the noise of the great bow was like that of a *yantra*.’ But there is no reason why the catapult discharging stone should not be so used; and negatively, again, why is the smoke of the discharge never alluded to?||

Most marvelous in view of the powder-theory are these facts: that we have no smoke from the arms in question, and no gun-powder is mentioned;¶ that powder is always the rocks

* H. 4515; i. 18. 12. Observe in H. that the slow motion of the gradually raised bow is the point of comparison; with the example from the first book, it is clear that a derrick is meant. Notice how late is the iron *yantra*. Compare xiv. 77. 26, *vicakarṣa dhanuḥ . . yantrasye ’va caḍḍo bhūn mahāns tasya*. Here the sound of the bow is like the discharge of a catapult (as well as cannon). So R. vi. 72. 24, *yantrasya ceṣṭamānasya mahato dānavāir iva*, of the sound of the demon’s teeth. This is a good example, for fire came from his eyes, and fire-imagery is exhausted before coming to the *yantra*, which is reserved for noise.

† So in iii. 284. 4, where the account of the moat filled with crocodiles and guarded by stakes is followed by the statement that there were *kapāṣayantra*, machines to guard the doors; but the commentator explains ‘to throw balls with,’ although the following words mean only that there were balls and stones and the *huḍa*, which he renders privy-horn. Even the Puranic *yantra* is used in the same simple way, e. g. Ag. P. 240. 28; 168. 33. Compare above, p. 178, note.

‡ ix. 57. 18.

§ xv. 28. 9. *gaḍḍh . . sajjayantrāyudhopetāh*.

|| iii. 280. 36, *visphāras tasya dhanuṣo yantrasye ’va tadā babhāu*: compare the noise spoken of above, in xiv. 77. 26.

¶ In i. 30. 47 ff. (*castrāṇi . . savisphuliṅgaḍḍvālāni sadhūmāni ca sarva-ḍḍah*), sparks of fire and smoke are mentioned in connection with the arms of the gods; but here Agni, the god of fire, is the god of smoke, and clouds are made of smoke, according to the Hindu belief; so that this proves nothing for the use of smoke from fire-arms. Besides, in this passage only sharp axes, spears, discs, tridents, etc., occur, and the smoke and fire accompany them as divine manifestations, not proceed from them. Smoke and fire are mentioned in vi. 87. 34—from the elephants’ tusks!

ground up by demons fighting; that the words for guns, *nalika* and *tūpāki*, are unknown; that the balls are generally oil-balls or hot-water-balls, and that no mention is made of discharging any other balls with (gun or) machines; that the later word for 'shot' is here 'arrow' (*çara*), and cannot be otherwise interpreted; that no mention of firing what is supposed to be a cannon occurs; that the Greek writers do not hint at the supposed use; that the one prop on which the hypothesis rests is that gun-powder 'was so common that it was not worth mentioning.'*

Let us remember, in closing our view of the offensive weapons, that not only are fire-arms uncertain in meaning, but many of the common arms have different meanings, and are differently interpreted by different scholiasts,† their local usage doubtless guiding them in their selection.‡

E. Armor and defense. The arms discussed above are of course in part defensive as well as offensive.

The difference between foot-man and knight comes now more prominently before us.§ The knights used most of the common weapons. In fact, except for the vulgarest weapons, the hot sand, burning oil, snakes, etc., the noble and well-born did not hesitate to employ the arms of the common people. The latter likewise used the nobles' bow and sword and spear. Each class had its natural and more usual arms, a distinction between them (perhaps almost forced, when we come to detail) being attempted above.

But in protective armor the knight was more the gentleman. His equipments here rather than in offense marked him as apart from the foot-soldiers and horse-riders. The armor de-

*In iii. 171. 3, cliffs are ground up into stone-powder, *açmacūrṇāni*; the devils fling fire, rock, wind, and themselves into the bargain, as weapons. So, vii. 121. 45, of mountaineers. No *agnicūrṇa*, gun-powder, is mentioned, only *açmacūrṇa* in *açmayuddha*. The *açani* is the wheel-moved thunderbolt, at the command of a pious knight, but remaining a divine weapon, as above, and in iii. 42. 5.

† It is not the text, but the commentator's interpretation of the text, to which Oppert is indebted for the facts which he thus quotes: 'Manipura . . . connected with Çukrācārya, the presumed author of Çukraṇīti . . . is the same Manipur of which we have read in the Mahābhārata that it was provided with fire-arms and guns.' . . . (Madras Journal, 1879, p. 167 ff.; in 1881, the late Nitiprakāçikā edited by the same).

‡ MacRitchie's accounts of the gypsies of India, 1886, makes probable that artillery was introduced into Europe by the Gypsies (*Jāts* or *Jaṭṭs*, as he thinks, of Sindh). A Hungarian chief of twenty-five tents made musket-balls and other ammunition in 1496 for Bishop Sigismund. So late a date cannot affect our interpretation of native Epic passages. Grierson holds that there is no proof that the Gypsies were *Jāṭṭs* (Ind. Ant. xvi. 38.)

§ *Çūrāḥ* are the knights, though not exclusively so; *sāinikāḥ*, the common soldiers; *yoddhāḥ* is used of both indifferently.

scribed belongs to the knight, not to the mass of those about him, although perhaps to a limited extent imitated by them.

In general descriptions (it should be said at the outset), it is difficult to know just where groups of protective armor belong. Thus, we know that skins were used as shields to the chariots, even rhinoceros-hide (*khādgakavaca*) being so employed; and that tiger- and leopard-skins (see above) are found in the general enumeration of protective devices for the whole army. Again, poetically the common equipment is naturally passed in silence, while the gaudy is described. We must, therefore, for the most part content ourselves with the arms of the knight.

We have a picture of a Hindu warrior, as he stands ready for battle. He is 'armed with a cuirass, and with guards for his hands, and has on his fingers the protector, on his arms the guard against the bow-string.* To quote here (as frequently in other places) one example as illustrative of what might be shown by many, we find that the cuirass is described as of gold—that is, gilded—and, with one word, many understand such gilding as an ornament of most of the arms.† Decorations such as the 'hundred moons' of Dhrištadyumna's shield are like the same ornaments in weapons of offense. Compare vi. 116, 19, shields with a hundred moons and stars.

The latest scenes naturally describe the most brilliant armor. By uniting two passages, we see at once of what material the pieces of defense, mainly shields, cuirasses, and breastplates, were made. We find them seven in kind: iron, copper, brass, silver, gold, wood, hide. At once the precious may be subtracted from the base metals, as we find them added.‡

Varman and *kavaca* are the usual names of the body-armor.§ This is sometimes termed 'body-guard' (*tanutra*, *-trāna*), but is elsewhere the particular breast-guard of the whole armor of man or beast, as 'body-guard.' Another name for this is *gātrāvaranāni*, 'limb-guards,' distributively, equivalent to the collective.||

* iii. 37. 19; x. 7. 52, *kavaci satalatrāno baddhagodhāṅgulitravān*, and *dhanuṣpānir baddhagodhāṅgulitravān*. In the first, 'C. reads *tanutrāno*, 1474.

† *kāñcanavarmabhṛt*, ix. 32. 64; i. 30. 47.

‡ *kārṣṇāyaśaṁ varma hemacitram*, vii. 127. 17; *tāmra-rājata-lāuha, lāuhāni kavacāni*, iv. 62. 4, 7; gold especially, ix. 32. 63; wood, *kīlakavacāni* (see above); hide, *dvīpicarma-avanuddha, vyāghracarma*, vi. 46. 31; compare above, p. 282, note, on arms. The cuirass is occasionally expressly stated to be very costly: vii. 165. 29, *hemacitram mahādhanam kavacam*.

§ *çarāvāra(ṇa)*, 'arrow-guard,' may be anything that protects the body from arrows, as shields, helm, breastplate, or quiver. As shields, perhaps, in vi. 60. 17; vii. 14. 72.

|| viii. 27. 33; vi. 119. 4, *saviçirṇatanutrāṇaḥ*, all his armor was pierced; vi. 95. 47, *varamukhyaṁ tanutrāṇam; gātrāvaranāni* in vii. 2. 28 (*kavacāni*, N.: shields, P. W.); *kañkaça*, elephant-hook, may mean cuirass in vii. 187. 47. Compare *çarma varma ca* in vii. 117. 28.

Specific ornamentation is found in the rich descriptions of the fourth book. The armor is here adorned with suns and moons, etc.* In this passage, and *passim*, the cuirass is lauded as impregnable; the *nivātakavaca*, 'invulnerable plate,' is always assumed. But the knights are in reality perpetually unharnessed (*akavaca*), from the armor being either hewn off or becoming loose.†

Varman, generally iron, and *carman*, leather armor, are often mentioned together.‡ Of metals, by far the commonest is iron. Of hide, we find a bull's hide, and loose bear-skins (with a brass breastplate), but the latter are generally for shields. Netted armor or wire netting may be meant in *jāla*, which is adorned with gold and worn by beasts and men.§ *Varman* means 'cover,' and *carman* 'skin.' Hence *varman* may often imply *carman*. The fixed phrase *khadgam carma tathā grhya* seem to point to the hide-shield as earlier—an a priori commonplace. As the Yavanas are expressly noted for wearing brass and iron breastplates carefully worked,|| it is interesting to observe that even these are said to be of such fragile nature as to be easily pierced by a mass of arrows drawn full to the ear.

Next to the *varman* and *kavaca* comes the shield, called *carman*, which is of leather adorned with figures (vi. 54. 26 ff.); or a simple tiger-skin or bear-skin worn over the body besides the brazen breastplate served as a shield. The shield (that is, here a real shield, worn as a plate) might have as many as three bosses according to the pseudo-Epic, but not in earlier portions.¶ I judge, perhaps from too slight evidence, that the

* iv. 31. 11. The various royal *tanutrāṇi* are gilded iron with images of suns, circles, eyes, etc.; the size of one specified is the area of one hundred water-lilies, or these were marked on it—I am not sure which meaning is correct: *utsedha* seems to me the outer surface raised, so that we might suppose the lilies were in relief. But N. takes it as 'one hundred padmas broad,' as if a shield were meant: this in *varma* is possible; but here we have *kavacam*. Arjuna wears a *sparṣarūpavat kavacam*, iii. 168. 75.

† *vimuktayogyakavacāh*. By arrows the *kavaca* is pierced, vi. 112. 26, et *passim*. Compare R. vi. 68. 19, *tasya tadbhānavidhvastam kavacān kāncanam mahat, vyaçirjāla rathopasthe tārājālam ivā mbare*. But *abhedyāih kavacāir yuktāh* is common praise: e. g. iii. 98. 27.

‡ vii. 148. 40: i. 194. 7.

§ *jāla, jālavant*, vi. 19. 30: *vāraṇāh*. . . *çūrā hemamayāir jālāir dīp-yamānā ivā calāh*. Compare R. vi. 64. 24, *sa samuddhaḥ çarī khadgī kavacī hemajālavan*. Compare *rukma-jāla* for knights, v. 155. 10.

|| 'The Overthrow of the Yavanas,' vii. 119. 42, 49: *çāikhyāyusāni* (is as usual damascened: compare xii. 98. 20, but N. here *çonitāyomayāni varmāṇi kāñsyāni ca*).

¶ *carma trikūṭam*, xii. 166. 51 ff. As *carmanī* are differentiated from *phalakāni* in xii. 100. 9, I prefer to take *phalaka* here and in x. 8. 59 as 'sword.' The latter passage makes it worn on the left side (*sarve sa-phalīke*). The Petersburg Lexicon translates 'schild' in both passages: N. in B. is silent.

shield of the chariot-knight was not worn from the beginning of battle, but rested in his car, and was grasped 'when it came to sword-fighting. First, it seems impossible that a knight should use a bow with even a little shield tied to his arm; and second, we find that a knight who performs the usual act of quitting the bow and the chariot is described as 'drawing his sword and seizing his shield,' which must, therefore, have lain waiting in the car.* I have no passage to prove that the little bells adorning the spears are also found on the shield, though I am not sure that such shields may not be mentioned. The custom is well known to the Greeks (Aeschylus, Septem, 385).

The helmet (*çirastrāna*, 'head protector', with the *kirīta*, as part of whole) is represented to be of metal and adorned with gems, chiefly the diamond; but, though often spoken of, I can get no definite idea of it, from the lack of description in the Epic. It is worn over the ear-rings (R. vi. 78. 16). The little towers called *nirvyūhas* figure apparently as helmets, and must have been (in accordance with the name, which is elsewhere applied to the real towers of a city) high head-pieces, perhaps a kind of tiara; but they are essentially practical, not ornamental. The commentator defines the word as a weapon. There was a band of cloth, turban, called *uṣṇīṣa* or *veṣṭana*, which was worn with the helmet. I hence suppose that the turban was wound around the sides of the head to guard what a not very well made helm left unprotected.† But often the turban is the only head-gear.

The head with helm and earrings 'looks like a full moon'; but the general brilliancy of ornament, not the shape of the head-piece, must be the tertium (viii. 51. 13). Brazen, *kāṅśya*, implies brass used quite as much for adornment as for use;

* vi. 90. 40, *vikṛṣya ca çitam khadyam gṛhītvā ca çarāvaram.*

† *Çirastrāna* is of gold, iv. 55. 57; ix. 32. 63 (*jāmbūnadaparīskṛtam*); viii. 21. 27 (*susāmnaddhāḥ kavacinaḥ saçirastrāṇabhūṣaṇāḥ*); xi. 18. 18 (*çirastrāṇāni*). *Nirvyūha* with the sword (*sanirvyūhāḥ sanistriṅçāḥ*), vii. 89. 17; v. 19. 4. *Uṣṇīṣa* with the helmet (*soṣṇīṣam saçirastrāṇam* . . [*çiras*] *apātayati*), viii. 54. 28. I do not see the point in the comparison *uṣṇīṣa-kamaṭha* of vii. 99. 52. Perhaps the turban kept the shape of the head (turtle-shaped in the parallel), and was stiff enough to be a real aid to the *çirastrāna*. I know from the Epic nothing of the make-up of the turban except that it was perhaps made of three pieces of cloth sewed together (*uṣṇīṣavān yathā vastrāis tribhir bhavati samvṛtaḥ*, xii. 217. 12; *sūçyā sūtram yathā vastre saṁsārayati vāyakaḥ*, ib. 36.) Such silly metaphors as that mentioned above abound. Another in *kava-coḍupa*, vii. 14. 10, may represent the *kavaca* not as breastplate simply, but as really fitted to the curves of the body—boat-like in shape on the ground. The only good figure in the scene above (vii. 99, in verse 53) is where Arjuna is the coast (*velābhūta*) against which this ocean of warriors surges.

and it is quite possible, therefore, that mention of brazen arms must be classed in the same category as that of golden.*

Rājendralāla Mitra (Indo-Aryans, i. 327) asserts that vizors were worn, quoting in corroboration only that when Droṇa fell, he lifted his vizor, and Arjuna shot him. But, in the case (not cited) that I suppose to be here referred to, Droṇa sits on the chariot-seat, and Arjuna calls out not to kill him. He is however decapitated. The account is repeated by an eye-witness. I find no vizor mentioned in either passage, or elsewhere.†

But if vizors are not worn, we find an armor-piece called the 'neck-protector,' which must have formed a defensive union with the helmet above and the corselet below. In a passage quoted above, a knight is described as arrayed in a strong iron gilded breastplate and a neck-protector, while wearing at the same time clothes of yellow, red, white, and black.‡ That this neck-protector did not amount to much may be seen from the fact that, though worn, it never guards a blow, and from the fact that the sword enters or 'digs into' the neck.§

The hand-protectors (*anṅulivestaka*, etc.) are of minor importance. They appear to be of constant use, and, properly, are a defense not so much against the foe as against the knight's own weapons. For their purpose was to protect arm (*godhā*)

* Except of course where *kāṁṣya* means a brass thing; 'brass and gold' are as noble metals put parallel, as *kāṁṣyam ca hāimam ca sarvaṁ*, viii. 2. 29.

† vii. 192. 63-68; 193. 63-65. Beneath the helmet or turban the hair was bound; it was a sign of fear to wear it loose, and we often find *muktakeṣā vikavacāḥ*, 'with hair and corselet loosed,' as a sign of flight, as in vi. 73. 40. There seems to be no difference between the Epic and the Rāmāyaṇa in respect of wearing the hair. There were always family and sectarian differences in cutting and braiding, but the warriors seem in battle to keep the hair tied about the head. Arjuna only when pretending to be a eunuch wears his hair in long braids (*veṇīkṛtaśiras*, iv. 2. 27). In R., *ekaveṇūtha-atvam*, wearing one braid, is a woman's sign of grief (R. v. 22. 8), and grief and discomfort are indicated by wearing long hair in a man's case, R. ii. 28. 23. Curly hair, *vellitāgra*, is admired. It was also a woman's sign of grief to pull out the hair and cover the face (*lulucūḥ kecān kroṣantyaḥ*, etc., ix. 29. 69: cf. ib. 63. 64). The Aryans were marked by their beards, as *vadanāḥ kṛptaṅgaśrubhīḥ* is a common addition when telling how the corpses on the battle-field look (viii. 58. 33, etc.). The Purāṇas borrow from a common Epic threat, vii. 119. 26, and denote defeat by a change in wearing hair (*muṇḍa* as epithet: cf. Vāyu P. ii. 26. 138 ff.; Bṛhannār P. viii. 39). To shave a warrior's head is not allowed, xii. 23. 47.

‡ vii. 127. 16 ff. Here *kavacī* followed by *varma*; the knight wears also hand-guards, earrings, and arm-rings (*aṅgula*); and, as these are conspicuous, the helmet and arm-armor must have been such as to leave both places exposed. *Kaṅṭhatrāṇa* is neck-guard; *kaṅṭhasūtra*, necklace, *passim*.

§ R. vi. 55. 11 gives a good illustration: *karāt tasya tataḥ khaḍgaṁ samācchidya . . tasyā 'tha galake khaḍgaṁ nicakhāna*. So the head is always cut off at a blow, as here in vs. 18, implying a poor guard.

and finger from the bow-string. They are called hand-guards and finger-guards, and are made of iguana-skin*. All the bowmen are represented as wearing them.*

Signs that this armor, common as it is, is not present in all cases, and that the bow-string marks were a common feature, remain in the epithets applied to warriors, implying that their arms were scarred from the bow-string. Nevertheless, the bow-string-guard is very old. Probably, therefore, it was confined to the fingers.† The noise made by this part of the armor struck by the bow-string is often brought forward.‡

As amulets were much worn and esteemed, we may add their characteristic use under the head of protective armor. The use passes into that of the divine arms, already noted. Such arms are restricted in application. One 'must not be used against the teacher,' etc. Of pure amulets, a single instance may here suffice. A 'gem of power' is spoken of: 'never shall I give it up,' says the knight; 'for, when I bind it on, I have no fear of what can come by weapon, disease, or hunger from god or devil or snake.'§ Blīshma's golden girdle was perhaps more for ornament than for defense. Such half-ornamental, half-protective additions to the knightly equipment are of course common.||

Remarks on the use of magic in war, and on the meaning of the 'science of weapons.'

As an appendix to the subject of weapons and armor, a few words should be said here in regard to a point touched upon in the foregoing paragraph—I mean, the application of the su-

* See above, and compare *baddhagodhāṅgulitrāṇa*, vii. 36. 23; *talatra* with *aṅgulitra* in vi. 106. 24, etc. At the beginning of the first day's battle, all the heroes are *talabaddhāḥ*, vi. 18. 9.

† Compare iii. 43. 24. *jjāçaraksepakaḥhināu* (*bāhū*), 'arms stiff with the stroke of the arrow and bow-string.' In A.V. we find *hastaghna* meaning 'hand-guard.' The Epic terms this *hastāvāpa* (but *hastavāpa* is an emission of arrows). Compare vii. 165. 28, *hastāvāpa*; iv. 55. 54, *hastāvāpin* (N. *hastatrāṇaṣṭ tadvān*). In xiv. 77. 21, *papāta gāṇḍivam āvāpaç ca karād api* (the form would be *karāvāpa*), we have not a simple 'armband,' but defensive gauntlet, as usual. The usual *aṅgulitra* or *-trāṇḍ*, in vii. 41. 16; 44. 14; viii. 19. 40; 58. 22 (*sāṅgulitrāir bhujāgrāih*); iv. 5. 1, *godhā*, etc.; also *cārutalin* (*tala*), iv. 53. 9 (N. *hastāvāpa*); while *karavāla*, i. 30. 49; v. 19. 3, etc., is sword.

‡ viii. 21. 15, *jjātalatradhanuhçabdah*: compare ib. 23. Compare also vi. 45. 3-4, *āsīt kilakūlçabdas talaçañkharavāih saha*, . . . *talatrā 'bhi-hatāç cāi 'va jyāçabdāh*.

§ x. 15. 28 (with *vīryamaṇih* compare *ālabhya vīrakāṣyam* . . . *ut-saṅge dhanur ādāya saçaram*, vii. 112. 63). * The divine weapon quoted above, *astram* . . . *na katham cana prahartavyam gurāv iti*, vii. 147. 25. See below, Magic.

|| iv. 66. 4, *hīraṇyakakṣaḥ*. But this common *kakṣā* may have been used as a sword-belt.

pernatural in war. This subject can scarcely be discussed without a prefatory word on the Epic meaning of the 'science of weapons.' Both these topics have been occasionally alluded to in the preceding sections; but, at the risk of some repetition, I shall here take a collective view of what the Epic teaches us in this regard.

We find that certain heroes are credited with a special knowledge in certain kinds of fighting, or that in different kinds the heroes are equally expert. For each sort there is a *çikṣā* or special art (vii. 112. 20 ff., *çikṣā*, ib. 31). The combination of all these arts makes the *dhanurveda* in its general and widest sense. Properly the 'knowledge of the bow,' as the bow becomes a type of all weapons, the knowledge becomes generalized, and *dhanurveda* is equivalent to the science of weapons. Such is the meaning when one says 'in the *dhanurveda* no one is my equal' (viii. 74. 54). But it is not impossible that this collected science became incorporated as a work. In many passages, where *dhanurveda* is set parallel to literary works, such seems to be the interpretation. Nevertheless, the Epic story itself gives no reason for believing that a work of this kind is meant. For, if we examine more closely, we see that the science was one gained by a magical gift or by physical exertion, not by mental application, except in so far as religious meditation be so considered. In what the 'skill' consisted may be seen by a few illustrations. 'Lightness of hand' is the 'art' that is learned in wielding weapons; 'the art of seizing weapons' is taught and acquired. 'Lightness and cleverness' constitute the 'skill.' 'How to mount a war-car' is a point taught here; so also how 'to leap down,' 'to run,' 'to leap easily,' 'to discharge weapons simultaneously,' 'to advance and retreat.' These are what are taught by the science of weapons.*

In all this the *dhanurveda* is no more than a more comprehensive *astraçikṣā*, or art of missiles (vi. 118. 21), and was probably at first confined to this. We even find a man spoken of as a paragon of learning 'in the *dhanurveda* of missiles and the *brāhmana veda*' (science of holiness).† When this science of weapons was extended to the chariot, and the knight was taught to 'circle' with his war-car, then the *rathaçikṣā* or 'skill with the chariot' became also a part of the *dhanurveda*. Such

* The heroes are 'supplied with the strength of skill' (vii. 45. 17, *çūrālī çikṣābalopetāh*). 'Lightness of hand' is *pāñilāghava* (vi. 74. 10; 82. 37; 90. 42, etc.); 'the knowledge of seizing weapons,' *çastragrahaṇa-vidyāh*, pl. (vi. 76. 7; vii. 114. 4); 'lightness and cleverness,' *lāghava* and *sāusṭhava* (ix. 22. 16; vii. 142. 38; cf. 169. 3); 'mounting,' *āroha*; 'leaping down,' *parjavaskanda*; 'running,' *saraya*; 'leaping easily,' *sāntarapluta*; 'discharging simultaneously,' *samyakpraharaya*; 'advance and retreat,' *yāna vyapayāna*, vi. 76. 8. Compare R. vi. 69. 30 ff.

† *astrānām ca dhanurvede brāhṇe vede ca pāragah*, vii. 23. 39..

skill consists in doubling and returning, and, negatively, in not being made *viratha*, 'deprived of one's war-car,' and not allowing it to be splintered to pieces by the enemy's arms. For each knight, whether he had or had not a charioteer, was able to manage his own war-car.

In the use of armor, the 'skill' consisted in making it invulnerable. This skill is taught by word of mouth. Especially Droṇa is famous for this: 'he knew how to instruct one to wear the breastplate so that it should be invulnerable.*'

The *dhanuḥ* or bow becomes thus generalized. Vishnu has 'bearing the bow and knowing the bow' as a title of respect.† All weapons are included in the name. It embraces all fighting-knowledge.‡ From this extent it fell into four recognized divisions,§ according to the arms taught, or methods of using them.¶ Only the name Veda, (or *upaveda*, as it was more properly called) betokens a literary existence for this science.¶ But when in the Epic one studies this Veda, he does not repeat it as he does the others; he does not 'go over' it, and learn it as a memorized work. He goes out and 'studies' it by secreting himself and practicing with his arms till he is proficient; or he gets a teacher to show him how to use his weapons; or, in one case, he makes a fetish-image of the great master.** The great teacher, Droṇa, instructs in the 'art of war' (*raṇa-çikṣā*), in club-fight, in 'mixed-fighting' (*saṅkīrṇayuddha*), in sword-fighting, etc.††

Like all other knowledge, this science had its mystical side. As a Veda, it is distinguished from the four great Vedas, but

* *kavacadhāraṇā . . upadiṣṭā tām eṣa nikhilāṃ vetti*, with *abhedya* as invulnerable, vii. 48. 27; *varma bhāsvaram*, ib. 103. 17.

† *dhanurdharo dhanurvedaḥ*, xiii. 149. 105.

‡ Thus, in i. 139. 6, 17 it embraces knowledge of fighting with club, sword, car, bow, arrow, and missiles.

§ i. 130. 21. *caturvidho dhanurvedaḥ çāstrāṇi vividhāni ca*; iii. 37. 4; v. 158. 3; ix. 44. 22, etc., *caturpādo dhanurvedaḥ*.

¶ Compare iii. 115. 45, *kṛtsno dhanurvedaḥ caturvidhāni cā 'strāṇi*; xi. 23. 27, *astrāṇi caturvidhāni veda*. Compare above, p. 235, note.

¶ ii. 11. 32-33. We have here, following the four Vedas, *sarvaçāstrāṇi, itihāsa, upavedāḥ, vedāṅgāni*. Compare in R. v. 32. 9 *dhamvede ca veda ca vedāṅgeṣu ca niṣṭhātāḥ*.

** Good examples of skill in shooting are given in the tournament, i. 138, and just before in the case of *çabdavedhītvam*, i. 132. 42, where a man sees a dog, and (40) *tadā tasyā 'tha bhāṣatāḥ çuṇaḥ sapta çarān mukhe, lāghvaṃ darçayann astre mumoca yugapad yathā*. This Ekalavya had made an earthen idol of Droṇa, the best teacher of the art of shooting, and worshiped it (i. 132. 83). There is a word in ib. 133. 5 that should be the keynote of good archery—Arjuna's reply to Droṇa, *paçyāmy ekam bhāsam*: he could see nothing but his target. In i. 131. 42, Ekalavya had left home 'for the sake of practice,' *isvastrahetoḥ*. He thus acquires *astravidyā*, ib. 132. 13, 14, 34-35.

†† Compare i. 109. 19; also xi. 23. 32, for the lamentation over this 'knower of the Veda and of weapons.' He is represented as a warrior-priest.

incorporates into itself the outlying mysteries of arms.* This 'mystery' of the science is nothing but the less known tricks in use, and the pretended power over the supernatural. The four divisions are only the divisions of weapons, or else the divisions of use. It is noteworthy that the commentator prefers the last, but admits the first. The original meaning is evidently simply that of method, not of kind. Even when not expressed, such a division is sometimes implied. Thus, we read 'and no one saw Arjuna when he took the arrow in hand, or when he laid it on the bow, or when he discharged it, or when he drew the bow' (iv. 62. 22). Such as these were the original 'four divisions in the science of the bow,' and with bow generalized the form also became extended.

The art of weapons is 'laid in' a person. One receives it as a gift. Thus, Rukmin receives the 'Veda of the bow with its four divisions' (v. 158. 3). But this presentation of the science belongs with the supernatural power used in divine weapons. This Veda must be studied, but the study is done by practice: as where, in Arjuna's case, one goes out and practices even at night, and so learns the art or science of managing horse and elephant, etc. (i. 132. 28).

The ultimate expansion of the theory of weapons resulted in the theory of war, and this was expanded again into a theory of polity; and we thus have on the one side our modern *nīti-çāstra* or 'system of royal polity,' and on the other the practical instruction in the use of arms or the 'science of weapons.' Thus, in a late book we read: 'he will comprehend the science of weapons, and the different weapons, and the system of polity.'† A system of war is implied when we read, for example, of the 'system of Uçanas,' 'the system of Angiras' son,' etc.‡

* *Rahasya*, the mysteries, i. 130. 65 ff. It is on a par with the other Vedas in importance for a warrior: *sāṅgā vedā yenā 'dhītāḥ, yasmīn sūksūdaḥ dhanurvedaḥ pratiṣṭhitaḥ*, vii. 198. 1. In xiii. 2. 8; 30. 9, *dhanurvedaḥ* and *vedaḥ* are opposed (cf. ib. 56. 7). 'The four Vedas and four-fold Dhanurveda,' or the 'Vedas, Upanishads, and Dhanurveda,' is the usual separation. In ix. 44. 21-22, *dhanurvedaḥ catuṣpādāḥ castragrāmāḥ asaṅgrahaḥ* comes after *vedaḥ caturmūrtiḥ*. In iii. 99. 59, Vedas, Upanishads, and Dhanurveda are opposed.

† xiv. 66. 24. In the later books, the 'system of polity' was so familiar as to be used in proverbs: e. g. *adhītya nītiçāstrāṇi nītiyukto na dṛçyate*, 'not everyone that has perused the works of polity is wise in polity': xiii. 164. 7. The Agni Purāna gives a *dhanurveda* (in chapter 248 ff.). The account describes the names, lengths, and methods of using various arms, with the proper employment of forces. In ib. 134-135 there is a rather interesting 'battle-wisdom,' calculated to get victory, and consisting of invocations and curses.

‡ In i. 100. 36, a man that is acquainted with all weapons (*sarvastravit*) is complimented thus: *uçanā veda yac chāstram ayaṁ tad veda sarvaçāḥ, tathāivā 'ṅgirasah putrah . . yad veda çāstrāṇi tac cā 'pi kṛtsnam asmīn pratiṣṭhitaḥ . . sāṅgopāṅgam . . yad astraṇi veda rāmaç ca tad*

The use of magic is properly a subdivision of the general system of war. It belongs originally to the démons, and is an unfailling concomitant of demon warfare.* Such magic is literally 'illusion.' It was then but a step to confer this power on the most pious knights. Any 'art' could be given away, as the horse-lore, *çikṣā*, of Nala is exchanged by will (iii. 77. 17), and so a knight could without effort learn this 'art of the demons.' Perhaps, too, the boomerang-power of *nivartana*, or making a weapon return to the hand, helped augment this belief. But more than this, the Atharva-Veda was instrumental. By its means one could revive the dead, make a person appear, and do other magical acts. On this side lies pure magic; on the other, the belief in one's magic through his extraordinary skill. Thus, as we saw above, the repetition of a verse over a weapon makes it partake of the supernatural, and gives it more than physical might. There is, however, holy magic and devilish magic. The former is used without scruple by all able to employ it. The latter is condemned, but is employed nevertheless. Its use is restricted to counteracting other devilish magic, for to extirpate a regular magician is a good thing. Good magic is allowed, for the gods use it. Many stories show this. But if one's foe employ no magic, then one should employ no magic.†

The true and usual use of the supernatural is, then, simply to charm a weapon. A hero 'let fly a huge arrow, which flew, terrible, glowing, insupportable even by death, like a piece of

etasmin pratiṣṭhātam. Compare xv. 7. 15. *çakātam padma vajranīca . . uçanā veda yac chāstrāṁ tatrāi 'tad vihītam.* of the battle-orders contained in Uçanas' code (see above, p. 131). In the late didactic portion of the second book, with *sūtra* on horses, elephants, and other war-material, we find the *dhanurvedasya sūtram* and *yantrasūtram* together (ii. 5. 121) as being learned. There seems no reason to doubt that we have here *sūtrāṇi* on various military affairs, and a literary work, the lateness of which is indicated by the context.

* In iii. 20. 33 ff., the demons engage in *māyāyuddha* or a battle of magic. They shower down mountains, clubs, darts, tridents, spears, axes, etc. Compare R. vi. 91. 17 ff.

† The gods use magic, *māyā* or *kriyā*, ix. 31. 8 ff. A king is urged to use it, ib. (*kriyayā yogan āsthāya*). Bad magic is such as Çakuni's (vii. 30. 15 ff., etc.). But *rathamāyā*, vii. 45. 21, is often no more than great skill, ib. 24. The 'delusion' is here physical: compare the 'manœuvres,' which result in 'delusion.' As to killing a magician by good magic, compare ix. 31. 6, *inām māyām māyayā jahi bhārata*; this is *dāivī māyā*, good magic: compare 7. *māyāvī māyayā vadhyah*. Demons, or even half-demons, invent bad magic (vii. 179. 39). *Kṛtyā*, pure witchcraft, is regarded as 'the divinity of witchcraft' by the commentator on vii. 92. 54 (*abhicāradevatā*). The uncanny scene of iii. 251. 23-24 exhibits 'mantra-magic, declared by Bṛhaspati, Uçanas, and the Atharva-Veda,' for the purpose of making a person appear. The practitioner of *abhicāra*, or *abhicārin* (xii. 140. 42), is one conversant with the power of *mantras*, though here used of one that bewitches right to make it wrong (*dhar-mābhicārin*).

Atharvan (Angiras) witch-craft, saying "may this, my arrow bring me victory?" (viii. 91. 47). Other magic is of doubtful propriety, except against a trickster. Here the 'eternal law holds: 'one that employs tricks may be slain'; and 'fight a fair fight; but if magic is used, use magic.' It is often a question discussed with gravity, whether one may employ proper or improper methods of fighting. And here we cannot help seeing the advanced morality of later times.*

In the use of the Atharvan we may distinguish between pure and false magic, as in the use of weapons. Pure magic is where a formula, *kuumbha*, empowers a thing to give life or death, as when such a formula vivifies steel. But plant-magic may rest on an older verity. Plants that changed unconsciousness to life, plants medicinally useful—their application is false magic: that is, does not necessarily imply supernatural agencies, though such are pretended.† Medicinal stuff is stored in all the war-cars.‡ A curse alone, purely vocal, is quoted as a 'mind-weapon'; 'by this truth' a knight is slain; this is 'Atharvan magic' pure and simple.§

* All divine weapons are *ipso facto* magical. Droṇa and Arjuna do the same with their divine weapons (vii. 188. 33 ff.) as do a pair of demons, each 'skilled in magic,' and showering weapons (vii. 108. 30 ff.; 109. 2 ff.). The real difference is that when a good man uses magic it is right, and when a bad man or a demon uses it, it is wrong. It is holy magic, for example, when Vishnu converts a handful of grasses (*erakāh*) into a club (xvi. 3. 36). Of the popular magic, one sort is to become as small as a thumb and then large as the ocean (e. g. vii. 175. 63). The best devilish illusion is made by Rāvaṇa, e. g. iii. 290. 5. The godly illusion may concern itself with such small matters as the sudden appearance of Arjuna's magic ape with a lion's tail, to frighten the foe, iv. 46. 3 (*dāivī māyā*). The rules referred to above are (v. 193. 10) Bhīṣma's: 'fight fairly, but use magic against magic'; the 'eternal law,' iii. 12. 7 ('a trickster should be slain'); but, ib. 52. 22: 'it is not called a crime to kill a sinner in a sinful way.' The question of fighting properly (*nyāyatah*) or deceitfully (*chadmanā*) is discussed at large before the underhand attempt of Aṣvatthāman (x. 1. 49 to 6. 21). The fact that this knight entered the camp *advāreṇa* (x. 8. 10) may have given rise to the proverb *advāreṇa ripor gehuṃ dvāreṇa suhṛdo gṛhān pravṛcanti narā dhīrāḥ* (ii. 21. 53; cf. M. iv. 73). The entrance into the *sabhā* must be *advāreṇa* when the priest is to cure an afflicted child by the hocus-pocus of his trade (expelling the sickness by bell, cymbals, etc.). In general it is a sign that evil is about if one does not go in by the door.

† *viçalyakaraṇī*, *oṣadhī vīryasampannā*, vi. 81. 10, pure drugs for wounds, false magic. *Vicalyā* is a plant preventing bloodflow. On the other hand, a 'consciousness-weapon' (restoring to life those actually dead) is an instance of pure magic (*prajñāstra*, iii. 289. 5-6). In xiv. 80. 42, Ulūpi finds a *saṃjīvano maṇiḥ* or stone to raise the dead. Compare the *viçalyā divyā* (called *saṃjīvakaraṇī oṣadhī*) of R. vi. 26. 5. Compare *agadā nirvṛtayo vedanāni*, workers of good-luck, and restorers to consciousness, ii. 23. 4 (here half and half).

‡ viii. 89. 70: battle is carried on after an instant cure *mantrāuṣa-dhūbhīḥ*.

§ *āstram manasaḥ*, 'weapon of thought,' viii. 90. 82; *satyena*, ib. 91. 47-48; *kṛtyā atharvāṅgiraṣi*, ix. 17. 44.

Supernatural also are prognostications. Portents and signs of earth and sky are usually powerful. But often no attention is paid to them. More care is shown for the signs of flying birds, etc., than for earthquake and falling meteors. The positions of wild animals and the acts of any animal are prognostic. The ass's bray is ill-omened. 'The people say it is a sign of defeat if, having eaten little, excrements abound; but let wild deer appear on the left hand, let the horses appear cheerful: that is a sign of victory. Should deer appear coming from the left (on the right), and incorporeal voices be heard, that is a sign of defeat.' So certain kinds of birds augur defeat or victory. The peacock, swan, floater, *cātaka*, are auspicious; but birds of prey, as hawks, herons, cranes; and beasts of prey, as wolves; and flies, and ghosts (*yātudhāna*), imply defeat. 'Drums sound unbeaten' in the army about to conquer; in the other, all is silence but for 'sounds like springs of water, roaring like bulls.' There comes a pure Hindu token to these pan-Aryan signs: 'and it is also a token of defeat if one hates a priest.'

There are in general three sorts of prodigies, of heaven, earth, and atmosphere. As a matter of fact, the ill-omened birds appear all over the field; for the hawk, crow, wolf, and jackal steal their food from the heaps of slain.*

This supernatural of superstition seems to have become more powerful than the supernatural of religion. The new god has

* The prodigies of beast and bird occur frequently, and several passages strengthen that quoted above: *pradakṣiṇā mṛgāḥ . . . jayalingam*; *apasavyā mṛgāḥ* (and) *vācaḥ . . . aṣarīriṅgaḥ . . . parābhavataḥkṣayam*, v. 143. 14 ff. Compare the evil birds on the right (*apasavyāḥ*), giving fear, in iv. 46. 27; in iii. 269. 7, a jackal coming up to the left side (*vāmam upetya pārṣvam*) is an evil omen; in iii. 179. 4 ff., the bad omens are beasts on the right (*apasavyāḥ*); carrion birds behind crying *yāhi* ('go on'); the right arm twitching, the left leg and arm twitching; in v. 138. 21 ff., the meteorological omens: compare end of ib. 158; vi. 2 to 4 (note here, 3. 43, *vāyusāc ca ruvanty ugraṁ vāmam maṅḍalam āciritāḥ*). The drums, etc., of our passage, *anāhātā nadanti pātahāḥ* (v. 143. 20); 'hating a priest,' ib. 27. Compare further ii. 71. 22-24 (jackals, asses, and birds as omens); ii. 46. 8 (the three kinds of omens, *utpātās trividhāḥ*). The bloody heaps attracting the ravenous, vi. 117. 57; vii. 7. 36 ff.). The Çānti, teeming with supernatural wisdom, gives (in 105. 24, *auśadhivṛyoga* is a foe-killing 'application of poison') in 102. 6 ff. late notes on prognostication. Winds following an army, rainbows, rain in the rear, sunlight, and even jackals and hawks, if they are favorable in appearance (*anukūla*), ensure success; certain smells and sounds also portend victory. The position is plainly relative, as seen in the following: 'when nice animals are in the rear and on the left during a march, and on the right while the army enters battle, they announce victory; those in front prevent it.' The following birds are lucky: *çakuna*, *haṅsa*, *krāuñca*, *cāṣa*; the general rule reads (15) *iṣṭo vāmaḥ pravṛtasya dakṣiṇaḥ pravivikṣataḥ, paçcāt saṁśūdhayaty arthaṁ purastāt ca niṣedhati*. In R. compare *anuvāti çubho vāyuh*, v. 73. 52, and other omens following; birds, in ib. vi. 11 ff.; and all of R. vi. 83.

not yet his whole power; the ancient gods are passing away. These divinities are degraded, but are still real. It is in the fairy stories of the Epic that the old gods are active. The Sun says to Sāvitrī, 'look, all the gods with Indra at their head sit laughing at me' (iii. 306. 20). But in battle—that is, in the actual Epic—they are visions, they are ghosts of themselves, asleep, spirits; real, but subordinated to the new power. They watch the battle, but take no share in it (viii. 37. 31, etc.). If they take a sudden party interest, they relapse again almost at once, and become dull spectators (viii. 87. 42, 48).

The forward knight that has penetrated the veil of priestly wisdom learns with awe the secret of the Trinity, of the One All-God. To the mass, to the vulgar, this is mere words. The gods of old are but shadows. 'The god for a warrior is his bow and arrow' (iii. 313. 51 ff.). Owing to this decadence of the old supernatural power, and the not yet thoroughly diffused knowledge of the new faith—for the heroes of the Epic are not so much devout believers as sudden and still inquiring converts—the poem is left in a strangely unreligious condition, so far as the mass of warriors is concerned. The war is intensely human. No convenient gods and goddesses play with their mortal protégés. Each fighter contends supported indeed by a religious hope of reaching Indra's heaven; but there is no Indra to intervene and save him. In this regard there is a marked difference between the Greek and Hindu Epic. Skanda is an impartial abstraction of martial fury. Vishnu is not a god that affects the army; he is, so to speak, a private god of the Pāndus, more particularly of Arjuna. The outsiders are left to their own valor. Each falls alone; no god watches him; no goddess shrouds him in a mist. Duty and Death and Indra far away—these are their gods. All others are but names. 'With all the gods' the boasting knight is not afraid to contend; to him they are unreal; to him even the new god is but a myth of fancy. If he accepts that god and knows him, he has by that acceptance done away with gods; if he rejects him, he has but the shades of gods no longer real. The knight's acts are his own; his reward is his own making; his sin is self-punished. Fate, or the embrace of Death; Duty, or to follow the paths of custom—these are his only moral obligation. His supernatural is understood too little to be true; or it is debased to incantation and witchcraft. The knight of our present poem stands on the border-land between two faiths. He presents a poetic figure unparalleled in Epic poetry. For that very reason, he gains upon the human side.*

* Besides the quotations given above, a few extracts from other parts of the work will show to what mere ghosts the ancient *devas* of

F. Paraphernalia of battle and Music in the Epic.

Under this heading I shall refer to the chief 'furniture of battle, but shall not seek to give a complete account of all the secondary trappings of the army, as my object is to convey the general impression made by the descriptions of the poem, rather than to be precise in details. We need this general impression, for otherwise we lose the shading of the Hindu artist, and the reality of the Hindu battle-field. The earrings of the knight are as necessary to the picture and to historic truth as are his bow and arrows. From one point of view, these accessories of battle are even more important than the more important factors. Chariots and bows are not national or peculiar; but pan-Aryan, or rather universal. We have only to determine what difference exists between those of the Hindu and other nations. But ornaments and objects of vanity are (universal indeed also, but) more markedly differentiated. Orient

the Hindu had descended, except in tales acknowledged to be of the marvelous. In the war the gods come and look on as mere spectators in vi. 43. 10; joined by all other supernatural beings, in vii. 188. 37; while they are worked up to active life simply through their wonder and astonishment at men's ability in vi. 95. 67 and vii. 124. We find that the Fire-god assists his friend, but not in the war, only in a tale related of one of the heroes (Sahadeva against Nila), ii. 31. 23. Of like sort are the Arjuna-tales, the ascent to Indra, the burning of Khandaava, etc. In the war these gods are openly despised. 'All these warriors protect thee, therefore all the gods can not harm thee,' vii. 87. 15. Karna says that 'the gods cannot conquer the Pāndus,' vii. 158. 50; 185. 25. The knight is not afraid to cry out 'the gods cannot overcome me,' vii. 195. 23-24. But the abstract of the personal gods remains; the *devas* are weak, but the *dāivam* is strong. The godly-power, that is the impersonal Fate. Forever we find repeated the formula *dāivam eva param manye dhik pāurusam anarthakam*, 'Fate I deem the highest; fie on useless human (effort),' vii. 135. 1; viii. 9. 3, etc. For 'Fate is the norm of good and bad action,' vii. 152. 32. And 'in Fate is victory,' vii. 158. 70. As a side of Fate only is Death, or Yama, who remains real with his realm of horrors (*yamarāstravivardhanah*), of a single man, vi. 89. 28; or of battle, vi. 95. 25). And Duty remains as a god, though often merely the law acknowledged by gods, vii. 156. 2. Such gods are abstractions merely, and convey no more than Krishna's words, which say 'his is the victory who fights in a (legal) manner according to the code' (vi. 43. 24). Most interesting in the light of the removal of the gods from human sympathy is the creation of the ancestral ghost to supply this need. No god gives any word of comfort. But the ancestor of Yudhishtira comes down as a spirit to speak words of sympathy to him, vii. 52. Only in stories and echoes of the past do we find the old gods active and armed, where, while Yama has the rod of death, Varuṇa has the noose and the thunderbolt, and the god of wealth bears the club (i. 227. 32: compare iii. 168. 29, arms of all the gods). It is the ghost of Vyāsa that proclaims *yato dharmas tato jayas*, 'victory is on the side of right,' vii. 183. 67; and he gives the essence of Duty as 'compassion, penance, generosity, mercy, truth,' ib. 64-66. What consolation there is is merely the statement that one should bow to fate and die like a hero, vii. 78; 80. 7 ff.: for, as the proverb says, 'man is the slave of things, not things of man,' vi. 43. 41, 56, 71.

and Occident here stand in more vivid contrast. Each fighter, the world over, bears a weapon; only some wear garlands and necklaces.

Our knight of India was generally a vain and boasting personage.* It must have been with satisfaction that the ignoble heart of Yudhishtira learned that Arjuna was about to miss heaven because he had boasted so much. But in truth it was the sin of all the Hindu warriors. There is not a modest man among them. This verbal display found also its counterpart in outward gaudiness of raiment. Not only were the arms and armor profusely decorated, as we said above, but the heroes also wore in all accoutrements whatever was most brilliant and showy. A barbaric display pervades the poem.

We saw in a quotation given above the ready knight stand armed with bow and breastplate, and wear, besides, rings on his arms and in his ears. Another we saw wearing red, yellow, white, and black clothes. The princes royal are arrayed in red. To these ornaments we must add the garlands with which each knight went into battle; the gems and diamonds worn about the armor, and even set in the common arms; the rings, again, worn upon the fingers; the chains of gold and pearl; the girdles of gold; and the tinkling bells of sword and club and chariot. Many of these—the rings and bands, in particular—are differentiated in Sanskrit without difference for us. Could we get at the true distinctions between these seemingly synonymous names, we should have a yet more bewildering view of the flashing, not to say flashy, magnificence of the Hindu warrior.†

* Even when he decries boasting he boasts. An amusing instance R. vi. 67. 15, 'without boasting I shall slay thee; behold my prowess: without talking burn fire and sun,' etc. (*avikatthya*).

† The general furniture of cars, men, horses, elephants, etc., goes under the name of *bhāṇḍa*. For the earrings, besides vii. 127. 16 (above), compare *mahac chīraḷi kuṇḍalopacitam*, viii. 27. 22; for the garlands, v. 195. 2; and observe that, ib. 196. 20, the foot-soldiers are described as bearing bows, swords, and clubs, but no ornaments. The poet loves a horrible antithesis of beauty and blood: 'upon that field of battle lay many a dis severed head, fair-eyed, with fair ear-rings' (viii. 27. 34: compare vii. 148. 40). The bloody banners and gaudy bloody garments are vividly described in vii. 34. 15 ff. The different rings and bracelets (*aṅgada*, *keyūra*, *pārihārya*) are mentioned together in v. 162. 16 (compare *parihāṭaka*); with *niska*, *cūḍāmaṇi*, crown-jewels, gems, and gold in the proper name Rukmāṅgada: compare vii. 148. 29; 41. 16 (*sāṅgadā rane*); the wrist-ring, *valaya* (vii. 138. 22), and arm-ring, *keyūra* (vi. 114. 18); add *cakrabāla*, finger-rings. The bells, *ghaṅṭā*, *kiṅkiṇī*, are more found *passim* (compare above, and the use of *nūpura*, anklets, more common in R.). The bejeweled turban, *uṣṇīṣa* (besides above, vi. 89. 37; 96. 73; 114. 18, etc.); white, in ib. 20. 9), is worn by all: the *mukūṭa* and *cūḍāmaṇi*, diadem, head-jewel, seem, however, to be only royal. We may suppose the old and new mixed here; the later usage, when the king, free from immediate personal danger, drove upon the scene to

We have to add to all this adornment the fans (*vyajana*), the umbrella (*chattrā*, spoken of above), and 'tails' of chowries (*cāmara*), which are in part insignia of royal office, in part mere weak additions to luxury and display.*

Music. We find ourselves here midway between the Vedic and modern text-book period of Hindu development. The musical instruments are in part (in name, at least), the same as those of the earlier age. The modern instruments are in part unknown.

We may say that, in general, the (kettle)-drum, cymbals, and flute are, in time, the most universal instruments. From a passage in the Atharva-Veda it seems that the body of the first was made of wood covered with leather.† No instrument is more common than this in the Epic.‡ The kettle-drum, *dundubhi*, is often mentioned as accompanied by the *bherī*. This last is not a Vedic word. It seems to mean, as the Petersburg Lexicon translates it, a kettle-drum also. In the Rāmāyaṇa it is beaten with a stick. In the Epic is sounds with the fearful sound of bows and horns, and the tumult of war-cars.§ There is one passage that leads me to question whether *bherī* may not be cymbals. In a great fight described in the third book we have an expression, copied again in the fourth, wherein the sound of

see, not to fight, permitting a crown instead of the older helmet. Neither word is old. Thus *aṣṭaratnīn*, viii. 72. 30, a hero with eight jewels on his head. The neck had a chain (*kaṅṭhasūtra*) of gold or pearl (*jāmbūnada*, *hāra*); 'whose diadem was bright with finest jewels' is a royal epithet, iv. 66. 27; vi. 114. 17 ff.; vii. 187. 48 (*hāra*, *kirīṭa*, *makuṭa*, etc.); viii. 27. 30 ff. Of all these, the naturally most common are the bracelets, which stay on the arms, while other gems fall off. 'With gauntlets and with clubs and bracelets in the fight' is a frequent juxtaposition, as in vii. 41. 16.

* For *vyajana* we sometimes find *vālavyaajana*. In viii. 24. 60 (*vāladhī*); 27. 33, these are mentioned together with the *cāmara* and arms of war. The ox-tail badge of authority (in viii. 58. 27, *prakīrṇaka* = *cāmara*, N.) was also worn as a crest of horses. Compare *prakīrṇakā viprakīrṇāḥ* with *āpīḍa*, garlands, etc., as adornment of horses, viii. 94. 20. For a general description, compare vii. 34. 20, 'with white umbrella, ox-tail, and fan, the king gleamed like the rising sun.' Compare above, p. 258.

† A. V. v. 20. 1-2; Zimmer, *Alt. Leb.*, p. 289.

‡ Yet Rājendralāla Mitra strangely remarks (after speaking of the drum as an ancient Rig-Veda instrument)—'But Vyāsa in the Mahābhārata does not allude to it. He replaces it by . . . conch-shells . . .' (Indo-Ary. i. 329). It is evident that this investigator means here the drum in general, in distinction from the shell, so that it would seem as if a more unfounded statement could not have been made, for drums are mentioned in the Epic as frequently as conch-shells. It also contradicts his own words on p. 284, where the large military drum of the Mahābhārata is spoken of.

§ iv. 46. 12; 62. 3, etc.; vi. 115. 39. In ii. 21. 16, N. translates *bherī* by *dundubhi*. He notes here a Bengal reading of the word *māsatalā*, viz. *mānsanālā*, and explains this as part of the hide, with which the three drums are made.

the roaring of a hard-pressed combatant is likened to the noise of 'split *bherī*'; and in another place the noise of the bow-string on the two hands is like the noise of (the) two *bherī*. A kettle-drum would hardly give any sound if it were split, whereas fractured cymbals would not ill portray the harsh discordance of cries intended in the comparison. The dual in the last may, however, be merely to parallel the 'two hands.' Elsewhere I find no objection to rendering *bherī* as drum in the Epic, and these passages may not be deemed sufficient to cause us to change. In peace this *bherī* is the alarm-instrument used, for example, by the warder of the assembly to rouse the town: 'he beat the gold-mounted noisy *bherī* that calls to arms.'*

The many kinds of drums and like instruments are shown by groups frequently found, such as this: 'they then brought forth the very loud sound of the *panava*, *mṛdaṅga*, *duṇḍubhi*, *krakaca*, *mahānaka*, *bherī*, and *ṣharṣhara*' (vii. 39. 31). To these we may add *peçī*, also a drum, and *puṣkara*, as indefinite, defined the same.†

These all appear to be drums, except perhaps the *mṛdaṅga* and *krakaca*, the former possibly a tambour, the latter said to be a saw. Quite common also is the *muraḥa*, tambourine, but the drum *paṭaha* is very rare.‡ It is hard to say whether drum

* iii. 11. 62, *vinadantam mahānādam bhinnabherisvanam baḷi bhrāmiyāmāsa* . . . almost = iv. 22. 75. Here the one that gives forth the noise is being strangled. iv. 48. 5, *talayoh çabdo bheryor āhatayor va*. i. 220. 11, *bherīm sāmnāhikīm tataḥ samājaghne mahāghoṣāḥ jāmbūnadaparīṣkṛtām (sāmnādhikīm, sāmnādhāḥ sarve bhavate 'ti śucayantīm, N.)*. The *bherī* (meaning to the Hindu 'the terrible') is sounded by beating, as here and, e. g., vii. 88. 1, *tāḷyamānāsu bherīsu mṛdaṅgeṣu nadatsu ca pradhṁpīteṣu çāṅkheṣu*, on the drawing out of the army into the field. So R. vi. 31. 28, *bherīm āhatya bhāravīm* one enters a war-car for battle. Music of all sorts accompanies this, ib. 35. 1 ff.

† vi. 43. 7-8; 99. 17-18.

‡ In iii. 20. 10 read *triḥ samāhanyatām eṣā duṇḍubhiḥ*, not *triḥsāmā hanyatām*. The *ānaka* or *mahānaka* (as above) is united to the 'joyous *mṛdaṅga*' in viii. 46. 52. It is the latter instrument for which as a poulder the *yantra* is used, vii. 23. 85. The former is beaten also, and helps the tumult of horns, *bheris*, and *peçis*, in vi. 51. 23. My objection to defining *krakaca* as a saw is merely based on its like use, e. g. in vi. 43. 7-8: 'they blew the sea-born shells; and then the *bheris*, *peçis*, *krakacas*, and *goviṣāṅkas* were forcibly beaten, so that a great noise arose.' The conch only is blown in vi. 43. 109: 'they beat the great drums (*mahābherīḥ*), and blew the white conchs,' after Mlecchas and Aryans had confusedly shouted (the causal of the verb is occasionally used, *çāṅkham prādhṁpayat*, vi. 54. 85). Accepting the commentator's statement, *bherī* is a large drum, and *goviṣāṅkā* (once feminine) a cow-horn; and this for the last seems certainly the requisite meaning. In vi. 99. 17-19 we find the sound of 'shells, saws, horns (and the five drums), *bherī*, *mṛdaṅga*, *panava*, *puṣkara*, *duṇḍubhi*, added to the sounds *kveḍa*, *kilakilā*. Compare nearly the same in ib. 44. 4, plus *muraḥa*, the tambourine. The *muraḥa* comes again in ib. 58. 46; and the *puṣkara*, in 43. 108. If in the last passage the v. l. registered by N. be correct (*ekapuṣkarām = muraḥam*, for *eva*

or shell be the favored instrument in Epic battle. Noteworthy is, however, the more marked personality of the "sea-born shell," the universality of naming it (in vii. 23. 85 we find a rare instance of drums named), and, again, the comparative rareness of horn as against shell. Further noteworthy is the fact that the knight carries a drum as well as a horn. In fact, the liberal fancy of the poet permits a hero to shout his war-cry, beat his drum, blow his horn, and carry his weapons all at once.

The usual instrument for trumpeting was the conch-shell, bearing etymologically the same name, *śaṅkha*, and carried by each chief. Compare this description: 'then standing on the great car drawn by white horses, he blew in his gold-adorned shell—Arjuna blew in his shell Devadatta; Krishna, the shell that was called Pāncajānya . . . '*

puṣkarān), we have the 'single-headed-drum' as synonym for *muraḥa*, tambourine; and therewith the name of the drum-head in general, *puṣkara*. *Jharjbara* (compare Vāyu P. i. 40. 24) might possibly be a corruption of *gargara* (though the latter is stringed), a Vedic musical instrument. The tambourine is united with the lute on the heavenly car of the gods described in the pseudo-Epic (xiii. 106. 62, *muraḥa* and *vīṇā*). The sounds of these different instruments, as in the specimens above, are frequently imitated. In vii. 154. 25 ff., we find also *phetkāra* (*nīrhrāda* of drums), the clanging weapon-sound, *caṭacaṭā*; and here too the rare drum *paṭaha*. In ix. 23. 70, *kaṭakaṭā* gives the sound of men. In vi. 44. 4, we find commingled *kīlakīlacābdāḥ* with weapons, and in vii. 36. 17, the shouts *halahalā* with the general instrumental music (*vādītra*); while ib. 38. 12 gives us *hum* as a shout, and the constant 'shout of the lion' as battle-cry. Here also we find *kṣvedītam*, *utkrūṣṭam*, *garjītam*, noises of exhortation to fight—that is, battle-cries. And we notice that they are not idle sounds, for such rout an army at times, e. g. vi. 44. 27. The directions given in the pseudo-Epic are: 'to encourage crowds (in battle) let such noises as these be made, *kṣvedāḥ*, *kīlakīlā*, *krakaca*, with horns and drums,' xii. 100. 46. 50. We may translate loosely: 'hissing noises, shouts of hurrah, saw-noises, horns, large battle drums should encourage the army in their advance.' As to the beating, however, we find *āhata* used of shells (e. g. R. vi. 57. 19), so that the instrument is not determined by the participle. One more drum is that called *dīṇḍīma* in the description of viii. 11. 36-42, at the beginning of the day's battle: 'shells and drums were sounded; the shout of the lion was given; then came the neigh of horses and the war-cars' heavy roll; and wing by wing and flank by flank they moved against the foe, dancing to battle.' In this passage, beside the usual *bherī*, etc., we have the 'din-maker,' *dīṇḍīma*, a drum. The *paṭaha*, v. 143. 20; (with *bherī*) in vi. 3. 42; R. iv. 38. 34 (with horn). I have noted no other form of Epic drum, except *āḍambara* in iv. 72. 27, marriage fête, with shell and horn. *gomukha*, and vii. 82. 4, with drums mentioned above. In R. vi. 37. 52, *kumbhamukha* seems to be a drum also, if not a bagpipe ('pot-head'). The later word for drum-stick, *koṇa*, is familiar to the Rāmāyaṇa, but not to the Epic.

* vi. 51. 24. The shells of the other Pāndus have also their names given in the same verse. Bhīma's is named Pāṇḍra; Yudhishtīra's, Anantavijaya; the twins', Sughoṣha and Manipuṣhpaka. Compare vii. 88. 22, where the two lovers blow their horns.

The conch-shell was 'fair and gilded and terrible' (viii. 37. 28), and seems* to have been used indifferently with the horn, whenever the latter is employed, perhaps only by the vulgar. Its great size is also alluded to.* The musical instruments in general are grouped as *vāditrāni*, usually implying drums, though *vāditra* may be a general name for any instrument. For example, in vii. 13. 17, the *vāditrāni* are beaten by the Kurus in scornful defiance of the Pāndus' horns; to encourage Karna, the Kurus 'beat the *vāditrāni* and blew the shells;' while, to encourage Arjuna, the Pāndus 'filled the horizon with the sound of music, drum and shell, amid shouts and clapping of hands.† Comparing later literature, we shall be inclined to give the later preference to drums rather than to trumpets, judging by the names. A number of new instruments, *ṭāṅku*, *damaru* (with *khetaka*), *damarukā*, etc., meets us in the Puranic period.‡ The camp-music differs slightly from the battle-field music; for though the battle-melodies are heard, they are softened; and when at sundown the armies return to camp, they are greeted by the milder notes of the lyre mingling with the war-instruments. Of this lyre more anon.§

On the commonness of shouting and congratulation and other noises I need not dwell. As heroes fight duels very often while 'all the world' stands and looks on, we expect to

* Compare above, iv. 72. 27. *gomukha*, *ṣaṅkha*, and *āḍambara*. Compare *ḍiṇḍibha* (sic) and *ṣaṅkha* in xii. 282. 41. Each his own drum and trumpet and bow (and battle cry), vii. 127. 28. With kissing and blowing of shells heroes salute each other, viii. 94. 59. In viii. 58. 27, *mahā-ṣaṅkha*. *Gomukha* is perhaps paralleled by *durmukha* in Mṛcch. Act vi., though it is not certain that the things here mentioned are drums at all.

† *Vāditrāni*, the 'sounding' things, are then, generally, percussive musical instruments; and *tūrya*, their sound. The terms for the instrument and music are occasionally interchanged, so that *vāditra* means music, and *tūrya* what makes it. Thus the *tūryanināda* in vii. 159. 37, though here joined to the 'lion's-roar' (battle-cry), may be an instrument: compare vii. 19. 20; and in iv. 65. 15, *na te 'dya tūryāni samāhatāni* (N. *jayavādyaṇi*), where *tūryāni* seems to me to be instruments. Compare in other literature the *yāmyatūrya* and *mṛtyutūrya*, a metal instrument beaten like a drum. So we might say in iii. 43. 11 'congratulations (*ācīrṇāda*) with *divyavāditra*' implies music or instruments, as beside are shells and drums.

‡ Compare Ag. P. 43. 27; 50. 2, 8; 51. 24, 31 ff., etc. The offensive armor is kept more conservatively in the Purāṇas than the defensive, or the instruments of music.

§ The *vinā* with joyful *tūrya*, as well as drum and horn, is the evening music of vii. 72. 11 ff., and thereto comes the *āḍambara*-drum and 'songs of victory,' *maṅgalyāni gītāni*. The music of the tournament, 'a sea of music' (*tūryāugha*), may be compared with this, i. 185. 18 et circ. The commentator using *tūryarava* (with *āḍambara*) reminds us that the *siṅhanāda* or battle-cry of 'the lion-sound' has become technical enough to need *rava* added—the sound of the 'noise of the lion,' *siṅhanādarava*, vii. 13. 2.

hear 'praise and loud rejoicing resounding' at the cessation of the struggle, when one is killed.* The usual 'sounds that are, as it were, rung in one's ears at once, with the quick and nervous style of the delineator, leave on the reader's mind a general impression that the whole battle, from dawn or sunrise to sunset, is filled with the rumble of car-wheels, the ringing of hoofs, the undistinguished cries of men, the neighing of horses, shrieks of elephants, clapping of hands, tinkling of bells, clatter of steel weapons, twanging of bow-strings, beating of drums, blowing of shells and horns, yells of agony, shrieks, shouts of warning, curses, bravos, the thud of falling bodies, and—clearest of all, widest-sounding—the battle-signals and war-cries that never stop till some great hero falls; then comes a moment's pause, but only for a moment, until in renewed shrieks of fear and joy and all the noise that was for a second hushed, the universal uproar again begins.†

Of much interest is the question of the application of music outside of war. For this not only involves larger social relations, but, in so doing, touches upon the first origin of the Epic itself. The Epic arose, as it seems to me, from two distinct sources and castes—music and narration, warrior-bard and priest. We may then broaden the question somewhat, and, going back of the problem to which an answer was attempted in the Introduction, enquire not only whence our present Epic has come, but further, how the general Epic form first arose. Our question is this: what *πῶς στῶ* in the poetry of their fathers had the first Epic poet or poets—what leverage to raise such a world as a military historical poem?

The possible origin of military poetry was long ago pointed out by Weber. I shall review what he has told us, and then seek to find what the Epic itself suggests as to the conditions under which poetry and music could be united with tales. War-poetry mingles, even in the Rig-Veda, with strictly relig-

* vii. 156. 142; vi. 113. 20; 114. 34 (*sarvalokasya paçyataḥ sarvasāin-*
2).

ells, vii. 148. 47; viii. 19. 45 (see individual arms, above); v. 196. 29; either, *ghanṭā* or *kiñkiṇī*. The women's belled girdles of the Rāmāyaṇa are, I believe, not mentioned in the Epic (*kāncī*: cf. R. v. 20. 16). Handclapping: compare *talaçabdā mahat kṛtvā tam samupādravat*, vii. 16. 36. Variations are *talatāla*, *tālaçabda*. A ghastly comparison in ix. 9. 18 makes the sound of heads falling to earth like the noise of nuts falling from a palm-tree. In vii. 187. 14 (a useful paragraph for battle-noise), the sounds are likened to 'the noise of those engaged in the washing of clothes;' or to 'the roar of ocean,' in vii. 39. 31. The chariot-noise is made by the metal tire, *nemi*, *pramaṇḍala*, and is joined to the hoof-sound (*nemikhurasvana*, *rathanemisvara*), ix. 9. 14-15, and likened to thunder. The *jaṇaçabdāḥ* occur independently on all occasions, as in ix. 6. 22, etc. They are encouraging shouts, battle-cries; the *āçīrvādāḥ* are wishes for a good day, or congratulations.

ious hymns. The overthrow of un-Aryan peoples, even that of Aryan neighbors, is made the subject of a triumphal lyric.

In the first beginnings of prose, we find among the rules in regard to the proper sacrificial ceremonies one rule that touches on the singers of military songs, and explains what should be the subject of their lays: a musician of the military caste shall (at this point in a religious ceremony) sing an original song; the song shall have for a subject 'this king fought, this king conquered in such a battle.' As Weber points out, these lays were assumed to be historical. They have, although employed in religious rite, not a religious but a secular origin—a circumstance that reminds us that the Epic was said to have been repeated at a great sacrifice as a secular diversion, and that to this day the Epic-recitations are given on such occasions (compare Lassen, *Ind. Alt.* i. 580). These lays, again, do not pretend to inspiration, but are the improvised verses of a minstrel belonging not to the priestly but to the military caste, as even some of the Vedic songs are accredited to members of the same caste. These verses are sung by the musician to a musical accompaniment in honor of the king who gives the sacrifice, or rather in honor of him and of his ancestors. The subject is, again, the battles fought and the victories won by these kings. We find, not one, but a band (*gana*) of musicians singing the deeds of old heroes, and accompanying themselves on the lyre (*vīṇā*), and called *vīṇāgāthīn* (lyre-singer).* Weber remarks that the laudatory side must have been developed at the cost of the historical, for the laudation was often so fulsome as elsewhere to be called 'lies.'† Fragments of such songs are preserved in the Brāhmanas, and choruses of singers revert to the Rig-Veda period. Antedating all but the Vedic hymns, we find as earliest product of what we may term literature (outside of the ritual) tales of heroes and gods, sometimes metrical, sometimes in prose. These are due to priestly wit. Now, combining such legend with the military lays that referred to more recent events, we have a union of legend and song, of the literary priestly and the dramatic military element. Did this happen, did the priest steal the military song and combine it (no longer as musical product, but as recitation) with his older legend, did he write a poem that embraced the deed of the present hero and the legend of his race, we should have an Epic of which the foundation must have been at once historical and legendary, military and priestly.

Weber's position on this point is not quite clear. In his Literature, pp. 200–201, he seems to consider the legends the chief

* Cat. Br. xiii. 4. 3. 3 and 5; Weber, I. S. i. 187.

† Weber, Z.D.M.G. xv. 136; Zimmer, *Alt. Leb.*, p. 170.

factor, and the Gāthās as secondary. In Indian Antiquary, ii. 58, he says that the Mahābhārata has 'grown out from the songs of the minstrels at the courts of the petty *rājas*.' Lassen, laying bare all as additions to the legends, counts the tales as the real origin, simply pointing out three kinds: the first, simple tales (Ādi, condensed Bhārata); next, tales of instruction (Çānti); last, the long legends (Vana). The difference between the Bhārata and Great Bhārata—expressed in the romantic tone of the latter, which brings it near to the prevailing spirit of the Rāmāyaṇa—has been clearly pointed out by Schroeder.* Müller, in Ancient Sanskrit Literature, pp. 36, 37, 40, will not 'deny that a mass of popular songs celebrating the power and exploits of gods and heroes existed at a very early period in India,' but says we must seek them in the Veda, not in the Epic. He shows immediately, however, that 'Epic poetry, traditional as well as improvised on the spur of the moment,' existed during the Vedic age, and that the Vedic traditions were not forgotten in after time, when the priests 'began to collect all the remains of Epic songs into one large body called the Mahābhārata.' That Epic legend existed long before the recognized Epic period has of late been shown by Bradke and Oldenberg. From the investigations of these scholars it would appear that the 'prosaic-poetic' legend is of Vedic antiquity. But the 'poetic' element is purely lyric.† I cannot allow that the recitative form was older, or was the exclusive source of the poem. The Epic is itself significant of its partial origin from lays. The cloudiness reigning in the battle-scenes between the acts of special heroes, and the catch-word phrases that always link these separate scenes together, seem to show that they have been united by a later clumsy hand: not perhaps the scenes as we have them in their present fullness, but the different exploits subsequently developed into those scenes. Take any of the battle-books, and open at random. We find a succession of duels and single feats, ending always in the same way: 'then it was terrible,' 'then there arose a great tumult,' 'then he seized another bow,' 'then everyone shot at everyone,' 'then there was an indistinguishable fight.'‡ We sail through a general indistinct warfare described in stock phrases, and soon come again on a duel, where individuals and separate deeds of heroism are plainly given. Each of these encounters is and was a unit, composed by a 'hero-praiser.' How early the 'hero-praisers' recite their old tales may be seen by Çat. Br. xiv. 5. 4.

* Lassen, *Ind. Alt.* i. 1004. Schroeder, *Lit. u. Cult.*, p. 456.

† Compare Z.D.M.G., xxxvi. 474, Bradke; xxxvii. 54 ff., xxxix. 52 ff., Oldenberg.

‡ Compare in short compass viii. 48. 40; 50. 40; 52. 30; 84. 21; 93. 50; ix. 28. 70, 79, etc.

10; Āçv. G. S. iii. 3. 1. But the musical side is prominent beside the narration. 'Sing ye the king or some other braver hero' is the command given to the two lute-players in the course of the ritual (Pār. G. S. i. 15. 7). The *snātaka* or twice-born householder is forbidden by the same authority to dance or play music, and song is deprecated (ii. 7. 3).*

The parallel between a lyric origin for much of our Epic and the Wolfian *κλέα ἀνδρῶν*, between the kitharode and the *vinā-gāthān*, can scarcely be called forced, and we have no right to ignore it. The well-developed music of the Vedic period; the kitharode equally besinging soma and the king; the mention of a harp of a hundred strings, *çatantī*; the congregational singing (*vānasya saptadhātur ij janah*, R. V. x. 32. 4), show us that a lyrical beginning is probable, and that not of a late, but of an early period.

But the most striking difference between the early and the late praiser is this, that at first the profession was full of honor; priests and kings' sons sang to the heroes' honor. But the praiser became a lying sycophant. Honor left the occupation. The priests no longer made new songs for new kings; they had embodied the old songs and kings alike into a religious ritual. The business of making new laudations passed into the hands of a lower class. The singer became a hired servant: or rather, hired minstrels took the place of the old singers. The bard was a lowly member of the warrior-caste or of a mixed caste.† But is it from such that the Epic has come? This comes from the priest. The latter had stored together a mass of legendary narrative; he had ceased to celebrate new victories in new verse, but he had a fund of family-histories of heroic or godly character. The Epic arose from the priest's converting the minstrel-lays into poems, and connecting them with his store of tales that had existed as prose narration. The poem for recitation united the prose and lyric on a middle ground. The prose was beautified, the lay was robbed of its beauty. Narrative verse linked the two factors together at the same time, and in their subsequent expansion and later additions of wholly extraneous character we have the Mahābhārata.

What says the Epic of music? Apart from war, we find that the poem teems with musical allusions. It is worth while to study these. Lyre, flute, harp, cymbals, bells, drums, trum-

* On this point the popular view is expressed by R. i. 79. 20: the Vedas, *dharma, nīti, dhanurveda*, riding, driving, elephant-riding, and *gandharvavidyā* (music, etc.), are to be studied (compare R. i. 80. 4, the same *gandharvavidyā* with polity, writing, and arithmetic, *lekhyasam-kyāvid*: cf. R. ii. 2. 6). So in ix. 44. 22, after Veda, science of arms, etc., we find *vānī ca kevalā*, as a knight's knowledge.

† Compare Lassen, *Ind. Alt.* i. 581.

pets, and horns are accompaniments of every peaceful scene. Dance and song go hand in hand with recitation and narration as means of amusement. Different classes of musicians, *mā-gadhas*, *sūtas*, eulogists, professional players and praisers, both men and women, diversify the life of the court. The chief occupation of many of these players is to make instrumental music, especially on some state-occasion, a victory or wedding. But they also sing songs to amuse the royal family, and with soft music the members of the kingly court are always awakened. We see the wearied maiden 'sinking to sleep but clinging to her lyre,' and the Epic poet finds nothing fitter with which to describe wretchedness than that those once 'always awakened by music' should be now without it.*

The professional singers, and also the professional 'tellers of tales,' appear furthermore where we have been led to expect them, namely at great festivals or in religious ceremonies.† Thus, at a wedding conducted 'according to rule,' we have the noisy shell and horn, and then 'those whose business it was to sing songs, and the tellers of tales;' with dancers also, eulogizers, and minstrels.‡ A sort of dirge seems to be sung over the fallen heroes in the great 'scene of lamentation:' that is to say, in the songs of lamentation there seems to be involved the

* Lament over those 'formerly awakened by music.' iii. 236. 10; iv. 18. 19; R. vi. 37. 58. Compare *upagīyamānā nārībhiḥ*, ii. 58. 36, 37; iii. 44. 8-10, *gītaṃ nṛtyaṃ vāditraṃ vividham*; iv. 2. 28 (compare R. v. 22. 10, the same, but *vādyam*); R. ii. 67. 3; 62. 14; v. 13. 53; compare with the last, where drums and other instruments are also found, the words of R. ii. 96. 8-9; here the *sūta* and *māgadha* also appear in the capacity of awakens, and the sleepers are further roused 'by songs appropriate' (*gāthābhir anurūpābhiḥ*; the *anurūpa* as noun early meant an antistrophic response in singing).

† A not insignificant change occurs in the scene of the imperial consecration. Here for the talks and songs we have the clumsy statement that at a great warrior-feast the guests devoted themselves to the theological and logical controversies of the learned priests, an imitation of the theological discussions more appropriate to a time of sacrifice, as in B. Ār. Up. iii. 1 ff. How different from the atmosphere of the simpler tradition, preserved e. g. in i. 192. 11: 193. 11 ff., where the great warriors 'talked such talk as no priest or man of the people could utter; for all night they lay and told tales of the army, and spoke of arms divine, of chariots and elephants and swords and clubs and battle-axes' (compare iii. 298. 7, below; and *yudhakathāḥ* in xiv. 15. 6, followed by the late *anugītā*). Compare again the late xv. 20. 4, *dharmyāḥ kathāḥ cakruḥ*, and ib. 27. 2.

‡ iv. 72. 26 ff. (29). Compare R. vi. 111. 8. That dancing and singing was in the later times regarded especially as woman's work, but also properly learned by twice-born men, is clear from the fact that such 'knowledge possessed by women and slaves' is regarded as a supplement of the Atharva-Veda, and the 'completion' of all study: that is to say, the twice-born man or Aryan should study the Vedas, and then first learn this art. Compare M. ii. 168; Vās. iii. 2; Āp. ii. 11. 29. 11-12. But legally priests that become dancers and singers lose caste (B. ii. 1. 2, 18).

custom of singing a formal dirge, or song of death and glory in honor of the fallen, and apart from the later burial rites.*

For sacrifices as important as a horse-sacrifice, the divinities kindly provide the music; Tumburu and other celestials 'expert in song' (as well as in dancing) officiate as chief musicians at the most celebrated of these ceremonies (xiv. 88. 39), and seem to be a survival of the musical exhibition as wont to be performed by men. Nārada remains to the late pseudo-Epic the patron saint of music (*gāndhurva*), as Bhārgava of polity (*nītiśāstra*), or Bharadvāja of the bow (*dhanurgraha*).† Again, victory-songs and genealogical recitations are given at a wedding (i. 184. 16), where, as above, a distinction is made between the eulogizers and callers of good-luck, and the tale-tellers and reciters of genealogies, such a distinction being inferable from the difference in title, and confirmed by the commentator;‡ and it is probable that part of an entertainment consisted in giving a list of the forefathers of the person whose honor was celebrated, wherein allusions to the great deeds of each would also naturally find place.§ At the great assembly, wrestlers and minstrels and bards amuse the court (ii. 4. 7). Another scene of quiet life reveals a banished king, old and blind, 'comforted by the storied fortunes of the kings of old' (iii. 298. 7, a legend). The fact that the singing was not a mere musical monotone or outcry is proved by the exchange of *gāthā*, verse, for *gīta*, song (sung): 'they sing verses.'|| The women singers have already been mentioned. They appear to belong properly to processional music, and sing to the sound of various instruments as the victor goes by, being accompanied by the *sūtas*, *māgadhas*, and *nāndivādya*s (iv. 68. 28); or they precede the king with music of all sorts (iv. 34. 17). In the last case, it is expressly mentioned that some of the women were respectable and some were bawds (*kumāryah* and *ganikāh*). A scene in the first book gives us a hint of the position of the 'praiser' in the king's house. The legend here makes a priest, although

* Compare xi. 17 ff. See also the whole account in R. vi. 94 ff. Here we have first a universal lament (12), of which the words are given, so that there was a universal song (28); followed by the individual song of sorrow, section 95.

† xii. 210. 19-21; though there are many *nyāyatantrāṇi*.

‡ He defines *vāitālika* as a good-luck caller; *sūta*, as a teller of tales; *māgadha*, as a reciter of genealogies.

§ Compare the genealogical tables given in the opening of the Mahābhārata itself (compare Lassen, *Ind. Alt.* i. 594). With the tale-tellers compare i. 51. 15, *ity abravīt sūtradhārah sūtaḥ pāurāṇikas tadā*; and also i. 214. 2.

|| iii. 48. 27, *gāthā gāyanti samnā*, i. e. *prītyā*. *Gāthā* is not sacred, as it was not in the songs of the martial improvisors: there as here, where the commentator distinguishes *gāthā*, as a secular, from *sāman*. a religious song, the verses were worldly in tone.

as instructor, the singer in the hall of an Asura king. The daughter of the king and the daughter of the priest go in bathing together, and, coming out, the priest's daughter finds that her clothes have been put on by the king's daughter, and says angrily: 'Why dost thou, being my pupil, take my clothes?' and the king's daughter as angrily responds: 'Thy father, as a praiser, stands below and constantly humbly, praises my father when he is sitting or lying down; for thou art the daughter of one that asketh, praiseth, receiveth; I am the daughter of one that is praised, one that giveth, one that receiveth not' (i. 78. 9-10). The contemptuous comparison with the *bandin* or eulogizer places that singer in a very humble position. The story is not without value as indicating the Brahmanic singer's position as well: though, of course, it goes on to show how the king's daughter was made to feel that a priest is nobler than a king, and finally reduces the king's daughter to the position of maid to her former dependant.

Priests join the regular eulogists in praising the king (xii. 38. 12), as do all the people (iii. 257.1): such praises being of course cries of congratulation, not songs with music, and being also common on the battlefield. Thus, as the troops draw out at dawn, the king is praised 'with wishes for victory': though even here we also find to the same end the singing of 'triumphant war-verses';* but as a general thing the battlefield praises are confined to 'hopes of good luck and wishes for a good day' (*jayāçis*, *punyaḥa*) chanted by heralds and Māgadhās.†

The musical instruments employed were chiefly, as said above, lyres, flutes, and cymbals, though more warlike music often accompanies quiet revelry.‡ The lute, *vallakī*, seems to belong to the middle period of Epic development (vii. 6665 = 154. 25, v. l. in B, and pseudo-Epic); but the lyre, *vinā*, one of the oldest instruments, and the one we have seen mentioned as suitable for military music, is very common, and we are fortunate enough to have it pretty well described in the Epic itself. It is said in general that in a song the flute and lyre follow§ the sound of the conch and cymbal. The lyre is spoken of (iv. 17. 14) as 'the sweet-voiced lyre, sending forth its strong notes,' and is more particularly described as having seven cords, *saptatantrī* (ἑπτάντρος φόρμιγγς: iii. 134. 14). The seven musical scales are described as a branch of study (*vinā saptavidhā*, ii. 11. 34); and we have the bass described as the

* *jāitrāḥ sāmgrāmikāir mantrāḥ*, vii. 84. 15.

† ib. 21; so *āçirvādāḥ pariṣvaktāḥ* (vii. 112. 62), etc.

‡ Compare xii. 53. 5, where *vinā*, *panava*, *veṇu*, and other war-instruments play together; with singers and *pāṇisvanikas*.

§ *anunādin*, v. 90. 11-16.

chord giving the 'big sound,' *mahāsvana*. We are told further that the string (*tantrī*) of the lyre rests on two supports (*upadhāna*), just like the cord tied at each extremity to the bow-end.*

We may believe, since the lyre of later times seems to be the same as the older 'seven-stringed lyre,' that this was the instrument which first accompanied lyric strains in India, going back perhaps to a period older than that when Terpander increased the four strings of the Greek lyre to seven (unless in the latter case Bergk's hypothesis of verse-divisions destroy the parallel).

The common reed-flute, known as *venu*, and found everywhere in the Epic beside the lyre, is not known to the Rig-Veda by that name; but other reed instruments (*nāla*, *nādī*, etc.) are common from the earliest time, and we may imagine that the flute under one of these names was also one of the most primitive instruments in the music of antiquity.†

* iv. 35. 16 : in reality the comparison is inverted. On *tantrī* compare the proverb in R. ii. 38. 24, *nā 'tantrī vādyaṭe vīṇā*. I believe this description coincides with those of later works. See Wilson on the *vīṇā*, Mṛch., Act iii., note, where he says the flute has seven holes; the lyre, seven strings. My own ignorance of music prevents my understanding very well the technical jargon found in the Purāṇas, but the general distribution of sounds seems coincident with that of the later period. The Epic makes no class of the five special instruments of later times, *bherī*, *mṛdaṅga*, *ṣaṅkha*, *paṇava*, *ḍiṇḍima*. To the explanation in P. W. under *mūrchanā* as a musical term add Vāyu P. ii. 24 and 25, where a full account is given, and compare ib. 24. 36.

† The tellers of genealogies need by no means have been mere dry reciters of family-records. They probably made their accounts interesting by a judicious mixture of pure legend. In later times we find fairy stories quoted from these *vaiṇavids*, as e. g. a pleasing story of Bhāgīrathī to explain the name is referred to the *vaiṇavittamāh*. Compare Vāyu P. ii. 26. 69 (*vaiṇavido janāh*) to ib. 170 (*evam vaiṇapurāṇajñā gāyanti*). I have already noted, above, p. 125, that the heroes as described are chiefly amused by tales and the singing of low-caste musicians. Such performers are generally spoken of with disapprobation as a moral evil, and the names *kuṣṭava* and *ṣāilūṣa* show the same feeling for actors generally. Although a kind of drama (as said above, p. 177) seems implied (especially in iii. 15. 14; xii. 69. 60, etc., and in *raṅgāvataraṇa* xii. 295. 5, or *raṅgavāṭa*, iii. 20. 27), we have no need of understanding more than pantomime in any of these allusions; and, for my part, I cannot see any recognition of real drama in the Epic. The uncomplimentary terms for dancers are common enough, especially in the pseudo-Epic (xii. 314. 28, they are of the quality of darkness; xiii. 17. 50, *nṛtyapriyo nityanarto nartakah sarvalāsalah*); and the paraphernalia of the stage could scarcely have escaped notice, had the pure drama been contemporaneous with even the pseudo-Epic. I see in the different regard paid to the public amusers a development something parallel to that shown above in dicing: at first, not dishonored; later, regarded with contempt; later still, the amusement indulged in but the amusers despised; finally, the amusement common, and dancing (and finally acting) become a patronized sport of the court. From the Epic connection of the stage with dancing and singing, the drama must have been developed by combining the art of singers with that of story-tellers, and perhaps *vaiṇavids*, and been wholly secular. The gradual restriction of this amusement is shown in Āp. ii. 10. 25. 14.

V. APPENDIX ON THE STATUS OF WOMAN.

Woman is to the Hindu a creature of secondary importance. As the goddesses among the gods, stand the heroines among the heroes of the Epic. But conventional sayings, of which there is a vast number, and the facts that may be inferred, give us together a fair idea of the position of woman in the middle ages of India, and even enable us to see how that position has changed, or was in process of changing, during the growth of the Epic itself.

Except in legal literature, there is little prior to the Epic that can furnish a satisfactory view of woman's life. What we know from Rig-Vedic literature may be summed up in few words. The girls were allowed their freedom, like the boys. Very early marriages appear to be unknown. At a ripe age the girl was married, and became the one wife of one husband, whom she herself had chosen, giving up her parents' home to enter absolutely into the family of her lord. With that husband as companion as well as lord she shared an equal footing in religious rights, and was not excluded from participation in social enjoyment. She had a separate but not an exclusive apartment. At her husband's death she retired to live with her son or returned to the home of her parents. Only as queen was she obliged to suffer rivals, and then probably as a political necessity. From rather unsatisfactory evidence, we may conclude that female children were liable, however, to be exposed; and that near blood marriages were not interdicted.

The early law-period is best considered in reference to the Epic custom and law. Much was changed in woman's life ere the conditions under which the Epic presents her were reached. The woman of the Mahābhārata in its completed form is best described in short by negating most of the description taken from the earliest Vedic age. The position held by her in the time to which we must refer the beginnings of the Epic lies somewhat between these two.

But in talking of woman we are, so to speak, confounding, from the later point of view, three different beings. The inherent complexity of woman's nature is aggravated in India by the social accident of her relation to men; and we find here, for all social considerations, as great a difference between woman and woman caused by marriage as between man and man caused by caste. This difference is heightened by the fact that women also (though, as I think, in less degree than men) were separated by the caste-regulations. But inside the pale of one caste we have always to distinguish sharply between woman, wife, and widow. The first had no value. The sec-

ond was of exaggerated importance. Again, the widow was a being socially apart from both girl and wife. It is only under these rubrics that we can study the condition of woman at all. For woman in general is but chattel, and receives only the respect due from a sensible man to potentially valuable property.

We have indeed a number of pretty sentiments in regard to woman, especially in regard to her purity, that seem to place her in another light; and when we read that 'a woman's mouth is always pure,' or that 'three things do not become impure, women, gems, and water' (xii. 165. 32; M. v. 130), we are tempted to believe that an ideal position of women has been thus early reached. No greater mistake is possible. The only ideal of the early Hindu in this regard was of practical convenience and sensual gratification. The proverbs quoted above are dry ceremonial statutes; most things render a man at certain times impure, as the sight of a dog, a tear, etc.; but, for the sake of convenience, the rule requiring him to rinse the mouth or bathe on thus becoming impure is done away with in the cases cited; and the whole force of the pretty saying is destroyed when we consider that the author is far from meaning women in general in this verse. He means only women of good caste. A woman of degraded caste was *ipso facto* impure, and to taste of her mouth was to render one's self liable to the severest penance.*

We may still consider woman as far as possible apart from her social conditions if we examine the descriptions given by the poet, which, though applied to one specimen, are serviceable as portraying the mental and bodily ideal women—descriptions which do not vary much in law and in Epic. It is thus that the beautiful Krishna† is described by her husband, after he has gambled her away as a stake in the madness of his dice-playing: 'Not too short is she, and not too tall; black-eyed is she, and fragrant; her eyes are like the lotus, and her breath like autumn's wind; welcome as autumn after the summer rain, and loved as autumn is beloved; slender is her waist, broad are her hips; blue-black her hair, and well-arranged' (i. 67. 158, Draupadi). She is described again, and more fully, in another passage; and adding this to a description of another woman in a later book, we get for the bodily ideal a result that tallies well with the technical enumeration of beauties furnished by still a

* xiii. 126. 25 (= M. iii. 155), *vṛṣalīpati*; by marriage, *yāuna*, xii. 165. 37. Compare Jolly on the legal position of women in India, *Sitz. d. K. Bayer. Akad.*, 1876, p. 423.

† Where the name does not necessarily indicate her color as black, since she may be merely the feminine to Krishna: the subject involving the original conception of the character. Fair women are attested by the Greek observer: see Ktesias i. 9 in *Ind. Ant.* x., with notes there.

fourth passage, and is corroborated by the legal works that warn against certain faults in women's personal appearance.* Blue-black hair seems to have been the favorite color. Red hair must have been well known, since the sages regard it as objectionable to marry a girl 'with auburn hair,' which is a characteristic, it is said, of Western girls. Girls so afflicted dyed their hair in later times. The Epic women are dark, and their hair is blue-black, parted in the middle, and the part marked, perhaps, with a pigment.† The eyes should be large and black; the lips, red; the teeth, white; the bosom and navel, deep; the breasts and hips, high. Further particulars, not specially edifying or translatable, but not differing from the Epic ideal, are found in the Brhat-Saṁhitā, and in the Purānas.‡

Interesting is our next general problem: what character did the Hindus assign to their women? Separate here tale and proverb. For no more tender and delicate types of women are to be found than Sāvitrī and Sitā (I have not so high an opinion of the much-vaunted Damayantī), and to have portrayed such characters is a vindication of the possibility of their historic existence. But on the other hand we have misogynistic sayings enough to show a popular disdain of woman. Only one circumstance is worthy of note: viz., that those who most indulge in these remarks have (in India) least cause to make them. 'A woman's nature is always unsteadfast'—this truth is uttered by the scapegrace Nala, who gambled away his kingdom, and ran away from the wife that remained steadfast to the end.§ Part of the wisdom imparted to another king that gambled away his wife is: 'woman is the root of all evil, for women are always light-minded;|| and the hardest blow is given to their virtue in the innuendo that even women of good family are envious of common prostitutes, wishing for the clothes and adornment that fall to the lot of the latter (xiii. 38.

* The second description of Draupadī is found in iv. 9. 1. Compare with this iv. 37. 1 ff., the technicalities in v. 116. 1 ff., and many incidental references, as viii. 73. 84, *prthuṅronī* of Krishnā: compare also M. iii. 5 ff.

† i. 44. 3, *śimanta*: compare N. Compare Wilson's Theatre, Vikram., p. 250, note.

‡ On the *śrīlākṣaṇa* see Ag. P. 242 (*purusalākṣaṇa*, 243); the dramatic ideal corresponds: compare e. g. Vikram., beginning of Act iv.; the king's remarks on Ākuntalā, Act i., etc. In Epic add xiii. 104. 131 ff. (C. omits 132 b). The Brh. Saṁ. 70. 16 ff. gives some peculiar tests of women's correct form, and of their virtue, depending on the length of the toes, etc.; in 23 we find *prāyo virūpāsu bhavanti doṣā yatrā kṛtis tatra guṇā vasanti* as a general rule. For minuter norms, see the whole chapter.

§ iii. 71. 6, *śrīsvabhāvaḥ calo loke*; literally, *varium et mutabile semper femina*.

|| xiii. 38. 1 ff.; repeated in 12, with 'no greater evil exists than woman. In vs. 17 we find M. ix. 14.

19). It is, perhaps, more philosophic reflection than misogynistic spite when the causal nexus of woe is traced back to woman: 'birth causes evil, woman causes birth, therefore women are answerable for woe' (xii. 213. 7). Love is a woman's whole desire. 'The mass of women hangs on love,' a wily adviser suggests to a king, 'and therefore, O king, if thou hast deprived thy subjects of their sons by thy wars, make the girls marry, and they will quit their sorrow' (xii. 33. 45). Woman's nature is to injure man: 'a man should not marry a woman of low caste, for the nature of woman is to injure man; be a man wise or foolish, women drag him down.*' When Father Manu went to heaven, he gave to men women—weak, easily seduced, loving and lying, jealous of love and honor, passionate and foolish—nevertheless respect (married) women.† The unusual fondness for love characteristic of woman is set forth in another verse: 'women are blessed with love, and slaves with pity' (xiv. 90. 14). And woman's untrustworthiness is recorded again: 'let not the king take counsel with fools and women' (iii. 150. 44; xii. 83. 56), a verse often repeated, with the warning 'never shall that be accomplished which is confided as a secret to the mind of a woman.‡' The historical reason for woman's lack of secretiveness is given in the story of a very pious saint, who cursed all women, because his mother revealed a secret: 'therefore he cursed all women, saying "they shall never keep a secret"; so he cursed them, because he was grieved' (xii. 6. 11).

In what then consist the virtues of women in the Hindu ideal? 'The strength of a king is power; the strength of a priest is holiness; but beauty, wealth, and youth are the strength of a woman—the greatest of all' (xii. 321. 73). A sentiment found oftener is this, however, that 'the strength of woman is obedience.§'

Such passages as these might be multiplied; but it suffices to have learned what the Hindu opinion was on this point. There is, to be sure, an antecedent impossibility of newness connected with the inquiry which robs it of freshness. Yet it is not without interest that we study the doctrine of India in regard to woman's nature; for in no point could the country for so long have remained original and free from foreign influence of thought. Except for slave girls, their women were their own; the opinions are based on narrow generalizations, and on that

* xiii. 48. 36 ff.; M. ii. 213-14, vv. 11.

† Ib. 46. 8 ff. The addition is necessary, as the context shows. In spite of all these faults, a wedded woman should be respected, because she is Manu's gift to man.

‡ xi. 27. 30; not in C! cf. v. 38. 42.

§ v. 34. 75. Parallel passages, xiii. 40. 8 ff.

account, to those familiar with the same generalizations abroad, the more curious. To the Hindu, woman is inferior because she is weak, because she does not argue dispassionately or clearly, and because she is a creature of emotions, especially of love. For the Hindu Epic warrior is not ashamed to weep; only he scorns, or rather ignores, the sentimentality of love. From two* points of view, love is a weakness. The soldier looks upon it as does the boy of to-day; the philosopher looks upon it as the origin of evil, and one with that desire which forms the first link in a chain of unhappy succurrent existences. Love as a passion the Hindu felt, appreciated, and deplored. As a sentiment, it does not exist, till the later Romantic age begins, that age which gives us the tales of good women, and later the lyric poetry. Women, at first free and unguarded, become gradually mere inmates of the inner house; they are watched and kept in ignorance. Outside of the generally pure lives of these guarded respectable women lie the lives of those whose presence preponderates in camp and city life—the ‘women of the crowd,’ mentioned only by groups, the dancing girls, the courtezans, prostitutes, and other vulgarities, who from the records of law and Epic abounded in the early as well as the later times.*

In strict accordance with this view of women stand the sayings in regard to her treatment. ‘Women (but wives are meant) should always be honored and petted. For when they are honored, the deities rejoice. . . and houses cursed by them

* Besides the laws regarding adultery (see below), allusions to prostitutes and loose characters are plentiful. We have seen that city and camp are full of them. The king is advised to avoid connection with (*svāriṇiṣu*, *klībāsu*) ‘unlawful women,’ xii. 90. 29-39. So ‘doubtful women’ ought to be avoided, xii. 35. 30. The verse on the ‘non-independence’ of a king says he is not *svatantra*, may not do as he will, in respect of games, women, council, etc. (xii. 321. 139). The report of Strabo shows that the king was attended regularly by slave-women; but this could have been, in accordance with Hindu law, for only part of the day (see above, p. 130). The ‘loose women’ that frequent the gambling halls are well known, ii. 68. 1. Among the rules for priests are many that show how vague, in spite of vows of chastity, must have been their morals and those of their neighbors in other castes. It is sinful to eat the food of one conquered by a woman, or of one who marries before his elder brother, or the food of a common prostitute (*ganikā*), or of men that suffer an *upapati*, or of a player (*raṅgastrī-jīvita*), xii. 36. 25 ff. In most of the disgusting tales in the Epic we find a great saint seducing some decent girl, and it is to be remarked that such connections are not condemned; that prostitution itself is not condemned as a profession; that wifely honor was esteemed, but maidenly honor not regarded except on practical grounds; that chastity in a man not particularly bound by an oath is looked upon as a matter of wonder. All the rules for chastity have purely practical reasons for their existence. Passion and love are the same thing, and are looked upon, like sneezing, as a natural impulse, best yielded to at once. Of purely moral censure of indulgence in passion there is no word.

are as if infected by magic' (xiii. 46. 5 ff.). To interpret the feeling that causes this, we may say that it is of the first importance that a wife should do as her husband wishes; if she is not petted and made much of, she will grow disagreeable; therefore the husband should keep her in good humor. This interpretation is inevitable, if we study the Hindu rules on the subject.*

The woman must be subservient to the man, but in intercourse with her he must obey her desires. In all these rules, and they are many, the woman, however, as woman is not regarded. It is always the practical effect of breaking them that is kept in view. So, too, with the laws that seem to evince a high moral standard: 'three sins lead to destruction—these are theft, adultery, and desertion of a friend.'†. 'There are four chief vices—gambling, intoxication, women, and hunting—he that does not foolishly rejoice in these is freed (from error).‡

What we may call rules of priestly conduct are so explicit as to suggest a predilection for the faults named: 'one should not (openly) eat or sleep with a woman;'§ 'one should not have carnal intercourse with a woman by day, or (at any time) with a loose woman, or with a woman that has not just bathed.' (xiii. 104. 108). It is said that such intercourse is always allowable if practiced in secret, restricted only by seasons, for practical reasons.||

To cast the 'evil eye,' *caksur dustam*, on a woman who is another's wife renders one debased; debased, in the next life, are also those that look at naked women with evil thoughts; and those that offend sexually against nature, *vijonāvu*. Especially strict, of course, are the rules for students, who were un-

* See particularly Manu iii. 55 ff., ix. 1 ff. The pretty sentiment in the mouth of the Lord speaking to Soma—'Never despise a woman or a priest'—is a fair instance of the danger of rendering too generally, or into our modes of expression. Soma had neglected Dakṣa's daughters, and is commanded to unite with them, at their desire, ix. 35. 82.

† v. 33. 65. *Paradārābhimarjīn* occurs in xiii. 23. 61.

‡ xii. 289. 26; 59. 60; iii. 13. 7. Compare above, p. 117 ff.

§ xii. 193. 24. This may be done in secret, xiii. 163. 47.

|| xii. 193. 17 (comm. and ib. 9, *ṛtukāle*). On this head, ib. 228. 44–45; 243. 6 ff. If a man receives an injunction (*nirdeṣa*) from a woman, he should gratify her desire, even if it be the wife of the teacher, ib. 267. 41; 34. 27; cf. xiii. 49. 12 ff. Those that cohabit *rajasvalāsu nāriṣu* incur *brahmavadhya* personified, xii. 283. 46. The converse in xiii. 90. 28; 104. 150; 163. 41. Sex-differentiation depends on the time, ib. 104. 151; females are born from the fifth, males from the sixth day. But in xiii. 87. 10, the girl from second, the boy from third day. Compare on *māithuna*, xiii. 125. 24; 129. 1. Speculation on this point was common, as in Greece; so Hesiod says sex is determined by the day of procreation. Compare Bṛh. Sañi. 78. 23–4. As well known, the law of Manu makes sex-differentiation depend on the respective vigor of the parents (M. iii. 49).

der vows of chastity till their study was ended. Such a student may not even talk to women outside of the family.*

Let us follow out the treatment of women in another direction. It was mentioned above that in the Vedic age there is some evidence to show that female children were occasionally exposed. This had passed by. In the early Epic period, woman lived on probation. She was allowed to live until her father or her husband saw fit to slay her. From all other men, she was, so far as her life went, secure. 'This verse has been sung of old by Vālmiki, women should not be slain' (vii. 143. 67). This rule is, of course, not a legal one. Women were tortured to death by law, for instance, if they were faithless. But it is a rule of chivalry, forbidding the strong to kill the weaker. It is one with the advanced code of military rules discussed above, and is universally found.† This rule implies legally so much, however, that the infliction of capital punishment in regular form, *vadhā*—that is, by decapitation or smiting on the head—is not in a woman's case to be performed for the many offenses rendering men liable thereto.‡ But the legal penalty for killing a woman is not in any case very heavy, and if she chance to be of low caste, it is very little. If a man kill a married woman (other than the teacher's wife—the teacher and all that belongs to him are all-sacred), he should undergo penance for two years; in the case of the teacher's wife, for three years.§

There is perhaps an indication of national Aryan superiority of civilization in the legend that 'Kāyavya laid down a law for the barbarians: he said "thou shouldst not kill a frightened woman; no warrior should ever kill a woman."¶

* xiii. 104. 116; 145. 50. The prohibition against looking at a naked woman (here and in xii. 214. 12; xiii. 163. 47) is extended in xiii. 104. 47 and 58 to a rule forbidding one to speak to an unknown woman, especially one in her courses. *udakṛyā*. Mutual desire, as a rule, excuses intercourse (see the marriage rules, below), but he that has forcible connection with a girl 'passes into darkness,' xiii. 45. 22. The student's rule is given in xii. 214. 12 ff.

† Killing a woman is reckoned as sinful as killing a priest or a cow, xiii. 126. 28: i. e. it was a high crime. Moreover, such a deed results in the 'murderer's being reborn in some despised shape, ib. 111. 112 ff. The use of a king, it is said, is this, that if a man who kills a woman should get applause in the assembly, the king will frighten him (and put him down), xii. 73. 16.

‡ We have to distinguish the military *na huntavyāḥ* rule, quoted above, and the technical *avadhyāḥ*, i. 217. 4. The latter case is plainly stated in i. 158. 81: 'in the verdict of law the law-knowers say that a woman is not to be exposed to *vadhā*.' Compare also ii. 41. 13, *striṅṅ na gastram pātayet*. On the other hand, compare the horrible death-penalty of an adulteress (see below).

§ xii. 165. 60 (*paradāre*). There is an Epic roughness about this rule. The law-books distinguish with great care between murder and manslaughter.

¶ xii. 135. 13; *dasyu* = *mleccha*.

Among the sins looked upon as 'without expiation' (as a variation on the saying quoted above) we find injury to a friend, thanklessness, woman-killing, and teacher-killing. It is quite in accord with the character of the Epic that we find one verse giving the expiation for a crime, and another denying the existence of such expiation (xii. 108. 32). To steal women is also one of the customs reprehended by Aryan law,* and we find it especially laid down for the *dasyu* that he should avoid union with (Aryan) women of high station, and theft of women.† Nevertheless, the Aryans, as they always carried captured women into slavery, could not have been free from this fashion.‡ Indeed, one of the marriage-forms is simply robbery of the girl, and one of the uses of a king is, it is said, to prevent women being stolen (xii. 67. 8 ff.)—that is, to put a stop to this antiquated form of marriage, of which, however, the Epic affords traditional examples in the case of its chief heroes.

How closely the legal part of the Epic hangs together in all formal statement of the rules of propriety we may see by comparing with the above the regulations of the *dharmasūtras*, not to speak of the *gāstra* of Manu, with which the later Epic stands on an equal footing in many points. Thus, the *dharma-sūtras* are precise in ordering that no breach of chastity shall be risked by contact with, or looking upon a woman.§ The especial sanctity of the teacher's wife is evinced by the rule that the student shall not mention her name, and shall serve her as well as the teacher (G. ii. 18, 31; Āp. i. 2. 7. 30). Special rules for greeting women are given, and some give even a rule here for colloquial intercourse between husband and wife (G. vi. 6 ff.) The supposed immaculate character of woman is not maintained, but some curious regulations are to be found. Thus, it is said by Vasishtha that only three acts make women impure: becoming an outcast, murdering her husband, and slaying her unborn child;|| but according to Gautama, abortion and connection with a low-caste make a woman an outcast (Vās. xxviii. 7; G. xxi. 9). Notwithstanding that it is said by Vasishtha

* 'One must not sell human beings,' G. vii. 14; 'females are not lost by possession,' G. xii. 39; Vās. xvi. 18; M. viii. 149.

† *Dasyu* here is slave, xii. 133. 16-17.

‡ There is a passage in the Aitareya Brāhmana (interpolated perhaps) referring to slave girls presented as gifts: Ait. Br. viii. 22.

§ G. ii. 16; Āp. i. 2. 7. 3. 8-10. In respect of *māithuna*, no intercourse is allowed *rtukāle*, but the penalty is slight: G. xxiii. 34; M. xi. 174. Of course no attention is paid to this rule in Epic legends. One should not eat what is touched by a woman in her courses; and anything handled by women seems impure: G. xvii. 10; Āp. i. 5. 16. 28; Vās. iii. 45.

|| On modes of abortion, compare i. 177. 46; *açmanā kuççim nārbibheda*, of the abortioness. Compare the same act in V. P. iv. 4.

that a woman is pure in all her limbs, and is not defiled by her lover (Vās. xxviii. 9, 1-6.), we read in the same work that to make herself pure the woman has to sip water (Vās. iii. 31-34; B. i. 5. 8. 22). Woman was, therefore, in general less exposed than man to accidental theoretical impurities, but crimes of the gravest nature made her impure; and, though not impure for herself from natural causes, she might render the man who associated with her impure. The giving of right of way to a woman seems also to rest on this footing in the law-treatises; for, though given in the form common to the Epic and to Manu in three of the *dharmasūtras*, that of Baudhāyana restricts the gallantry to the case of a pregnant woman.* As to killing a woman, we find in all the law-books that the punishment is in proportion not only to the caste, but to the condition of the woman at the time of her murder.† For an ordinary woman—that is, for women in general—a modified penance is ordained by law, while for the accidental slaughter of an unchaste woman or harlot there is no penance at all, or at the most ‘a bag.’‡

But few general rules remain to be considered for women. Legally, they could be witnesses only for women (M. viii. 68; Vās. xvi. 30). Religiously, they had no independent part in Veda-study or in sacrifice, merely helping their husbands in the manual part of the daily service, and (barring accidental representation) being entitled, like the slaves, to merely a perfunctory acquiescent word during religious rites, their knowledge being classed with that of slaves as the last thing that a man should study, and consisting of improper tales, singing, dancing, and mechanical arts.

The Epic rule agrees with the legal of course in generally excluding women from sacrifice, feasts to the Manes, and fasting,§ and confining their religion to ‘obedience to the husband’; but we find terrible religious austerities undergone by the maid of Kāçī, performed, like those of an ordinary ascetic, with a view of compassing earthly power by religious merit (v. 186. 19).

Finally, as we cannot suppose for a moment that the Epic represents either chronological or geographical unity, we must always understand that ‘the women of India’ means the Aryan women approved of by the late redaction, when rules for conduct are given; since we read of women whose customs are

* G. vi. 24; Āp. ii. 5. 11. 7; Vās. xiii. 58; B. ii. 3. 6. 30; Mbh. xiii. 163. 38.

† Penance for the slaughter of a Brahman woman in her courses stands always first. Compare G. xxii. 12; Āp. i. 9. 24. 9; Vās. xx. 34 sq.; B. i. 10. 19. 3; ii. 1. 1. 11; M. xi. 88.

‡ G. xxii. 17, 26-27; Āp. i. 9. 24. 5.

§ iii. 205. 22; women have no *yajñakriyāḥ*, no *çrāddha*, and no *upavāsakam*, but their means of heaven is *bhārtari çuçrūṣā*.

directly opposed to those allowed by the Epic ideal, women who dance naked, and get drunk, and behave with open and unabashed immodesty;* and though we know that the practice of 'guarding' or shutting women up was of comparatively recent origin, yet we have to assume this as the custom for all respectable women of the 'Epic age,' the only exceptions being those of older traditional tales, girls in lowly circumstances, and country girls. City women of respectable character were neither seen nor heard. Yet the feasts and rejoicings of a still later epoch† show us women freely commingling with men, and we must suppose that absolute seclusion of women was practiced only in the families of kings or of the highest nobles, and that the occasional return to a natural life was a temporary adoption of rules current in lower society.‡ Some women seem recognized as not restricted by the ordinary rules of seclusion.§

It is now time to draw that necessary distinction in treating of Hindu women to which allusion was made at the outset, and review the three periods of woman's life, as girl, wife, and widow.

The Girl.¶—Krishnā, the daughter of Drupada, was, considering her beauty and her marital complications, an exceedingly well instructed woman, and was able to argue very cleverly with her sage lord, Yudhishtira. Much of this wisdom she gleaned from him rather late in life, but other sources of knowledge were open to her from an early period. To one of these she refers at the close of a grand discussion on the difficult question of fate, involving subtle questions of human and divine power, with which she is remarkably familiar: 'this I learned (in childhood) as a sage priest taught it to my brother, while I sat in my father's lap and listened.'¶¶ The picture drawn here represents an unusual home scene; for notices of the life of girls except in an epigrammatic or didactic way are rare.

* The Madrakāh, women of Čalya's country: compare viii. 40. 17 ff. Compare the Bāhikas in ib. 44. 1 ff.: 45. 19 ff.: v. 39. 80, 'Bāhikas are the refuse of earth.' In B. (the same proverb) Bāhika and Vāhika, (sic).

† Not alone in the Harivaṅṣa. In i. 222. 21, the women get drunk at a picnic. Compare above, p. 121.

‡ To see the city sights, processions, etc., the women sit on the roofs, away from the public (i. 69. 1 ff.).

§ ii. 31. 38; women in Mahiṣmati by especial permission of Agni are 'not guarded' by their husbands and are dissolute (*svāirinyah* . . . *yathesṭham vicaranti*). The expression *raks*, usually used of keeping women secluded, may be used in an entirely unconventional sense, as *yosit sadū raksyā*, i. 111. 12, means that one ought never to injure a woman. For fuller treatment, see below.

¶ Parāç. vii. 4 defines a ripe girl, *kanyā*, as a maid of ten years; one of nine is called *rohini*; one of eight, *gāurī*.

¶¶ iii. 32. 60-62, the *bṛhaspatiproktā nītil* is meant, on *dāiva. pāuruṣa*, and *haṭha* (ib. 32).

But Drupada was a king, and must have been an unusually affectionate father, for in general there appears to have been no sentiment but contempt for the girl. At least, this is the frequent statement: boys are blessings, girls are a nuisance. Girls, anyway, are no good, 'but a daughter is a torment,' it is said.* The care of marrying her and the responsibility she unworthily bears is meant; as Mātali exclaims in another place, against the girls of great families, that a daughter is a constant risk to three families, her mother's family, her father's, and finally her husband's (v. 97. 15-16). But natural affection was stronger than systematic contempt, and we are glad to learn from the Epic's own words that, in spite of the usual fixed difference in the regard felt for son and daughter, 'some fathers love the boy more; some, the girl' (i. 157. 37). A rule of the 'house-manuals' says that when a man returns from a journey and meets his son he should kiss him on the head, and murmur 'out of the heart art thou born; thou art the self called son; O live a hundred years,' and kiss him three times more, murmuring benedictions—'but his daughter he should only kiss, without words.'

But almost all the occasions on which girls are mentioned have to do with their marriage. For the universal rule of Epic and formal law compelled the girl to marry when she was yet immature. Before the time of marriage she appears as a naked child, or, if somewhat older, either as a child-princess whose main interest just before her marriage is to get new clothes for her doll, or as a clever little damsel picking up wisdom on her father's lap.†

According to law and Epic usage, and even to a suggestive verse in the Rig-Veda, it would seem that the brother was scarcely less necessary to the girl's fortune than the father. The brother preserved the sister from a rude fate, since Aryan

* i. 159. 11-12, *kṛcchraṁ tu dukhā*, etc.

† The princess Uttarā asks Arjuna, to whose son she is shortly married (after he himself had declined her hand when offered by her father), to bring back cloth with which to dress the dolls of herself and girl-friends. Arjuna's remarks on declining her hand show that she was a mere child, although at least of marriageable age, *vayahsthā*, iv. 72. 4. She appears in full regal attire when ceremony demands it. Compare above, p. 170, and iv. 37. 29 for the doll, *pāncālīkā*. This seems implied in *sūtraprotā dārumayī yoṣā*, v. 39. 1, though a puppet, *puttikā*, may be meant. The first expression is used in the drama for the doll of a princess. Playing with a ball, *kanduka*, is shown to be a girl's amusement in iii. 111. 16; and *kanduka* appears again in Mālavikāg. iv. 17, *kandukam anudhāvanti*, as fitting play for a princess. The general name for children's playthings is *kṛīḍanaka*, which implies dolls, balls, carts, etc., or pet animals, as in the divinity's case, *vyālakṛīḍanakāṅkṣi kṛīḍate*, Vāyu P. ii. 37. 281: compare ib. 36. 94. The usual amusements of the girls, however, singing, dancing, and music, are more corporal exercises parallel to the shooting and riding of the boys.

rule prohibits marriage with a girl that has no brother. Of such a girl the Rig-Veda speaks as if it were a matter of course that she should not be married, but should become a common woman of the streets.

The reason for this is not less simple in itself than significant for the late and full development of many customs appearing in the Vedic age that we are wont to regard as peculiar to a later—or, in other words, for the lateness of parts of the Rig-Veda. For the only reason for the Rig-Veda's speaking of the forlorn condition of the brotherless girl must have been that which causes legal injunctions against marrying such a girl: namely, that the man who had only a daughter might claim that daughter's son as his own religious representative in offering oblations to the Manes of himself and ancestors. The right of the husband of the brotherless girl in his prospective son would thus be forgone. The dead father ought to receive the funeral cake, but that son could offer no cake to his father's soul; he must offer it to the soul of his maternal grandfather; and the main object of the father's marriage would be lost. Without a son, and without a cake, his soul would lie in hell.* The only interest felt for the girl was in the matter of her marriage. Before she becomes a wife, however, two points are to be settled. At what age does she marry, and at what price?

Now the later tabulated and scheduled wisdom, as we find it in the *Brhat-Samhitā*, gives a remarkable statement, to the effect that a woman is not full grown till she is twenty.† On the other hand, the only Epic that specifies the age of the heroine makes *Sītā* six years old at the time of marriage (quoted above, p. 110, note). But we can trust the law to help out the Epic in this particular. It is not likely that unanimity on such a point would exist among law-books, were there great differences in practice. Suppose we divide life into the four divisions usually accepted by the Hindus: babyhood, youth, maturity, old age. The period of babyhood extends to the time when it is necessary to put on clothes. Now some of the law-givers say 'let a girl be married before she wears clothes'; one says, 'before puberty';‡ and a later (verse) law says, 'while the girl is still naked let her father give her in marriage.'§

* Rig-Veda i. 124. 7: the girl without a brother runs loosely after men. G. xxviii. 20; M. iii. 11; ix. 136; Yāj. i. 53.

† *vinçativarsā nārī . . arhati mānonmānam (puruṣaḥ khalu pañca-vinçatibhir abdaih)*. B. S. 68. 107.

‡ *prāg vasaḥ pratipatter ity eke after pradānam prāg ṛtoḥ*, G. xviii. 23, 21.

§ *Vās. xvii. 70*: cf. B. iv. 1. 11-14 (Bühler). The length of the time the girl should wait to be given away, and at the expiration of which she may make her own choice, is set by some at three months; by some at

The pseudo-Epic chimes in with the rule that a man of thirty may wed a girl of ten (still clotheless); or a man of twenty, one of seven. In its informal part we find also the same advice, but expressed more indefinitely: 'a long abode in the house of relatives is not a good thing for women.'* The statement in the Epic 'they extol a wife whose maturity is past (*gatayāwanā*)' points to the same view; for it is the married woman whose youthful folly has passed into middle age that renders the house and peace of the husband perfect (v. 35. 69). The law-book of Manu does not specify more nearly than to say that the girl may marry at eight, or before the age of puberty; but it adds a very special injunction that a girl is better unmarried forever than given to an unsuitable husband. The oldest commentator on this law objects to so early an age as eight, saying plainly that in such a case the girl is simply sold by her father. In India the marriageable age is usually reached between ten and twelve.

We have clearly in the legendary literature, both Epic and dramatic, a reversion to a freer age. Çakuntalā, Subhadrā, Mālavikā, Damayantī, Krishnā, are no babies of eight or ten. They are grown girls conscious of womanhood. The girls of the forests in their fathers' ascetic abodes, so often met with by kings and priests, are practically well-developed and full-grown.

Instances of legend and law might be multiplied without increasing our knowledge. We must, it seems, first of all admit that there was a difference of custom within the Aryan order itself; recognize that till the Vedic age is passed (back into the borders of which the Epic story extends), the girls were married after they had reached maturity, not before; acknowledge that the priests in literature prior to that of the Epic had laid down a maxim that girls ought to be married before this age, and that

three years. The latter seems to be the earlier form, for which later the 'periods' are substituted. Compare G. xviii. 20 (*trīṇ kumārṛyṭū*) with Vās. xvii. 67-68 (*trīṇi varṣāni*); and the confusion in çloka-writers. M. ix. 4, 90-92; Vishnu, xxiv. 40, and in the *ṛtu* substituted in the verse of Vasishtha (loc. cit. 70) after the prose *varṣāni*. Compare also B. iv. 1. 11-14). In the Epic, a month is the formal equivalent of a year (iii. 35. 32), and I have thought perhaps this *varṣa* is responsible for such informal confusion and formal substitution. 'The rains' might be interpreted as years or months (rainy season); *varṣe-varṣe* = each rain or each year. The 'four rains' means the months. It may be remarked in connection with the following discussion that 'in the bad age to come' girls will choose their own husbands and bear children at the age of five or six; boys becoming also mature at seven or eight: iii. 190. 86 and 49.

* xiii. 44. 14 (M. ix. 88-94). In the following Epic verses occurs the law-book rule that a girl 'after three years' unwedded may hunt up her husband herself (ib. 44. 16-17); the informal advice, i. 74. 12.

this generally received maxim expresses a general custom; see in the freer permission of Manu and the objection to child-marriage of his oldest commentator a later protest against such immature marriage; consider the Epic and dramatic legends as expressive of an ideal rather than a custom of the time; make a distinction between the lot of the higher and lower classes, the respectable and unworthy women; presume such a distinction made further by geographical difference in custom; and conclude that we have thus come as near to historical truth as we are able. The line of development in this matter seems steadily directed toward the state of affairs now obtaining, where child-marriages and child-widows are the general curse of the land.

Necessary and important is the evidence of the Greeks, with which I leave the subject. It proves that seven was regarded as an age fit for marriage. *Ἐν δὲ τῇ χώρῃ ταύτῃ ἵνα ἐβασίλευσεν ἡ θυγάτηρ τοῦ Ἡρακλέους, τὰς μὲν γυναῖκας ἑπταέτεας εὐσθας ἐς ὄρην γάμον ἰέναι, τοὺς δὲ ἄνδρας τεσσαράκοντα ἔτη τὰ πλείστα βιώσεσθαι* (Arrian, Ind. 23, c. 9). *Μεγασθένης δὲ φησιν τὰς ἐν Πανδαίᾳ (?) κατοικοῦσας γυναῖκας ἐξ᾿αετῆς γινομένης τιττεν* (Phlegon, Mirab.).

The period described by the Epic, and from which its story comes, represents probably an age in every way more happy for women than the later. But the time in which the Epic was composed out of old legends must already have known child-marriages. For this later custom we may give four reasons, if we put ourselves upon the Hindu plane of thought. First, the nature of woman: the objective end of woman's life is to marry and bear children; let her not, therefore, be kept from the labor the Creator intended should be hers, but undertake it as soon as possible.* Second, the pecuniary advantage: the girl was an expense at home, and was paid for when married; let her bring her price as soon as possible. Third, the fear of impurity: after the age of womanhood, contact with unclean women rendered men liable to impurity, and made it necessary for them to do penance; let her be put out of the way, safe and 'guarded': that is, where only her husband shall meet her (for 'women's apartments' can have been only in the large houses of the rich). Fourth, pride: it is an honor to parent and child to have the latter married well and early; and, as the Hindu says, a grown girl may commit indiscretions that ruin the happiness of three families; as women are utterly untrustworthy, they should be 'guarded' as soon as possible, even before they are of age; then the parent is free from danger,

* This is the view bluntly expressed by the Hindus. Compare 6, 'women are created in order to bear children.'

and the husband is certain that his wife is pure. Climatic conditions make these marriages of children possible: the practice reveals at once the state of society. Yet, with general condemnation, we must not forget the skilful, witty, and learned women of the earlier Brahmanic period, who are indeed often the best in coping with the priests in argument, and are put down by the violence as much as by the logic of their opponents. Like the women of that period appears *Krishnā* in the Epic, a well-taught and clever disputant; nor are the others of her sex represented except in pedantic didactic as inferior to men. One might almost conjecture another reason, added to those above, and attribute the insistence of the priests upon child-marriages to a desire to suppress the intolerable freedom of tongue exercised by women in their discussions.

In the fifth century B. C., at the hands of the Buddhists, women became to a great extent emancipated. Then follows the era of enlightened women; the rise of the nunneries; the freedom from restraint—to be lost with the rise of Brahmanism again, though occasional glimpses show us in the period of our middle ages women that were esteemed as poets and even as lawyers: as witness the work on law by one *Lakṣmīdevī*, of whom *Colebrooke* speaks, and the women poets in the *Saduktī-karṇāmṛtam* (composed 1205 A. D. ?).*

Before taking up the question of the price paid for the girl, let us consider the kind of a girl one should marry. She should of course be 'of good family': the first rule, wherever we find rules on this subject, is always that a man should take care that his son marry a girl whose family is worthy of her; and his daughter, a man of like or higher caste. In this regard, because of caste, no land was ever stricter in its precepts. Legends, however, oppose the laws in showing us as many cases of men of knightly caste uniting with priests' daughters as men of priestly caste with girls of warrior-caste; and even the women of lower castes are here wedded to kings and priests. To be avoided in marriage are girls personally defective, or afflicted with disagreeable diseases, or with inauspicious names. Too close relations are forbidden to marry in the later

* See Notices, No. 1180; *Cāndālavidyā*, *Bhāvadevī*, *Vyāsapādā*, etc. are women among the 446 poets whose verses are here made into an anthology. There is no other language than that of men for the Epic heroines; but, as is well known, in the drama vulgar people and women generally speak *Prākṛit*, or a patois, while the men of rank speak *Sanskrit*. Venerable women and even common women do sometimes, however, even here speak *Sanskrit*, e. g. in the case (*Mṛcch.*, Act iv.) of *Vasantasenā*.

law: 'one should avoid a girl of the same family as one's mother.'*

As among the earliest rules no such law is found, we may assume that blood-relationship was only gradually introduced as a bar; the early legends of the gods wedding their daughters and sisters seem to me, however, no proof of such custom in man.

Corporal characteristics are spoken of above.

The price paid for a woman is called *çulka*, a price or fee.† Gautama says that the debt does not involve the sons if unpaid by the father, and that the price goes first to the mother, or, if she is dead, to the brothers of the girl, according to some law-givers; others say, to the brothers with the mother; but he leaves this point unsettled.‡ Tacitly, as well as peremptorily, the early law recognizes the sale of a daughter; later on (as well known, both stages are represented in Manu), the law forbids such a sale. In the Vedic times the sale of a daughter appears not to have been unusual (R. V. i. 109. 2). It is the rule to-day in some parts of India. The law-makers resisted the custom, and would have the fee looked upon as a gift. Nevertheless, it remained sales-money by the name of gift or fee, and was not uncommon, though the kind of marriage implying it is reckoned less worthy. The 'free-choice' of the woman must have been affected by it; for it is disputed whether it be legit-

* The injunctions are given in xiii. 104. 123 ff.; the *parivrajitā*, wandering (Buddhist?), is included among undesirable brides (also *ayoni* and *vijoni* connection blamed). In verse 130, *samārsā mātuh svakulajā*: in ib. 44. 18, *asapindā mātur asagotrā pituh*. In ib. 15, 'one should avoid a girl that has no brother or father, for she is *putrikā dharmīni*.' See M. v. 60 (*sapindas* are those related to the seventh degree); iii. 5-11; G. iv. 2; Āp. ii. 5. 11. 15 (Bühler's note). The first quotation is freer than the second, and means simply, as translated, 'one should not marry a girl descended from one's father's ancestor, or one of the same family as the mother.' The legal restriction is 'within six degrees on the mother's side and not a gentilis or relation on the father's side;' in the Puranic law, the fifth on the mother's side, the seventh on the father's. The question is involved by somewhat contradictory tradition and by caste, into which the Epic takes us by its usual impartial giving of different views. Thus, *samārsā* would appear to restrict the rule anyway to Brahmins. The views of the legal commentators will be found in Bühler's or Burnell's translation of Manu. The priest that in i. 13. 29 goes after a wife of the same name (*sanānnī*), and refuses (14. 3) to accept Vāsuki's sister because she did not fulfil this condition, meant thereby not family but proper name, one with the same meaning as his. According to B. i. 2. 2. 3, own cousins may marry 'in the South.' For the usage given by the House-laws, see Weber, *Ind. Stud.* x. 76.

† This subject has been discussed by M. Léon Feer in *Journ. As.*, vol. viii., *Le Mariage par achat dans l'Inde aryenne*: mainly devoted to adjusting discrepancies between the marriage-forms in Ādip. and Manu (see below). Feer draws attention to the fact that the election is only a preliminary to the form of marriage selected (p. 476), and concludes that the *ārṣa* and *āsura* forms both imply sale.

‡ G. xxviii. 25-26. The first *çulka*-quotation from G. xii. 41, like M. viii. 159, is thus interpreted by the commentators.

imate for a father to give his daughter, although engaged to one man, to a better one, if the marriage has not taken place. The frequent denunciation of the custom proves its prevalence: 'he that sells his son or offers his daughter for a fee goes to hell.*' 'A gift for a girl is recorded by the good.†' 'They that dispose of a girl for a fee go an evil course.‡' The 'fee' is sometimes a mere promise to pay.§ A permissible sale is veiled as a free gift, but open selling is condemned. Nevertheless we find the selling practiced.¶ Even the pseudo-Epic records a case of sale. Gādhi did not care to give his daughter to Ricīka, because he thought 'he's a poor beggar'; so he said 'first give me the fee, and you shall then have my daughter.' The suitor readily assented, and paid the price (xiii. 4. 10). Fee is sometimes implied without express statement. Compare 'this daughter was disposed of by the king, after the latter had stipulated the marriage-fee' (i. 193. 23). If a man, it is said, should give a girl to one man and then to another, he would be born a worn—implying payment.¶

* xiii. 45. 18 : compare M. iii. 54 with the following.

† i. 102. 12 ; see below, under marriage-forms.

‡ vii. 73. 42 (equal in sin to one courting a *rajasalā*, or to an *āsya-māithunika*, or *ye divā māithune ratāh* (ib. 43). C. omits this.

§ In i. 103. 14, *vrttam çulkahetoḥ* is a mere promise on the part of the suitor.

¶ Compare in i. 221. 4, *pradānam api kaṅyāyāh paçvat ko nūman-yaṭe, vikrayam cā py apatyasya kaḥ kuryāt puruṣo bhūvi*. The king of Madras says to a suitor who does not offer a price, 'you suit me exactly, but I cannot transgress our law : whether bad or good, I cannot transgress our family custom, and there is an impropriety in your request ; you should not say : "sir, give me (without a price, this sister),"' i. 113. 9-13 ; ib. 10. The suitor paid the price ; and he is the greatest saint in the Epic. Not content with paying, he says the rule is a good rule, a rule of God, a law enforced by the ancients, a law without sin ; ib. 13.

¶ xiii. 111. 83 : compare also xiii. 44 : if one man gives a fee for a girl, another is promised the girl, another abducts her, another offers money, and another actually weds her—whose wife would she be ? The answer is, that the Vedic ceremony makes the real marriage, and the promise is invalid in face of the fact that the girl is now wedded ; followed, however, by condemnation of one that gives to one man after promise to another ; so that the marriage is clandestine (28). In the following the fee-theory is stated in full : 'the fee does not decide the marriage ; it is not the chief thing ; a gift (to the bride) of ornaments does not imply that she is sold ; eternal law proclaims that the husband should give something ; it is of no consequence if one gives a verbal promise of a daughter ; a girl should not be given to one she hates ; a wife may not be sold ; those that maintain that the fee given before or at marriage is really sales-money and the chief thing (and that the woman passes into her owner's hands solely on account of this) do not understand. For instance, if a man gives the fee for a girl and dies before marriage, the girl does not belong to his family ; therefore the fee is not a price paid for chattel. The girl may marry some one else, or form a levirate marriage with the dead groom's brother (so Manu), or act like a widow (as usual, the Epic puts into the argument what destroys it ; the statement that the girl in some cases weds the brother or acts like a widow shows

It remains to add of the marriage-money that Strabo attests the fact that a yoke of oxen was given by the suitor as a price for the girl (xv. p. 709). On the other hand, the wife's dowry is an unpledged sum given by the father to the daughter or son-in-law; in royal marriages the gift is often handsome. 'A befitting dowry' is sometimes spoken of; a king gives his new son-in-law a princely gift; Drupada gives gifts to all the knights when his daughter is married, horses, elephants, women (slaves), etc.; and Krishna carries the *haraṇam* of Subhadrā from her home to that of the Pāṇḍus.* Compare the gift of King Virāṭa to his son-in-law when his daughter is married—seven thousand horses and two hundred elephants (iv. 72. 36). It made some difference whether the father gave to the bride or to the bridegroom, as the wife's property included 'gifts at marriage' (M. ix. 194).

The father of the bride at the election-day of his daughter has all the expense, not only in gifts to the pair, but also in largess to the people (though the suitor gives 'to the priests'). This advanced stage probably brought the fee into disrepute; the latter remained as a survival, and 'the pair of oxen' that the law enjoins upon the bridegroom to give is a mere formality. The bridegroom is really paid to take the girl, if the father can afford the honor of suitors willing to wed his daughter for her state. Probably, therefore, private and small families retained the fee, while at court and by the upper classes it gradually became looked upon as an archaic barbarism.†

she was regarded as sold to the dead man); an actual marriage is performed by taking seven steps about the fire or by pouring water; a man should wed in this way a girl that loves him and of proper descent (*anukulām, anurañcām*), after she has been given to him by the brother; she is married by the ceremony (*upāgnikām*), not by the fee. Compare M. viii. 227 and ix. 71 (where it is questioned by the commentator whether the 'first' suitor spoken of is not dead); and Yāj. i. 65, who says that a girl promised to one may be given to another if the latter is 'better.' Our text (31-36. 45-46, 48-52, 55-56) is expanded in the next chapter (xiii. 45. 1-6): 'suppose the fee-giver has gone off without getting the price back; she is still sold to the fee-giver (*krītā cūlkadasya*), and no one else may marry her: all her offspring will be his (if she marry another); but if married to a man of her own election (*svayamvṛta*), and with her father's consent, without a fee, some regard the offspring as not his; this is doubtful; let one do in this matter as the good do. This must be remembered, however, that a marriage is only real by virtue of a proper wedding; a mere cohabiting of a male and a female does not constitute a marriage between them' (*bhāryāpatyōr hi sambandhaḥ, śrīpūṃsoḥ svalpa eva tu*, 9). Throughout this passage, aside from contradictory admissions, the fee, though disparaged, is recognized as the custom of many.

* i. 221. 33 ff. and 44 (*jñātideyam* and *haraṇam*); i. 198. 15, Drupada's gifts. The king offers Vikramāditya a dowry with his daughter (Pañcadandaprab. 4 and 5), to take a late example.

† The rise of the royal election, with tournament and fête, results (Bhishma, Arjuna, etc.) in the price paid for the girl being looked upon as

The question of selling a girl for marriage is illustrated by the old law of slavery involved in unsuccessful gambling. Although the formal law denies the right of selling human beings, women of the lower classes are frequently mentioned as slaves of war, serving in the capacity of servant maids or in more vulgar professions.* But this was not the only method of enslaving; for, as is seen in the course of the main story, the wife of an Aryan, and that a king, might be made a slave if staked at play. The scene is too well known to describe, and it is only necessary to refer to the fact that Krishnā is dragged into the gaming hall as a slave, and is addressed thus: 'thou wast a queen; thou hast been lost in play; thou art a slave' (ii. 67. 34); and she is then commanded to take off her rich attire, assume that of a menial, and go to the women's apartment and wash dishes. The husband objects to this on sentimental grounds, but, admitting the fairness of the game, he has nothing legally to bring forward against the enslaving of his wife. The only protest on the loser's part is that they ought not to bring a respectable woman into the gaming-hall where the men are. The one legal point raised is that described above, p. 123.

Slave-trade in women being mentioned and reprehended shows that the practice was not uncommon, though condemned: 'those that buy or sell slave women' are regarded as sinful; but this is a later law (xiii. 44. 47). As the passage following is in a section on war-rules, we must suppose that the girl intended is a war-captive; the passage shows an acknowledged right to carry off women as captives, but would restrict the authority of the captor in favor of the woman: 'a captive of war should be released at the end of a year; a girl carried off by a feat of valor should not be asked (to return) before the end of a year; the same rule holds for other property taken by force.†

The attire of women is a subject not without a certain social value, but I regret to say that I have omitted to make special

so nominal that we find a *vīryaṣulka*, or fee-of-bravery, regarded as the price: that is, he who won the girl by strength of arm paid for her by the feat. So the Ag. P. describes the bending of the bow at Sītā's marriage as the 'fee' (5. 11-12).

* Slave-girls are given away by the quantity, generally with their ornaments, as in viii. 38. 7, *asmāi . . dadyāṁ śrīṇāṁ ṣaṭam alamkṛtam*; so xv. 14. 4.

† xii. 96. 5. If the girl wants to go, and says so at the end of a year, she must be returned; but she may not be asked till the expiration of the year. 'Other property,' according to the commentator, implies slaves captured by force. The general rule is that the girl or slave or any other property is returned at the end of the year. This must have been a rule that the victor followed or not as he pleased. I have already referred to the slave-girl given to the vicious priest in the 'northern country,' xii. 168. 20 ff. -173. 18.

note of this point, not having considered it of sufficient interest. I may mention, however, that in general there is distinction between the dress of maid, wife, and widow. The last wears no ornaments. The chief article of the married woman's dress is a necklace, this being indicative of wifehood. Other ornaments are worn in profusion by girls and married women. The rustic maidens seem to wear as little dress as possible, but queens and women of wealth are gaudily attired in linen or red and yellow silk (the men of the same class wearing red and blue silk). Thus Sitā and Draupadī are described: with the addition, that the hair is worn in a long braid, long enough to conceal a dagger in, according to the tragedy related in the *Brhat Saṁhitā*. The *deshabillie* of a royal dame seems to be a linen cloth wound about the body; thus Krishnā, when dragged into the assembly, wears only such a cloth.*

Affecting both girl and wife is the institution of 'guarding' women, to which I have had occasionally to refer.

In the great *Sabhā* scene of our poem the heroine is dragged into the hall where the men sit after their gambling. In her deep distress she cries out 'I, I whom neither wind nor sun have ever before beheld at home, I now enter the assembly hall' (ii. 69. 5). And this indignity, even more than the forcible disrobing, seems to fire the indignation of the helpless heroes, who exclaim, 'they never of old have caused a righteous woman to enter the assembly-hall; the law of old, the law eternal, has hereby been put to naught.'† It was only in grief, and as a sign of mourning, that the veil was laid aside.

At a time much later than that of this scene, but still falling within the realm of the whole Epic, we find women who, while being Aryan, have yet dispensed with this good old rule. It is noticeable, however, that when the beggar-nuns mingle in pub-

* Silk gowns are mentioned in xii. 296. 20. Krishnā is *adhonivī* in the assembly, ii. 67. 19. *Ekaveṇī*, 'with one braid': compare R. vi. 60. 7; v. 22. 8 (and 18. 21; 66. 13); also sign of a eunuch. The ornaments include bells, as in *kāncinūpurānisvanāḥ*, R. vi. 112. 13; v. 20. 16; 81. 29; from the Epic I have only *nūpura* in xiii. 107. 30; iii. 146. 24. Sitā is dressed *pītakāñcēyavāsini*, R. v. 31. 2. Wedding clothes in drama are silk bodice, red muslin skirt, necklace, shoes, wreath: *Mālatīmādh. yī. 82*. The story of the B. S. 78. 1 begins *castrēna venivinigūhitena* (with a dagger hid in her braid the queen of Kūçj killed the king). The *Amarāvati* tope, referred to above, p. 105, shows un-Aryan women barely dressed in a belt, necklace, and anklets (of the fourth century). From the Epic I have further noted only Subhadrā dressed as queen in red silk, i. 221. 19; *Tilottamā* (divine woman) *veṣaṁ sāksiptam adhāya raktenāi 'keua vāsasā* (i. 212. 9), a Coian garb; and Krishnā, *kṣāumasaṁvītā kṛtakāntukamaṅgalā* (i. 199. 3), linen clothes and the matron's necklace. The 'girls with one garment' abound in the stories of rustic adventure: but it was a last shift for a woman of rank to appear in 'one piece of cloth' (as in Krishnā's or *Damayantī*'s case).

† *ib. 9*. The *pūrvō dharmāḥ sanātanaḥ* is the law of women's exclusiveness. Compare in the law *Āp. ii. 6. 13. 7*, etc.

lic, they are not unexposed to suspicion of immorality. In the scene of the beggar woman who has come to visit a Solomon-like king, we find that the sovereign rebukes her sharply for her immodesty in so doing. She answers with a proof of her innocence: 'O king, I have come hither to learn (not to seek thee for a bad purpose); for behold! I have not touched thy hand nor thy limbs; I come into thy presence as the pure water-drop comes upon the leaf of the lotus. It stands and does not intrude within' (xii. 321. 168).

It is said that the 'dependence' of women is a new thing. But there is no doubt that restrictions on the social freedom of women were early practiced, and I find nothing to warrant the assumption that anything of Vedic freedom in this regard survived except in the earliest traditional form of the Epic. 'Women should always be guarded,' and when Sūrya says to Kuntī (iii. 307. 15) that it is 'contrary to nature' that women should be *āvrtāh* (secluded), he for a selfish end tells half the truth; but it was already second nature for women to be kept at home, girl and wife, all her life. Such a security against harm is the firmly enclosed court in the Nala story. A description elsewhere gives us the information that one enters through three different inner rooms of the palace, before coming to the garden, where there was a playground for the women, decked with flowers and fountains (xii. 326. 31 ff.). We know from Vedic times that the women had separate apartments, and the seclusion of the royal dames is a carrying out of this exclusion from the home of the man.* But how was it in the humble house? Here there must have been much intercourse.† The homely rules of the student show this, as well as the intercourse related in the Brāhmaṇas between honorable women and guests. But theoretically the woman was never an individual capable of taking care of herself. There is a much tempted St. Anthony in one of the later portions of the Epic who expresses to a young woman this trite truth with great force: 'an aphorism-maker says that women are all liars; that is the truth; it stands so in the Veda; do you say you are independent? There isn't any such thing as women's independence, because women are not independent; it is the opinion of the lord of creation that a woman isn't fit for independence.'‡

* Compare the princess in iii. 55. 21: 'closely watched is my dwelling; and my father the king is a man of severe rule.'

† The best way to guard woman is to keep her poorly dressed, according to v. 34. 40. Compare on older freedom of women i. 122. 4 ff.

‡ xiii. 19. 6 ff.; ib. 20. 13 ff.; 20, almost = Manu ix. 3 a. but v. l. in b. In xiii. 40. 8 ff., and xiii. 43 end, the injunction to guard women is expanded. Other remarks on the subject in xiii. 141. 26 ff., where the rule is given that 'a deposit (*nyāsa*) and a woman ought to be kept watch of.'

The evil of this dependence had one alleviation. For, being dependent, the women were not exposed to liability to err; and if they did err, the fault was in great part taken off their shoulders. If a woman goes astray, she is not blamed so much as her guardian. She is a prisoner; her desire to escape is natural. If abducted, she is still theoretically a virgin, although not really so.* It is only the Bliṅṣukī (the begging nun, spoken of above) who is thought of as being independent by her own fault, (which makes) all her learning in revelation void (xii. 321. 64).

On great public occasions this seclusion of women was temporarily given up. During the marriage-election the maiden had to expose her face to the crowd; but besides this, on occasion of festival or sorrow the women form part of a very mixed procession, laying their veils aside in the latter case, as in the women's lament in the eleventh book; and even without this, being apparently flung together with crowds of men of all sorts. No statute permits this, but compare the story: 'crowds of women and crowds of knights went forth (from the city) mounted on carriages, accompanied by Brahmans, and the wives of the Brahmans (also were there) . . . So there was also a great commingling of the crowds of Vaiçyas and Çūdras' (i. 126. 13 ff.).

In one respect the Hindu woman was bettered by the advance of civilization. She was, after the Vedic period, allowed no part in the religious exercises except when permitted in the simple Vedic rites. Knowledge of the Veda was also denied her. To speak in modern parlance, her religious education was entirely neglected. But after the completion of Tradition-works (as distinguished from Revelation-works, in which she had no share), she was not only permitted, but expected to hear and read them; and this went on under free Buddhistic influence, till even the highest philosophical truths and mysteries became familiar to her.

We read that women, like men, are purified by reading certain portions of a song in honor of Agni: 'if a woman or a man shall read this at both twilights (she and he are blessed)' (iii. 3. 77), although 'for a woman to peruse the Veda is a sign of confusion in the realm' (iii. 33. 82); and at the very end of the whole book from which this quotation is taken, we read 'if a woman or a man hears this story, (he or she) obtains all desires'; while in the latter portion she studies philosophy, and is deified for the knowledge of the attributes of Vishnu. 'One who knows self through self is freed from sin, even as a snake is freed from his skin; the man or woman who knows this truth

* Vās. xvii. 73, *ṃathā kanyā tathāi'va sā.*

is not subject to future births' (xii. 251. 10, 11, 23). But as to her right to use the Veda: 'the law has been fixed that women have nothing to do with religious ceremonies; for there is a revelation to this effect: women, devoid of manly power and devoid of law, are (the essence of) untruth (and therefore unfit for Veda and religious ceremonies).'*

The Wife.—It is of course recommended among the plati- tudes of the Epic that one should not marry a person of lower station, but should select one of the same caste.† What is meant is that a man should not marry above his order: the sociological key to this being found in the fact that a man does not rise to the social level of his wife, but the wife sinks to that of the husband. It is, therefore, better, if the marriage is not equal, that the husband should be of the higher caste. Kings wed the priests' daughters in legendary narrative, but are not recommended to do so. 'Thou canst have no con- nubial connection with me,' says a king to a woman of the priestly caste, 'for thou shouldst not make a caste-mixture.‡' This rule holds always good, that a man may not marry a woman of higher caste; but the rule that a man may not marry a woman of lower caste is restrictive only of his first choice in wives. After he has married a woman of his own caste, he may marry others of lower extraction. A great distinction must be made in regard to what is comprehended under the word wife (*dārāḥ*).§ The first or priestly wife of a priest, for example, is the only real wife. No matter if a man has previously married others; when the woman of highest rank becomes wife, her rank reduces the others to a secondary position: 'she is the more venerable; she alone bathes and adorns her husband; she alone may clean his teeth and oil him; she alone may fling the offer- ings with him; she alone may give him food and drink' (xiii. 47. 32, 33). In the same way, a wife of the people-caste compared with one of the warrior-caste must slip into the background (ib. 40).

The four wives, three wives, two wives, one wife thus allowed respectively to priest, warrior, man of people-caste, and slave are by some restricted, through dislike to admitting that the slave-woman can be a wife of any but a slave. The slave-

* xiii. 40. 11, 12. 'Devoid of law' (*gāstra*) is a later emendation on M. ix. 18, where women (in a verse just like this) are declared to be without *mantras* (or Vedic texts). Compare my note to Manu ix. 18. Compare the same in substance with xiii. 123. 5-6 (G. xviii. 1 ff.; Vās. v. 1, etc.).

† v. 33. 117: *sama* means like in all respects, but caste is especially intended.

‡ xii. 821. 59, *nā 'vayor ekayogo 'sti*.

§ xiii. 47. 30 ff. The rank of the sons here discussed lies outside the limits of this paper. See ib. xiii. 46-49. On illegitimate sons compare i. 120. 34; v. 140. 8.

woman is a wife only through lust or irregularity; the third wife of a warrior would (according to the schedule) be a slave-woman, but she is not legally a wife. A man of the people-caste has one wife, the slave-woman would be a second, but she is not legally a wife. The slave has but one wife.* Thus, if a priest really 'marries' four wives, the sons of only two are his own, 'like his self;' for not only the son of the slave-woman, but even that of the woman of people-caste (another indication of the nearness of these two), is 'degraded.†' The logical conclusion, reducing the son of the woman of people-caste when married to a man of the warrior-caste, is not carried out: 'a warrior's three wives bare him three sons, of which two are like his self; the third is degraded.' It is added that a man of the people-caste has two wives (*bhārye*), and a true son, 'like his self,' is born of each.‡

These low-born wives were then really concubines, except in the people-caste. The fact that only the first married wife (when the others are taken in caste-order) may be wedded by the ceremonial points also to this. There is a plain contradiction, in both Epic and legal literature, in regard to the eligibility of a slave-woman as wife of a 'twice-born' man, which we may set against the legends that show us the sons of such offspring held in esteem, and we may conclude that the custom was not unusual, but with growing strictness of caste was censured, until such a 'wife' became virtually a mere concubine.§

To supersede a woman by marrying a second wife ('over-marrying,' as the Hindus call it) is allowed only when the first has failed in her duty, i. e. not borne a son, or been faithless, and the like. Divorce is allowed only in cases of especial provocation.|| We may hence conclude that a plurality of wives was admitted at first for kings, and afterwards extended to the ordinary subject. But the early priests appear to have had two or more equal wives. King and priest subsequently gave up polygamy, but resorted to concubines in addition to the bigamy and trigamy permitted. No verbal distinction makes this clear, however; the women are all 'wives.' The only

* Ib. 8, *na dr̥ṣṭā 'ntataḥ smṛtā (cūdrā)*; 51, 56: compare M. ix. 157.

† xiii. 48. 4: 'in consequence of their sharing their mothers' family': compare ib. 15.

‡ xiii. 48. 7, 8. A son of a man of the people-caste by a slave-woman is of the people-caste, says the commentator. Compare ib. 49. 7-8.

§ A slave-woman may be a wife (of one of the upper castes) first to satisfy lust; but others deny this; a priest that has a son by a slave-woman must undergo penance,' xiii. 44. 11 ff. ('a priest has but three wives,' etc.). The commentator refers to M. iii. 13; Yāj. i. 56, as 'the other men'.

|| Jolly (loc. cit., p. 443), alluding to M. ix. 78, rightly says that the separation is rather a banishment than a divorce.

women really forbidden the king by formal rule are prostitutes and priests' daughters (xii. 90. 29-39); and a Nisādi woman is called a 'wife' even of a priest (i. 29. 3); as is also a slave-woman (ii. 21. 5). The restriction is but a rule not enforced, like that which makes a nymph *guror gurutarā* (iii. 46. 41). The heroes of the Epic have many women apiece, and each is paired with one real wife, so soon as Krishnā is exclusively taken by the king. But the possession of many 'wives' is allowed as a natural right of men, and the distinction in the meaning of 'wives' must be assumed to be late.* This passage sets polyandry against polygamy. 'Polygamy,' it is said, 'is not wrong; but it is a very great wrong in women to transgress against a former husband' by a later marriage.†

Polyandry seems to be an un-Āryan custom practiced by or assumed for the chief heroes of the Epic, who, five in number, are represented as marrying one wife, much against the girl's father's wish. The wife, however, soon becomes the special wife of the king, and subsequently the polyandrous side appears scarcely noticeable; although each brother is said to have had a son by her. It is a custom declared to be against all good usage, but some mythical legends are cited in support of it, and the legal objection is refuted by the common retort 'right is hard to distinguish;' but in adding, as the pleader does, 'I follow the custom of the ancients,' the advocate of polyandry goes too far, for it is as flatly said 'this custom never was practiced by the ancients.'‡

The authority of legends manufactured for proof is scarcely worth quoting; but it is noticeable that in one of the instances cited, as in the case of the Epic heroes themselves, it is not polyandry that is in question, but phratrigamy, to coin a word expressing the true relation. The one woman marries brothers; it is a family-marriage. The first case cited is that of Jatilā Gautamī: 'she is said in an old tale (*purāna*) to have had seven husbands.' The second is that of a dryad (*vārkṣī*) born of a saint, 'and she married ten brothers, the Pracetasas.'§

* The constant remarks on the jealousy of wives, the fact that the only ill a woman fears is *sāpatnakam*, may be noted, as e. g. in i. 238. 26 (in 31 the usual advice 'never trust a woman').

† i. 158. 36; compare i. 104. 35, where *eka eva patih* is the rule 'from now on'; and Ait. Br. iii. 23. 47, 48, polygamy.

‡ Compare i. 196. 5, *katham ekā bahūnām syād dharmapatnī na saṁkaraḥ*; and 6; also ib. 195. 27, *ekasya bahvyo vikṛitā mahiṣyaḥ . . nāi 'kasyā bahavaḥ puṁsaḥ crūyante patayaḥ kvacit*. The next verse repeats that this is 'opposed to the world and the Veda.' See also ib. 195. 29, and 196. 8. But in i. 202. 8, *ipsitaḥ ca guṇaḥ strīṅām ekasyā bahubhartṛtā*.

§ i. 196. 13 ff. In vs. 23, polyandry is termed *bahūnām ekapatnītā*. The legend of Draupadī's repeated wish is found in i. 197, the last ten verses. Compare i. 104. 10, two brothers have one wife.

One of the law-books says that 'the wife is given to the family,' but adds 'this is now forbidden:' a statement, as it seems to me, indicating that polyandry was known but not allowed; and in the silence of other authorities we may assume it to have been un-Aryan.*

Zimmer thinks that polyandry is disproved for the Vedic age by the moral tone regarding adultery; this seems to me a weak proof; but the negative evidence furnished by the Veda is strong enough to make us refuse to believe that such a custom was in vogue. As to the morality of polyandry, that depends on the number of women on hand. If the people is still an invading host, the number of men is far in excess of that of the women, and the morality implied by a formal marriage of several men to one woman is greater than where the woman is common to several men without formality. Some of our western camps would be morally improved by a little strict polyandry.†

The form of marriage is distinct from the kind of marriage. The different methods or means of marriage are grouped by Epic and legal rule in certain divisions, but these are not marriage ceremonies. The latter scarcely differed much, and, as described in the House-rules, we may say that there was but one form—as we should say, but one wedding ceremony. The characteristic of this form was, as explained in the developed ritual, a three-fold circumambulation of the fire, with an added inner ceremony of seven formal steps; suitable verses and significant gestures (such as pouring grain) and movements (such as mounting a stone) taking place at the same time. The ceremonial is generally alluded to in the Epic simply as the 'rite of seven steps;' and the supposition is natural that the long ritual with its three circumambulations and the seven-step ceremony added is really but a later phase, in which a distinct ritual, at first differing from the 'seven steps,' has at last embraced the latter, which was originally enough in itself to constitute a wedding ceremony. Something of the same prevalence of another popu-

* The use made of the rule in Āp. ii. 10. 27. 3, from which the above is taken, is for *nīyoga*; the levirate law is declared inapplicable now, but was applicable of old, because *kulāya hi strī pradīyata ity upadiçanti*, the woman is given not to the husband alone, but to his family, and therefore, if he fail to beget offspring, his brother may form a consubstantial relation with her for this purpose. The tales above are of course cited only to indicate what seemed to the composers a fitting state of things.

† There can be no doubt that polyandry was frequently practiced in ancient times in India; the only question is, was it ever admitted among the Āryans? In some parts of India a plurality of husbands is more common than of wives—even as many as seven. Here, too, we find that the joint husbands are always brothers (Report of J. Davy on the Kandyan country in 1831). It is also a Tibetan custom.

lar view remaining in the Epic long after the formal enunciation of the ritual remains in the ritual's directions how to elect a girl by getting her to select among certain clods of earth, and thus prognosticate her fitness for wifehood, over against the loose admonition of the Epic that she should have 'good marks.'*

Arbitrary rules and law are the following: not to marry a girl that does not love in return; not to marry if one's elder brother remains unmarried; not to marry a girl whose elder sister is unmarried; not to marry without the father's consent (against marriage by robbery)—these rules of law are all violated in practice.†

The ordinary kinds of marriage, the means by which the girl is acquired, do not seem to differ much from those generally practiced the world over. The lover asks the girl to marry him. Either she says she will and does so at once, or she is coy and says 'ask my father.' The father's consent is legally assumed as necessary even in the case of a goddess. In decency the girl must be given to the lover by her guardian.‡

It was this means by which the girl was acquired that made to the Hindu legislator the difference in kinds of marriages.

* The *Sūtra*-rules, with similar but not always identical ritual, are given *Āc.* G. S. i. 7; *Gobh.* G. S. ii. 1; *Āp.* G. S. ii. 4, 5, etc. The first notes as a prefatory-remark that the rituals are very different in detail; the incorporation of the 'seven steps' is shown, e. g. *Āp.* loc. cit. ii. 4. 17; *Çāṅkh.* G. S. i. 14. 5; *Pār.* G. S. i. 8. 1. The loose expression of the Epic is given in iii. 297. 23, *sāptapadam māitram*; xiii. 51. 35, id.; and often. As the ritual embodies a pan-Aryan rite (for circumambulation of fire, stepping upon a stone, and other details, are shared by other Aryan peoples), we may perhaps see in the seven-steps rite a foreign element incorporated later into the Aryan community. The steps are strictly not round the fire, but to the north. According to rule, the pair take hands only when of equal caste; as otherwise a woman of warrior-caste holds an arrow; of people-caste, a goad; of slave-caste, the hem of the groom's garment. In practice, however, in the case of a king wedding a priest's daughter, the expression 'takes her by the hand and lives with her' is indicative simply of an informal marriage: *jaग्रāha vidhivat pānāv uvāsa ca tayā saha (çakuntalayā)*, i. 73. 20; cf. ib. 47. 5. A most interesting view of the pan-Aryan ritual has appeared of late (1888), *Die Hochzeitsbräuche der Esten*, etc., by Schroeder. For India especially, compare Haas (*Ind. Stud.* v. 321), who thinks the seven steps are first of general character to solemnize any pact, as of friendship between two men (so above), but regards this also as pan-Aryan. See above, on xiii. 44. 55.

† Compare xiii. 106. 22; and xii. 34. 27; 35. 27 ff., for fasting to secure the girl's love; and the rule of not marrying before the elder brother. The latter is a very venial sin, for after a time the pair live together, though at first the younger brother expiates his sin by a penalty. If the elder was fallen from grace, this bar was raised.

‡ Says a maiden in i. 63. 75: *viddhi mām kanyāṅ sadā pitṛvaṅgānugām*; says a nymph to her lover in i. 172. 24, *yācasva pītaram mama sa cet kāmayaṅte dātum tava mām bhaviṣyāmi te*. In iii. 224. 6, a goddess cannot be married without *varadānāt pituḥ*. So i. 81. 26.

Either the lover paid for the girl with the customary yoke of oxen, or he ran away with her, or he was elected by her, etc. Purchase, robbery, and formal election are the Epic means of marriage, until the late scenes already discussed, where, far from buying the girl, the suitor was rewarded by receiving a fortune with his wife. Of these kinds of marriage the most popular in the Epic is the knightly election. This custom does not appear to be regarded as peculiar or on the decline; it is not looked upon as an ancient rite passing away, but as modern custom. Indeed, all the paraphernalia, the brilliant court, the invited kings, the gifts to the suitors, the martial contest, show a period devoted to pageants, and not a relic of an antique usage. Choosing a lover was of course a maid's right from ancient times, but the technical self-choice or election of the Epic with all the knightly ceremony seems of recent growth. Besides the chief heroines, many others are incidentally referred to as having had an election; and the common expression used of a woman 'given in the election' shows its frequency. The girl, as said above, is either virtually given before the so-called election, or makes her election and is then given.*

The pseudo-election ceremony permits the girl to reject at the outset any unfavorable suitor.† In this pseudo-election there was no decision but that of the strength of the combatant. If, as in the case of Damayantī, she has a real election, the girl, after selecting from among the assembled suitors (whose names and ranks have previously been called aloud by the herald),‡ advances and signifies her choice by grasping the hem of the successful suitor's robe, and laying a wreath on his shoulder. After this ceremony is over comes the wedding. The wedding-feast is very free, the bride pouring out liquor for the men and stimulating them to carouse. In some cases the defeated suitors remain and share the feast and the host's gifts.§

* Thus, in iii. 293. 33, a king says 'you choose a husband, and I will give him to you.' Compare i. 165. 7; iii. 12. 116: incidentally, i. 112. 3 (*pitṛā svayamvare dattā duhitā*); i. 95. 76 (*kanyāṃ svayanivarāl lebhe*); vii. 172. 38, etc. The man 'elects' as well as the woman, and often the girl's choosing is represented as a last resort, because no man has chosen her.

† Thus Krishnā refuses Karna the right of trying to win her, i. 187. 11 ff.

‡ *kīrtyanāneṣu nāmasu*, i. 102. 6; *nirdiṣyamāneṣu vareṣu*, v. 120. 5. In the latest period, as in the election described by Bilhāna, the points of the suitors are given by an old woman who accompanies the girl into the hall (Bühler's *Vikramāṅkadevacarita*). Compare iii. 57. 27-40.

§ From other tales. In i. 184. 11, a *dīvyo mahotsavah*; in i. 198. 15-17, 'after the wedding,' gifts are given to the warriors. The seers and astrologers receive gifts at the same time. iv. 72. 28 (liquors drunk at a wedding). 'Wedding and carouse' go together if *āvāha* may bear the interpretation of 'invitation to carouse' given to it by the P.W. in xiii. 63. 33 (*āvāhāc ca vivāhāc ca*). Apropos of Prithā's remark that Draupadī is 'an alms' and must be divided by the brothers, compare the tale in i. 13. 29, where a priest begs for a wife as *bhikṣā*. Compare R. ii. 66. 38, *putrabhikṣām dehi*, 'give a son as an alms.'

The poet intends us to believe that the election is meant only for the warrior-caste, but there takes place an episode which seems to show an equal participation by the priests. For, disguised as priests, the suitor and his brothers (in the case of Krishnā's election) enter the lists and fight. The appearance of armed priests does not provoke opposition until the contest is decided in their favor. Then the rule is made that priests shall never again be allowed to enter an election. We have here at first the same matter-of-course acceptance of warrior-priests as in the case of Kripa the son of the priest, who, being found as an infant by a soldier, *senācara*, was, on account of his nobility of appearance and his accompaniment of bow and arrow, at once supposed to be the 'son of a priest who knew the science of arms.'*

The other popular form of marriage is illustrated by Arjuna's stealing of Subhadrā. He simply runs away with her. Subsequently the wedding takes place in a regular manner. This method is not among those condemned, but it is not looked on with favor, except for the warrior. The six other methods are divided illogically, according as they are bad or for separate castes. Of these, the marriage by sale has already been discussed. The 'eight marriages allowed by law' are, according to the schedule, that of Brahmā, the godly, the sages', the creator's, the devils', the Gandharvas', the fiends', and the demons' (*brāhma, dāiva, āṛṣa, prājāpatya, āsura, gāndharva, rākṣasa, pāiçāca*). The legality is, according to Manu (here quoted), in proportion to their priority on the list. A priest may be married by the first four; a warrior, by the first six; but kings may marry by the fiends' rite; the devils' rite is for men of the people and slaves. It is then said that three are legal and two are illegal, out of (the last) five of these; and the demons' rite and the devils' rite are absolutely forbidden; while the fiends' and the Gandharvas' rites are allowed a warrior (compare M. iii. 22). The first two fit only a priest, for the marriage 'of Brahmā' and 'the godly' are simply gifts to priests, the first as a free gift, the second as a fee for sacrificial work. These women did not necessarily become wives, for in the word marriage here we must understand in the broadest sense any means of connubial connection, and a marriage-rite is not meant. It was free to the priest to marry the girl so acquired or not, but

* *dvija dhanurvedāntaga*, i. 130. 16 (compare 19. *gāutamō dhanurveda-paro bhavat*). It is, however, of course said that 'priests have no right in election; this is only for warriors,' and a Revelation is given to prove it, i. 189. 7 (*adhikāra*, here and xii. 297. 25). Compare ib. 11 (law of excluding priests). The quoted 'Revelations,' *ṛutis*, in the Epic are often, as in the case of quoted Manu verses, merely lies strengthened by vague but grave authority.

the giving is not in itself a marriage. Six means of getting a woman are left. The first is the sages', the inherited method, and is described as the purchase of a girl by a pair or two of oxen (see above). The creator's way is described as the giving of a girl with formal verbal ceremonies. The next is the devils', where the girl is sold for as much as the suitor can pay (this is for slaves and the people-caste). The Gandharvas' method of union is free cohabitation without ceremony (the one recommended here). The two last are reprehended, and are only admitted because of the necessity of filling up the category with missing methods of sexual connection: the 'fiends' method' being to steal and violate a girl; the demon's, to rape her when she is asleep or drunk. Another list, and Manu,* compared with this, show complete confusion; moreover, the fourth in the new Epic list is displaced by the election, put last. I have elsewhere pointed out the confusion in the 'legality' of these lists,† and Peer, in the essay alluded to above, p. 345, has tried by various substitutions to reconcile the discrepancies in the Epic. The same difficulty exists in the Manavic text, for here the *svayamvarā* (compare *pativivarā*) is recognized simply as the girl that elects her own husband (M. ix. 92), but the 'election' is not on the formal list. It is especially urged in other parts of the Epic that the 'fiends' manner of securing a girl is proper for warriors.‡

Still another list gives us (xiii. 44. 3 ff.) the term *ksātra*, or method peculiar to the warrior, as the one immediately after the one for the priests (*brāhma*), and it is described as where a bride is given according to the custom of the family, and is differentiated from the *rākṣasa*, with which in the Sūtras this name seems identical. The three lawful forms are here the *brāhma*, *ksātra*, and *gāndharva*, and the two unlawful ones are *āsura* and *pāṭāca*=*rākṣasa*. It will at once occur to the reader that *prājāpatya* is identical with *svayamvara*, with which it interchanges in the lists above; and this is strengthened by the fact that in another passage from the same book as the last quotation we find *ārṣa*, *prājāpatya*, and *āsura* given as the three lawful forms (xiii. 19. 2), for the priestly, knightly,

* i. 73. 8 ff.; i. 102. 12 ff.; M. iii. 27 ff.

† In 'Manu in the Mahābhārata.'

‡ i. 219. 22. Krishna advises Arjuna to carry off his sister, although she was holding an election. In i. 102. 16, we read that warriors come to an election, but the knowing ones declare that 'the best way is to carry off the girl by force.' Yet the free love implied in the Gandharvas' method is also recommended as 'best for a warrior,' and that by a priest, i. 73. 27. As to the purchase given as a form for the under castes, it is urged, as shown above, that the purchase must be in the form of a gift—a *dāna*, not a *vikraya* (i. 102. 12); yet the *ārṣa* connection was originally for all what the *āsura* was later for the people-caste, a sale.

and mercantile castes, apparently. Of course *prājāpatya* is a late name, by analogy with *brāhma*, which in turn was misunderstood as 'Brahmā's rite,' though really 'for the priests,' as *ksātra* is 'for the warrior.' The difference may, however, have been merely in the verses recited. In the Sūtras we find at first six marriages mentioned, of which the first three are in agreement with Manu; the fourth, fifth, and sixth are respectively the *gāndharva*, *ksātra*, and *mānuṣa* (= *āsura*), according to Vasishtha. To sum up, we have two peculiar methods of acquiring a girl open to a priest. He must not steal or buy her, but may receive her as a free gift or as a fee. There is one method, called the sages' method, where a girl is sold for a yoke of cattle. This last is the only method known to the Greeks, but is reprehended, although acknowledged as an ancient custom, by the Hindu law-givers. There is one unceremonious connection, equivalent to a free-love union. There is one method called especially the warrior's, where a girl is stolen by force. The next method is to buy the girl for money.* There remains the forbidden rape and the ceremonious *prājāpatya*. As no real wife is made without a wedding, we may take this to be the simplest explanation of allowed household connection with women. Deducting the first two for priests, the third, preserved, although disliked, as an ancient rule, we have the connection recognized for concubines who had no wedding ceremony: one for the warriors, by force; one for the merchants, by wealth. Connection by free-love and by force might afterwards be ratified by a wedding, and the girl then becomes a wife. Thus (xiii. 44. 24 ff.), we find that a girl may be sold for connubial connection, and the man is not to blame if he has the wedding-rite performed. Had the Epic election been an old ceremony, we should doubtless find it in the earlier law-literature, nor find *svayamvarā* (kept till late) merely as a girl that chooses†—that is, not one given by her parents. In the second list of the Epic we find too that the election is used in a very free way, rather applicable to the man than to the woman: thus, *svayam kanyā varayāmāsa* is used by the suitor.‡ It is well-nigh impossible to suppose that the knightly election common in the Epic could have been a usual ceremony in earlier times, or we should see traces of it in the earlier literature; but here we find only that the girl chooses

* Vās. i. 29 ff.

† Compare M. ix. 90-92; Ag. P. 226 (1 ff. on betrothal, and) 41, *adaṇḍyā stri bhaved rājñā varayanti patiṁ svayam*. Compare V. P. iii. 10. The election is the common form in all late legends, as in V. P. iv. 2. The girl is called self-given (*svayam dattā*) although she has nothing to say in the matter, as in the case of Arjunakā, Var. P. 8. 9.

‡ i. 102. 11, 14; but in 3, *kanyāḥ . . . śucrāva sahita ṛṣṇvānā vai svayam varam*. Prithā 'elected' a husband because none 'elected' her.

a husband; nothing of the great state and show of the Epic ceremony. It seems to me, therefore, that the identification of the Epic election as a later magnificent form of that method known to the law as one with a ceremony, and seemingly synonymous with it in our two earliest Epic lists, is well-nigh certain. Again, as the Epic election is common in the latest period, if assumed for a very early one it must have existed at the time when the Greek observers described India, and been continuously before the people. The Greeks know nothing of it, however; or are we to suppose that even historical sketches of the late kings (such as of Vikramāditya) would have described as historical elaborate election-scenes entirely unknown to that age?

On reviewing the Sūtra literature on the subject of wifehood, we find much the same confusion as in the Epic. Several wives are implied, without limit; again, a son born of a slave-woman is an outcast; a slave-woman is 'for pleasure, not for duty;' yet 'some' permit a slave-woman to be the wife of a priest.*

As to methods of obtaining a girl, only Gautama and Baudhāyana add the *prājāpatya* and *pāñcāca*; while Āpastamba and Vasishtha give the four usually given first (as above), with the fifth and sixth in Āpastamba, substituting *āsura* and *rākṣasa* for the *mānuṣa* and *kṣātra* of Vasishtha. These two, according to Baudhāyana, are a warrior's, and he goes on erroneously to claim *gāndharva* for the people-caste, whereas it is evident that the *gāndharva* is meant as a warrior-mode, and the *āsura* as one for the people. Sale is condemned. Āpastamba enjoining that 'the gift should be returned.' Āçvalāyana's House-rules are as late as Gautama's and Baudhāyana's laws in recognizing all eight processes of acquisition. Most of the House-rules ignore these formal distinctions.†

The *rākṣasa* or *kṣātra* seems to be the earliest method recognized for warriors: that is, simple robbery, traits of the original form being still recognizable in the completed ritual. Then came the *prājāpatya*, a civilized marriage for the same caste, alternating with the election, in Epic state and ceremonial. The *prājāpatya* form is exclusively for priests and warriors in the earlier texts, and in the later substitution of woman's *svayamvara* is probably practicable only to the latter.

Pischel, *Vedische Studien*, p. 30, would show that the *svayamvara* is mentioned in the Rig-Veda, and seeks to disprove my assertion, as stated in the abstract of this essay given

* Compare e. g. G. xxviii. 16; B. i. 8. 16. 2 ff.; ii. 1. 2. 7; Vās. i. 24-26; xviii. 18.

† G. iv. 1 ff.; Āp. ii. 5. 11. 17; 6. 13. 12; Vās. i. 30 ff.; B. i. 11. 20. 1 ff.; 21. 2; Āçv. i. 6.

in the Proceedings for October, 1886, that the *svayamvara* came from the *prājāpatya*. I was speaking then, as now, not of the simple choice of a husband by a girl, but of the Epic ceremony known as *svayamvara*; nor did I intend to take the trouble to prove that girls did not choose their husbands before the Epic era, but undertook to show the origin of the scenes such as are given on occasion of the marriage of Epic heroes—this being the technical *svayamvara*, the only one under discussion. I admit, however, that the abstract does not make clear that I was treating of this alone, though to prove that a simple choosing of a lover was known in early times would appear to be a work of supererogation. It is right to say that Feer's essay (quoted above) was the first to suggest the substitution of *prājāpatya* for *svayamvara*, although this essay was unknown to me when my paper was written. On the other hand, if Pischel means, as he seems to do, that the state *svayamvara* is proved by his citations from the Rig-Veda, I think he is wrong. He shows that Sūryā chose the Aṅvins as husbands, but not that this was a ceremony capable of comparison with the Epic *svayamvara*. In regard to the different kinds of marriage, it should be observed that the fiends', *rākṣasa*, implies a kind of exogamy; it is the theft of a girl from an outside family; while the perhaps equally old purchase (though it has been supposed by some, without much reason, that purchase is a recent rite) is the method of gaining a girl at home. Now between these stands what I call above a civilized form, the only form corresponding to a modern marriage on the whole legal list—that is, where the girl is neither raped, stolen, bought, nor given to a priest as a gift (slave) or fee, but where a lover, with the approbation of the father and with his blessing, is presented with the girl. This is the *prājāpatya*, so called, and the 'gift of the girl' here differs essentially from the honorary gift to a priest as a token of respect or as a fee. In the first two cases of priests' marriages, we have the girls' regards left out of account; she is a present, like any chattel, and the warrior is excluded from this 'rite.' But the *prājāpatya*, as Manu says, is legal for any caste; and he emphasizes this by giving several wrong opinions beside his own. Whether the *svayamvara* came from the *prājāpatya* or not, it is evident that the only method of going through with the necessary preliminaries of a wedding that corresponds in our legal list to the acquaintance and consent presupposed by the House-rules as having existed before the wedding ceremony is this method called *prājāpatya*; and, on the other hand, in our Epic election we have nothing but a peaceful exhibition, and consequent attainment of consent, preliminary also to wedding-rite. There is, excepting *prājāpatya*, no method on the list, which explains

all possible means of acquisition, to tell us how a peaceful villager makes arrangements to get married; but this term designates the ordinary vulgar method of village-life, equally old with sale. This, transferred to a brilliant romantic court, becomes the election of the Epic, in which is no real strife or remnant of rob-marriage, as Pischel thinks, but a knightly entertainment, in which the fair lady selects her knight from the many that offer themselves; or they hold a tournament and she is the prize of the winner: a court ceremonial and chivalric state characterizing the whole exhibition. Thence it is that she is sometimes called *vīryaṣulkā*; the price the lover pays is his bravery, as if a substitution of a feat of arms for a sale. In the rob-marriage of Bhīshma (as proxy), the *svayanvara* is used both of the man's electing and in this technical sense of the woman. When the word means simply that a girl elects one suitor at cost of others, it is doubtless as old as love; but when it means what it implies in the Epic descriptions, it indicates a state of society as far removed from a period when brides were won by robbery as the state of the Augustine age from the Sabine rape. It indicates further, with its dowry instead of bride-sale, a period when it was no longer a privilege to the suitor to grant him possession of the girl, but an honor to the girl's family, for which, although the knights contended for her hand, her royal father was willing to pay handsomely. Furthermore, the fact that the stories of the Epic speak of elections proves very little in regard to the antiquity of the custom, for the long stories like that of Damayanti bear no trace of great antiquity, the simplicity of the latter's style, honoring of the old gods, etc., showing high art rather than natural simplicity, wherein many incongruities indicate a later age than that pretended. Of these tales the gist is old, the form is late. The question of exogamy just raised does not seem to me to have been satisfactorily answered by Jolly in the essay quoted above. He regards the presence of the rape as a legitimate form of marriage on the legal list as proof that exogamy was regarded as a duty in older times (p. 430). I cannot assent to this. It was a custom, a privilege, but not a duty. There is no proof that exogamy was ever (as elsewhere) a required means of marriage.

The chief duty of the husband toward the wife is to keep her pleased and amused, that she may be a cheerful 'lamp in the house;' for 'without a wife the house is empty,' or is 'like a dreary forest.' The estimation of the wife may be known by a few more such remarks, which may as well be grouped together: 'a man's highest good is a wife;' 'there is no medicine equal to a wife, no friend like a wife, no refuge like a wife;' 'one's self resides in the son, one's wife is a friend given by

God; 'happy are those that have wives, the highest good; reverend are women, sacred lamps in the house; wives are the joy of a house, and should therefore be guarded well.' I have given above some platitudes of misogynistic character, and pointed out that all the glory was for woman as wife, when on the other side equal extravagance reigns. But these citations must suffice for such a theme.* The wife was to the Hindu not only flesh of his flesh, but soul of his soul. In bearing a son she bore her husband, and is therefore called *dhātṛī* and *janinī*, because she has incorporated and borne anew the husband's self, and has, therefore, become identical with it.† Matrimonial relations being freely discussed, as indicated above on *māithuna*, we find the general rule laid down that a husband must be regarded as guilty who does not please his wife in this regard. 'To leave a woman full of love is blamed; the same as one that commits abortion is he that fails to have marital connection with a love-filled wife, when secretly besought.'‡

It is no woman-worship, however, but, if properly analyzed, man-worship, that prompts this honor to woman, i. e. to wife. For it is the incarnate husband that makes the wife glorious. And if we turn to the other side, we see this more plainly. The husband is the protector; he is the woman's god. Here and hereafter he is the woman's sole hope and possession. 'In the next world a woman's sole possession is her husband; he is her chief ornament; she has no divinity equal to a husband; he is her highest divinity; there is no refuge, no joy, no protector like a husband.'§ In accord with this, most of the laud of women is transferable to the husband: 'when the husband is pleased, the divinities are pleased,' etc. (xii. 145. 3). The song

* They are from v. 33. 88; xii. 144. 5 ff.; ib. 267. 31; 343. 18; iii. 61. 29-30; 313. 72; i. 74. 42-48; iv. 2. 17; v. 38. 11 (compare M. ix. 26, *striyah śriyah*).

† Another derivation from the same passage, xii. 267. 32 ff., is *ambā aṅgānām vardhanāt*. In ib. 35 we find it stated that *mātā jānāti yad gotram mātā jānāti yasya saḥ, mātūr bharaṇamātreṇa prītiḥ snehaḥ pituḥ prajāḥ*—as if the mother alone could tell the family and father. With Ait. Br. vii. 18 ff., on *jāyā*, compare 'the wife is *jāyā* because her husband is born (*jāyate*) in her; the wife's wifeship is in this, that the husband is born of her; the wife is half of the man, the root of his heaven,' iv. 21. 40 ff.; i. 74. 37 ff.

‡ i. 97. 5; 88. 34. This demand on a man is to be honored when made by any woman. In xiii. 143. 39 the 'village custom' is opposed to the rule *ṛtukāle patnīm upaṣayet*. There are indications that on birth the man and not the woman was made impure. But by the common view both become impure: 'some say the woman becomes impure, others say the father' (B. i. 5. 11. 20-21); Vās. iv. 21; G. xiv. 15; M. v. 62. Compare in Greek antiquity Apoll. Argon. B. 1010 ff., describing the land 'where the women bear children and the men groan and tie up their heads; but the women care for them.'

§ i. 104. 30; 233. 26; iii. 68. 19; 234. 2; xii. 145. 4; 148. 7 ff.

of the daughter of the king of Videha says: 'a woman has no sacrificial rite, no religious feast or fast; the wife obtains heaven solely by obedience to her husband.'*

Sumanā is instructed by Çāṇḍili as to the conduct of good women: the wife should not wear ascetic garments of red or of bask, nor go with her head shorn; she must give pleasant words without harshness; she must carefully and continually cultivate divinities, manes, and priests; she must not act in a mischievous manner, nor stand in secret places, not talk too much; she must in all things seek to please her husband,' etc. Again we find 'the sum of a wife's duty is to be obedient and restrained; to eat what is left; attend to the fire, the household, and guests; her husband her refuge and her god; the wife must do as the husband bids, whether right or wrong; whether he be poor, sick, or on the side of the (public) enemy,' etc.†

Women have, however, the right of sharing a penance with their husbands when, as in i. 119. 41, the husband goes to the wood to do penance 'accompanied by the wife.' Disobedience is censured, but husband-murder is without expiation; punishment of the husband for lying is recommended by 'some,' but it is not said who inflicts it: probably said of the king.‡ The prohibition against witchcraft is meant in the same way as the rules above. Such power would relax the woman's dependence, and violate the rule shutting women out from the Vedic texts. As 'Vedic texts and roots' go together in these injunctions, we may perhaps imagine that woman's fondness for dealing with magical and harmful rites helped to exclude her altogether. The man that has a wife addicted to Vedic texts and roots, it is said, 'would be as afraid of her as of a snake that had got into the house.' This remark is made by Draupadī, who has just been asked why the Pāṇḍus are so fond of her: 'is it vows and penance both, or texts or magic herbs, force of wit or force of roots, or sickness caused by muttering prayers?' Draupadī

* xiii. 46. 12, followed again by Manu ix. 3 and 26. Compare 14 b = M. ix. 3 b; 15, like M. ix. 26.

† xiii. 123. 1 ff. (*kāśāyavasanaṁ valkaladhāriṇī*); xiii. 146. 46, 55 ff. Husband, wife, and children must, however, obey the parents and do the latter's bidding, whether right or wrong, iii. 214. 18 ff. In respect of eating with or after the husband, the Sūtras make a geographical distinction: Vās. xii. 31 (forbidden); B. i. 1. 2. 2 ff. (a southern custom). But when guests are present, the wife always eats after them, as Draupadī does in iii. 50. 10. Compare also i. 158. 22 ff., and ib. 3-4, 'wife, son, and daughter exist only for the man's sake,' etc. The Sūtras say that protected and pregnant women are, however, to eat first (G. v. 25; Āp. ii. 2. 4. 11-13: cf. M. iii. 114-116).

‡ ii. 64. 3. In respect of lying, 'some think a wife, a husband, a priest, and a pupil should be punished for that sin; but some (say) no (to this rule),' xiii. 44. 21-22. Compare xii. 121. 60: 'mother, father, brother, wife, and priest—these must not go unpunished by the king.'

replies as above, adding that magic is to be applied against enemies alone, not as love-philters; a good wife avoids egotism, wrath; waits on her lord, etc. (much as above), and so wins his love; she does not joke and mock; she receives him gladly with a seat, water, and kind words when he returns from the field, etc.*

Women are all guarded in the later Epic, but especially wives. To guard them is to guard one's self from jealousy; they are not to be trusted, even if good; 'even a mother of sons does not reflect on duty;' some, it is said, honor the father, some the mother; but wives should obey mother, father, and husband; 'I can find no other laws so hard as the terrible laws for women.'†

We find a general rule that women are not to be executed (e. g. iii. 206. 46, often repeated), yet the 'terrible law for women' enjoins to the latest period that an adulteress shall be slain in a much worse manner than that implied by simple *vadha* or execution. Death was inflicted as 'simple' or as 'variegated' in the Hindu code, and the latter, death by torture, was the one selected for false wives. They exposed her in a public place and had her devoured by dogs. But others prefer to have her mounted naked on a donkey and driven through the village. The Epic is freer than the Sūtras, which have in mind the regulation that women are not to be killed, and lay greater stress on the caste-order involved, and give optional punishments, such as the above of riding a donkey, or of sleeping for a year in a pit filled with cow-dung. The general Epic rule is that the seducer gets the greater penalty; the wife receives one-third the penalty imposed on one that slays a priest: a cattle-fine, or fasting with ascetic rules, being meant.‡

But without caste or *guru*-restrictions, we also find the rule that a guarded wife who has committed adultery should be eaten by dogs, while, as in the law-books, the man is tied upon an iron couch and roasted. In the case of adultery with the Guru's wife, the stress of punishment is the man's;

* iii. 233. 13 (*mantras* are for enemies, magic for them or for cattle-diseases: 'I know the bull whose urine smelling the barren cow bears calves,' iv. 10. 14, etc.). The *mūlapracāra* here inveighed against points to an extended practice: it is spoken of as the *samūcāra* of bad women (loc. cit. 7 ff.). *Pativrātātva* is the name given to the perfect fidelity of women whose husbands are gods to them, xii 360. 10, etc.

† The first quotations in iii. 12. 68 (with the pun on *jāyā*) and i. 233. 31; xiii. 104. 138. The last in iii. 205. 5, 17, 8. In ib. 206. 20-30, even a priestly guest is forsaken by a woman that she may attend to her husband, saying, 'please excuse me, seer, but my husband is my greatest divinity.'

‡ xii. 165. 42 ff. In ib. 53 twelve years' penance is allotted for priest-murder, but probably payment of cattle is meant here; *ṣeṣa*, 'the rest,' i. e. two-thirds of the fine, the seducer's penalty.

he is also roasted. He is subsequently reborn as a wolf; or, according to Manu, as a jackal.*

Death as the penalty is implied in the ordeal by fire in Sītā's case; the suspicion of adultery must be removed by entering fire, as a test of purity. In the real Epic story the wives are of so perfect a character that they do as they please, except in theory and aphorism. That social converse with men was quite open and natural has already been pointed out.

The Hesiodic and Manavīc metaphor of a wife as a field, and the whole levirate doctrine hanging on this metaphor, is well known to the Epic. The wife is a 'pure field,' and 'on the husband's field shall he raise fair offspring.' A curse falls on sonless women, and the sonless husband goes to hell. Hence levirate marriages. We find also that adopted daughters are like own daughters in the matter of marriage: the second method of raising a fictitious son, illustrated by Arjuna at Manipura.†

* Caste order is not given in our text as a factor. Compare xii. 165. 63 ff. (M. xi. 177). Compare *khādayet* (M. vii. 371), *khādayet* (G. xxiii. 15), and *ṣrabhīḥ tām ardayet saṁsthāne bahuvistare* (loc. cit.). All the original harshness is preserved in Ag. P. 226. 42, *bhartāraṁ laṅghayed yā tām ṣrabhīḥ saṅghādayet striyam*; and ib. 257. 65, the murderess is killed by drowning. For the other citations, compare xii. 165. 49 with the alternatives of M. xi. 104-105 following; also xiii. 141. 26 ff.; 104. 21. In xiii. 122. 9, we learn that *tapas* alone frees from this, old and new mixed together. In xii. 35. 20-25, the adulterer or 'robber of wives' does penance for a year. Compare also xiii. 23. 61 ff. (the *prayoktar*), and ib. 13. 3. 'murder, theft, and adultery,' the three sins of the body. All members of the Guru's family being venerable (i. 77. 7-8), it may be that an early distinction arose between simple adultery and that with the teacher's wife, especially as the youth lived with the teacher. But apparently the older general law was that an adulteress should be eaten by dogs and the man burned. The Sūtras add that the man should be castrated. Adultery with a low-caste woman, by the same authority, renders one liable only to a year's penance (G. xxiii. 32; Āp. i. 9. 27. 10-11). A distinction is also made, as in Manu, between women guarded and unguarded, but there is no Aryan limit here (i. xii. 2; Āp. ii. 10. 26. 20; M. viii. 374), except in the case of Aryan woman and slave (Āp. ii. 10. 27. 9). Outcasting is the penalty for adultery with female relatives and the Guru's wife in G. xxi. 1-8; Vās. i. 20, etc. The roasting, castrating, etc., are here limited to offense with the Guru's wife, though denied by some (G. xxiii. 8 ff., 'father only'); Vās. xx. 13; Āp. i. 9. 25. 1-2; i. 10. 28. 15-16 (Hārīta opposed). So killing by dogs is reserved here for the Aryan woman's adultery with a man of low caste (G. xxiii. 14-15; Vās. xxi. 1; M. viii. 371-2, caste implied).

† *kṣetram puṅyam*, i. 74. 52; *nīyuktah*, i. 105. 17 (the man, not the woman is here 'commissioned'); curse on barren women, xiii. 127. 13; cf. ib. 129. 1 ff. The sons of all sorts are given in the late passage xiii. 48, 49 (= M. ix. 160, x. 10, etc.); the daughter, in xiii. 49. 24; cf. ib. 12. It is said that commission is lawful at a woman's command, or with the Guru's wife. I may add the converse of this rule on the man, that the women, except at natural seasons, is for once *svatantrā*. But the levirate is forced upon her by her obedience (i. 122. 19-30). The law gives sixteen years from maturity as the time for appointing a widow (Vās. xvii. 59). The Epic legends are too well known to need detail: Pāṇdu's appointment of the gods; the case of Bhīṣma, etc. The first form is

Woman's property. The simplest rule is given thus: 'three people have no property—a slave, a son, and a woman.*' From this to the statement in the pseudo-Epic that the amount of inheritance which a woman may claim is 'three thousand' is a long step. This later view holds in brief the following position: the daughter inherits in default of sons; the son of the daughter, *dāuhitra*, may also inherit; the woman takes the gifts given at marriage as her own property; the wife, with the above limitations, is the legal owner of what her husband may leave to her; the wife may make free use of what her husband has given to her; it is 'the fruit of enjoyment'; but she may not touch her husband's property; at the wife's death, her daughter of highest caste inherits what the mother has got from her father; the king may not confiscate the property of women left unprotected.†

As it is evident that these provisions for women's property are mere legal verses incorporated into the pseudo-Epic, we must revert to the 'no-property' rule as the law of the earlier poem. In point of fact, however, we have no property of women discussed in the tale except incidentally, as affected by the disposition of the wife lost as a stake in gambling, which scene alone shows that the woman herself and her nominal possessions were her lord's, to do with as he pleased.‡

Divorce was scarcely necessary, unless we extend the meaning of the word. If a woman sinned lightly, she could be 'overmarried'—that is, superseded; but her wedding connection was not annulled. It is formally stated that one should not separate from his wife.§

to appoint the brother of the dead man; then any one of the family; then during the man's life. Finally the priest is appointed. The priest is the substitute in the later rule, reminding us of Mandeslo's experience in finding that all girls were given to the priests on arriving at maturity, and none were fit for marriage till used by the priests: rather far from the Vedic ideal, *na ceṣo anyajātam* (R. V. vii. 4. 7). The Buddhist law permits a man to marry his brother's widow, and also his living wife's sister; but to marry his dead wife's sister is unbecoming (Sparks, notes on the Buddhist law, i. 7).

* v. 33. 64; i. 82. 22; ii. 71. 1; all like M. viii. 416.

† Compare xiii. 45. 10 ff. = M. ix. 180 ff.; ib. 46. 2 = M. iii. 54; ib. 47. 23-25.; cf. M. ix. 198-200 (Manu's *nārhāra* is here *apahāra*; *nā 'pahāraṃ striyaḥ kuryuḥ*); in 23, *trisaḥasraparo dāyaḥ striyāi deyo dhanasya vāi, bhartrā tac ca dhanam dattaṃ yathārham bhoktum arhati*. Last quotation in xiii. 61. 25. For pensioned widows, see above, p. 107.

‡ Into the legal points of *strīdhana* I cannot here enter, but may refer to the essay of Jolly already quoted for the legal view, and to the Puranic rule giving six kinds of property to women, Ag. P. 255. 30; 209. 22, 27. In this work, 221. 20 ff.—23 and 223-226 treat especially of women, generally from the same point of view as the law-books, but here any woman without distinction attains heaven by entering 'her husband's fire.'

§ xii. 270. 27, *na patnīm vihareta nārīm*. The commentator (see M. ix. 46, 80-81, 83) compares Āp. ii. 5. 11. 12-14 (Vās. xiii. 49; xxi. 9-10), saying that *vihaḥajeta* is meant.

On the treatment of the wife, two tales may show the practical teaching. The second is absurd, but worth reading.

‘There came a guest to a poor man’s cottage; he was very hungry. They gave him food, and he ate it all and was hungry. Then the householder, knowing the guest-law, gave the stranger his own share. But he ate it and was hungry. Then the wife would give her share also; but the householder broke the guest-law, saying: ‘nay; thou art wearied and hungry; eat, wife, for the beasts and insects protect their wives; thou also shalt not suffer’ (xiv. 90. 38 ff.). ‘Jamadagni was a priest who used to amuse himself by shooting arrows; his wife ran after them and picked them up. Once she remained a long time. When she returned, he demanded why she had been so long collecting the arrows. She answered: the sun was very hot; my head burned, my feet were tired. Then he said, did the sun dare? I will shoot the sun. Therefore he shot at the sun, but could not hit it, on account of its speed. But he knew that at noon the sun stands still one half a wink; and he said, in that wink I shall hit it. But the sun became frightened, and said, do not shoot me, I am useful to thee; I bring the clouds and rain and fruit. Then Jamadagni decided not to shoot. But he said, show me how I may protect my wife when she runs about collecting arrows. The sun said, make a shade and hold it up; make leather covers and put them on her feet. Thus Jamadagni invented umbrellas and sandals, and his wife ran after his arrows without harm’ (xiii. 95. 2 ff.).

Another tale makes the world, depopulated by warriors, grow again by virtue of marriages between priests and women of the warrior-caste. The period was one of great felicity, as the inhabitants in this second creation were devoid of lust, and even the animals were virtuous, opposed to the unbridled sin of the earlier era. The story may be nothing but a moral on the good influence of priests.*

The Mother.—Little as we see of women in this light, we cannot but admire the attitude held by the heroes toward Prithā, or in fact any scene where the mother occurs.† She is

* i. 64. 5 ff. The story is often repeated. Compare i. 104. 5; 122. 3 ff.; xii. 228. 50 ff. In xii. 207. 40, the Kali age first sees marriage. The later condition of wifehood in the period of child-marriage is well illustrated by the tale of Dharmavyāḍha, whose daughter is given away to a young man, and is obedient to him and to his sister, till the latter says something disagreeable about her father, on which she runs home crying to her papa: Var. P. 8. The same Purāna uses *vivāhasāmagrīṃ kṛtvā* as ‘preparing for the wedding,’ Var. P. 22. 44.

† Prithā, Gāndhārī, and the other mothers of the Epic are looked upon with the greatest veneration. A passing touch shows this on the wedding-night of the Pāndus. We find the new-made bride sleeping at the feet of the heroes; their mother, before them (*purastāt*), at their head, i. 192. 9.

holy, as the father is; the children must obey her as they obey him. She is to be guarded by her son, and protected by him when her husband is dead. 'More elevated than heaven is the father; more venerable than earth, the mother.' She is again said to be the most venerable of all persons.*

Whether father or mother deserve more respect is the only question allowed on this point. Women as mothers are identified with the earth, as man is with the creator. So it is said in one place that the mother surpasses the father; in another, that the father is better than the mother.† The eldest sister is regarded as a mother, and so too the brother's wife, if one has been nursed by her. This corresponds to the fatherly position occupied by the eldest brother.‡ The mother's curse is, it is said, one for which there is no antidote, although all other curses may be averted (i. 37. 4).§

The Widow.—As seen above, the son protects his widowed mother. Among those with whom one should not engage in business are sons, brothers, a widow, and a son-in-law (v. 37. 30). The self-inmolation of Mādri, although she is described as 'resolved on heaven' (i. 126. 30), is merely that of a favorite queen. Nothing would indicate that a common woman, or a woman of priestly caste, ought to die on her husband's pyre.¶ I showed above that this custom probably originated with royalty, and was in the beginning confined to one wife.¶ The emphasis with which the ideal time of old is referred to as one 'when there were no widows' (i. 109. 11) would imply an undue number at the time of the writer. So, too, the remark that 'all men run after a widow' shows the widows as a frequent and disturbing element in society.**

* iii. 298. 35; v. 33. 74; i. 105. 32; xii. 65. 17; iii. 313. 60 (*mātā gurutarā*); i. 196. 16; xii. 108. 3 ff.; xiii. 104. 145. In the two last, the mother's will is law, although it be wrong or hard. Compare Tāitt. Up. i. 11, 'thy mother shall be to thee as a god.' Compare also G. ii. 51; Vās. xiii. 48; Āp. i. 10. 28. 9, etc.

† xii. 108. 17, 24, and xiii. 105. 15 (= M. ii. 145); compare ib. 106. 65; xii. 190. 15; 108. 25; 297. 2. The mother and father are each 'lord of their children' by i. 105. 32.

‡ xiii. 105. 19-20 (*jyesthā mātṛsamā bhaginī*); sisters without children live in their brothers' house, v. 33. 70.

§ Edward Thomas, in his essay "On the Position of Women in the East in Olden Time," not imparting much of value for India, would prove a metronymic custom of naming children. As shown above, p. 105, this is only partially true.

¶ In the drama, the suttée of a Brahman woman is expressly said to be a sin (Mṛcch., Act x). In the ordinary burial of xii. 298. 38, the Epic knows nothing of this practice; the support of widows is implied ib. 228. 40.

¶ Jolly thinks the practice began with 'the lower castes,' but adds as a suggestion 'the warrior-caste' (loc. cit., p. 448).

** 'All men run after a woman who has lost her husband, as birds run after food let fall on the ground,' i. 158. 12. It is added that she should die before or with her husband.

In harmony with its general character, the Epic both knows and ignores *Śuttee*.* We must undoubtedly make geographical distinctions, as well as those of time. Burnell says that the custom is more common in the Gujarati records than in the south, where they are 'only to be found in the Telegu-Canarèse country.' He says 'the custom has never been common in southern India' (*Palaog.*, p. 78, 120).†

In Epic law, a second husband is forbidden, whether the first husband be dead or alive.‡ The Epic story ignores such a rule. *Damayanti* as a grass-widow finally seeks refuge in a neighboring kingdom, and serves the queen's daughter, on condition that she shall not have to eat leavings or wash feet or speak to men; if a man desire to marry her, he shall be fined and then slain. In the same way *Krishnā*, in the late fourth book, becomes the companion of the wife of *Virāta* on exactly the same conditions, as a *sāirindhrī* or maid.§

Except in the case of a *sati*, women refrain from suicide, although they generally threaten to kill themselves when disappointed. They mention, as means of executing their threats, hanging, fire, water, and poison—but they always continue to live.||

Queens are as independent rulers comparable with slaves in like capacity; alluded to, but disparagingly, as rulers very undesirable: 'when a woman is the ruler, men sink like stone-boats' (above, p. 136, note). Women's kingdoms seem far off and

* See above, p. 172 ff., and i. 74. 46, *mṛtam bhartāraṁ sādhy anu-gacchati*, the general rule.

† I might add in connection with this suicide of the woman that the *Śiva* faith demands the same of the man in the Puranic period: *agnim pravācete yas tu rudralokaṁ sa gacchati*, *Vāyu P.* i. 21. 66. So *Kalanos*? The Epic condemns the *ātma-hā pumān*, male suicide, i. 179. 20; so also the law, *Āp.* i. 10. 28. 17; *Vās.* xxiii. 14 ff.; *G.* xiv. 12; *M.* v. 89; so Puranic law in general, *Ag. P.* 157. 32; drama *Utt. R.*, Act iv.; *Mṛch.*, Act i.

‡ i. 104. 34-37. The law 'from now on' is thus given by *Dīrghatamas*, with the addition that the woman's property, however rich she may be, would only cause her to become *vṛthābhogā*, or an unlawful enjoyer (commentator as *pūnyogā*). A second husband is recognized in law, e. g. *Vās.* xvii. 19. 20; *M.* ix. 175, but with disapproval. Even the virtuous *Damayanti* pretends to marry again, implying the usage.

§ iii. 65. 68; iv. 9. 32-36. A set term is appointed by the law-books for a grass-widow to wait for her husband's return, three, six, twelve, etc. years being specified: *G.* xviii. 15 ff.; *M.* ix. 76; *Vās.* xvii. 75 ff. (five years). In *Prithā's* position we have a glimpse of the extraordinary morality allowed in a woman, provided she be a childless wife. Compare the definition in i. 123. 77, *nā 'taḥ caturtham prasavam āpatsv api vadanty uta, ataḥ paraṁ svāirīṇī syād bandhakī pañcame bhavet*. The line seems drawn at four legitimate children got by other than the husband; after that the woman is reprehensible. This is given as a proverb, and not only in application to *Prithā*.

|| Compare *Damayanti* and *Uttarā* in iii. 56. 4; xiv. 69. 9. The men are as extravagant: compare iii. 7. 6, with 'the sword' added in a like vain threat.

foreign, and are grouped as such: 'the barbarians, the Yavanas, the Chinese, and those that live in a woman's kingdom' (iii. 51. 25).

Women-warriors are as unfamiliar as independent queens. Only Drupada's boy-girl upholds a legend which, if it means anything, means that a child was, though a female, brought up as a boy, and became a warrior. The figure of this warrior seems too intimately connected with many scenes to allow us to suppose that it was invented as an excuse for Arjuna. The child 'was born a girl and became a boy,' for its parents proclaimed it as a son.

* vi. 119. 34, *strībhāvāc ca cikhaṇḍīnaḥ*; vi. 107. 81, *yathā 'bhavaac ca strī-pūrvam paścāt puṁstvaṁ samāgataḥ* (compare ib. 106).

ADDITIONS.

p. 103, note, on *āhvāyaka*, as judge, xii. 76. 6, compare Muir, Ind. Ant. iii. 238.

p. 108, first line of note, compare Bühler on G. x. 17, 18.

p. 121, note *, add *pītvā kailātakam madhu* in vii. 112. 62.

p. 123, note †, compare Āp. G. S. vii. 18. 1.

p. 238, on position of knight, add vii. 156. 129, *rathamadhyasthaḥ*.

p. 240, on *varūtha*, against commentator as quoted, note *ayasmayo varūthaḥ* in vii. 43. 5, and compare the iron car of a demon, ib. 167. 39.

p. 243, on *dhvaja*, note *indrakīla* (in C., *indrajāla*), part of staff, in vi. 59. 122: compare note on p. 298.

p. 257, on horses, note Krishnā, beautiful 'as a mare of Kashmere,' in iv. 9. 11, *kāçmīrī 'va turāṅgamī*.

p. 266, on tusks of elephants, add *caturdanta iva dvipaḥ*, vii. 16. 19.

p. 271, note †, on bow-string, add i. 225. 21.

p. 302, fourth line: in R. the *yantra* are raised: in Mbh., the *çatagñi*.

p. 364, on phratrigamy: in i. 104. 10, the wife of one brother objects to union with the second only because she is enceinte.

CORRECTIONS.

- p. 58, abbreviations, for *A. P.* read always *Ag. P.*
- p. 77, lines 7 and 8 from foot, transpose the lines.
- p. 79, note, line 15, after *below* read *p. 134*.
- p. 80, last line of note, for *Pār. G. S.* read *Parāç. Smṛti*.
- p. 96, note, line 6, for *explained* read *unexplained*; lines 8, 20, 30, for pp. 76, 72, 80 read respectively pp. 78, 74, 82.
- p. 97, line 27, for *kind* read *hind*.
- p. 99, note *, the quotation is from R. vi. 51. 58.
- p. 113, note †, line 4, for p. 77 read p. 79.
- p. 116, note †, line 12, dele *41. 20*.
- p. 121, note †, line 1, for *iii. 15. 13* read *iii. 15. 14*.
- p. 123, note †, line 2: Āpastamba means here the verse of Āp. as interpreted by the commentator (see p. 122, note †, line 3); for *recognition of state gambling-tables* should have been written *recognition of royal revenue from state gambling-tables*.
- p. 126, line 21, for *legal* read *early*.
- p. 127, note †, line 12, for p. 45 read p. 83.
- p. 129, line 2, for *once* read *own*.
- p. 132, note §, line 4, for pp. 77, 87 read 79, 88; *ib.*, line 9, for *thirtieth* read *thirteenth*.
- p. 137, note †, line 2, for *G. S.* read *Smṛti*.
- p. 156, line 2, for *and falsely* read *then falsely*.
- p. 177, note †, line 15, for *above* read *about*.
- p. 199, note, line 2 from top, for *viii. (160. 43)* read *vii*.
- p. 208, note, read *āsādya; vāmam . . .*
- p. 227, note *, for *241* read *Ag. P. 241*.
- p. 238, note *, line 6, for *the yugaiudhara* read *Yugaiudhara*
- p. 240, note ¶, dele *and vi. 16. 31*.
- p. 302, line 4, for *over* read *at* (see additions).

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AMERICAN ORIENTAL SOCIETY

Proceedings at Boston, May 6th, 1885.

THE Society was called to order in the hall of the American Academy, at twenty minutes past ten o'clock on Wednesday, May 6th, by the President, Professor W. D. Whitney, of Yale College, New Haven, Conn.

The minutes of the preceding meeting were read by the Recording Secretary, Professor Toy, and approved. The general order of proceedings was announced. Reports of the retiring officers were then presented.

The accounts of the Treasurer, Mr. Van Name, were referred to Messrs. Dickerman and John A. Paine as a Committee of Audit, and found correct. They are in brief summary as follows :

RECEIPTS.

| | | |
|--------------------------------------|-----------|------------|
| Balance on hand, May 7th, 1884, | - - - - - | \$1,037.94 |
| Annual assessments (98) paid in, | - - - - - | \$490.00 |
| Sale of the Journal, | - - - - - | 13.07 |
| Interest on deposit in Savings Bank, | - - - - - | 40.84 |
| Total receipts for the year, | - - - - - | 543.91 |
| | | \$1,581.85 |

EXPENDITURES.

| | | |
|---|-----------|------------|
| Printing of Proceedings, etc., | - - - - - | \$169.98 |
| Paper, | - - - - - | 180.00 |
| Expenses of Library and Correspondence, | - - - - - | 18.90 |
| Total expenditures for the year, | - - - - - | \$368.88 |
| Balance on hand, May 6th, 1885, | - - - - - | 1,212.97 |
| | | \$1,581.85 |

The Bradley type-fund now amounts to \$994.12.

The Librarian, Mr. Van Name, reported that the Society had received from the Hon. Eugene Schuyler nine Arabic manuscripts, among them a beautifully written and illuminated manuscript of the Koran; from Mr. W. W. Rockhill a copy of the "Hundred Thousand Songs of Milaraspa," noticed in the Proceedings of the Society for October, 1884; and from the French Government the fourth volume of the Bhāgavata Purāna in the series of the "Collection Orientale." The other accessions were chiefly the regular exchanges. The total accessions amount to nine manuscripts, forty-five printed volumes, ninety-seven parts of volumes, and fifty-three pamphlets. The present number of

titles in the Society's library is, of printed books, 4,296 ; and of manuscripts, 161.

For the Committee of Publication, Professor Whitney reported that the second half of volume xi. of the Journal was all in type. It contained articles on the Cypriote inscriptions of the Cesnola collection in New York, on the American Arabic Bible, on a Syriac Lectionary, and on the Greek stamps on the handles of Rhodian *amphora*, found in Cyprus, and now in the Metropolitan Museum of New York, by Prof. Isaac H. Hall ; on the professed quotations from Manu found in the Mahābhārata, by Prof. E. W. Hopkins ; on the unaugmented verb-forms of the Rig- and Atharva-vedas, by Prof. John Avery ; on the northern barbarians in ancient China, by President W. A. P. Martin ; and on the position of the Vāitāna-sūtra in the literature of the Atharva-veda, by Prof. Bloomfield. There remained to be printed the account of books received and the revised list of members, and it was hoped that all would be finished and distributed to the members in a few weeks.

On behalf of the Directors, the Corresponding Secretary, Professor Lanman, announced that Professors Short and Hall and Dr. Ward had been appointed a Committee of Arrangements for the autumn meeting, and that the same would be held at Columbia College, New York, on Wednesday, October 28th, unless the Committee saw fit to change place or time. The Committee of Publication of the preceding year had been reappointed. The Directors proposed and recommended to the Society for election the following persons :

As Corporate Members—

- Mr. William Emmette Coleman, of San Francisco ;
- Mr. Adoniram Judson Eaton, of Plymouth, Mass. ;
- Mr. Abraham V. W. Jackson, of Columbia College, New York ;
- Dr. Henry A. Todd, of Baltimore ;
- Rev. William C. Winslow, of Boston ;
- Mr. H. B. Witton, of Hamilton, Ontario.

The gentlemen thus proposed were duly elected.

The President named as a committee to nominate officers for the ensuing year the Rev. Messrs. Dickerman and George, and Prof. Elwell. These gentlemen proposed the re-election of the retiring board of officers without any changes, and their proposal was unanimously ratified by the meeting. The names are :

President, Professor W. D. Whitney, of New Haven ;—*Vice-Presidents*, Rev. A. P. Peabody, of Cambridge ; Professor E. E. Salisbury, of New Haven ; Rev. W. H. Ward, of New York ;—*Recording Secretary*, Professor C. H. Toy, of Cambridge ;—*Corresponding Secretary*, Professor C. R. Lanman, of Cambridge ;—*Secretary of the Classical Section*, Professor W. W. Goodwin, of Cambridge ;—*Treasurer and Librarian*, Mr. Addison Van Name, of New Haven ;—*Directors*, Professor John Avery, of Brunswick, Maine ; Professor Joseph H. Thayer, of

Cambridge; Mr. A. I. Cotheal, Professor Charles Short, and Professor Isaac H. Hall, of New York; and President Daniel C. Gilman and Professor Maurice Bloomfield, of Baltimore.

The Corresponding Secretary read the list of members who had died during the year, and gave some of the facts of their lives and relations to the Society. The deceased were as follows: the Honorary Members,

Professor Richard Lepsius, of Berlin;
M. Adolphe Regnier, of Paris;

and the Corporate Members,

Mr. John W. Barrow, of New York;
Mr. Porter C. Bliss, of New York;
Rev. James T. Dickinson, of Middlefield, Conn.;
Mr. George B. Dixwell, of Boston;
Rev. Adolphus Huebsch, of New York;
Rev. William Hutchison, of Norwich, Conn.;
Prof. Joseph William Jenks, of Newtonville, Mass.;
Prof. Lewis R. Packard, of New Haven, Conn.;
Hon. Stephen Salisbury, of Worcester, Mass.;
Mr. Charles Tracy, of New York.

Professor Lepsius was one of the first four honorary members of the Society, and was elected with Champollion-Figeac, Rosellini, and Sir Gardner Wilkinson, on the fourth of October, 1843 (at the sixth meeting of the Directors), during his absence on his first archaeological journey to the Nile Valley. His great achievements in Ægyptology are a part of the history of our time. Regnier was the pupil and friend of Burnouf, and would have been his successor had he been willing to renounce his allegiance to the house of Orleans. His later years had been devoted to the publication of the collection, *Les grands écrivains de la France*; but by the fruits of his earlier labors, namely his work on Vedic grammar, and his edition, with translation and commentary, of the Rigveda Prātiçākhyā (1856-59), he has merited well of Oriental students also. He succeeded Mohl as president of the Société Asiatique.

Mr. Jenks, son of one of the original corporators of the Society, Dr. Wm. Jenks, was born in 1808, and was one of the very few survivors of the men named on its first list of members. He graduated at Amherst College in 1829, and was appointed chaplain and professor of mathematics in the United States Navy. A voyage to Egypt and the Levant quickened his already awakened interest in Oriental studies. Resigning his commission, he devoted himself to his favorite pursuits under De Sacy. On his return he spent seven years aiding his father in editing the Comprehensive Commentary to the Bible, a popular work of wide circulation and important influence. In 1852 he was made professor of languages in Urbana University. The energies of his middle life, were devoted to an intense activity in writing and publishing

teaching and lecturing, and to editorial and bibliographical labors. He had a good practical knowledge of about thirty languages, mostly Oriental. He was ever ready to impart to inquirers from his rich stores of information, and to help them by suggesting schemes of study or methods and routes of travel. His interest in the Society was active, of long standing, and constant to the end.

Mr. Barrow was born in London in 1828, his father and the mother of Dickens being brother and sister. He was educated mainly at Heidelberg, and was a pupil of Tregelles and a personal friend of Tischendorf. Besides being a fluent speaker of the modern tongues of Europe, he was a thorough scholar in Hebrew, Chaldee, and the Talmud, and was deeply versed in New Testament criticism, a subject in which he was second to none in America save Ezra Abbot. He was a man of unusual business ability, of wide, discriminating, and disinterested charity, and altogether a very symmetrical and a great character.

Mr. Bliss was born in 1838. He made journeys of exploration to Mexico and South America, and occupied positions in the United States diplomatic service. Later he followed journalism as a profession, and wrote also many important articles on biography and literature in Johnson's Cyclopaedia. He was of remarkably varied attainments, and acquired languages with great ease. The best of his works is a study of the languages of the Gran Chaco Indians, published by the Argentine Republic. While in Paraguay in 1858, he was forced to submit to torture by the tyrannical Lopez, and his career throughout was a very eventful and adventurous one.

Mr. Dickinson, after a successful but brief pastorate in Norwich, Conn., entered the foreign mission service at Singapore in 1835. Eight years were spent in preaching and teaching, and in the study of the Chinese and Malay languages; then, by reason of ill health, he returned home, and lived in quiet seclusion at Middlefield, Conn. The account of the Malay language in Appleton's Cyclopaedia is from his pen.

Mr. Dixwell was born at Boston in 1814. At an early age he entered commercial life, and went to Calcutta, where he became proficient in Hindustani. He was afterwards connected for many years with the firm of Heard & Co. in Canton and Shanghai, and was a diligent student of the Mandarin dialect, which he could speak and write both in the business of the firm and in his intercourse with the natives. On his final return home in 1873, he became much interested in the investigation of superheated steam and of means for using it safely. He also wrote upon subjects of political economy.

Rabbi Huebsch was a learned Hungarian, very proficient in Hebrew, Arabic, and Syriac, who was called to the New York Congregation Ahawath Chesed in 1866, and became a great power for good among his people. He published a Hebrew translation of part of the Peshitto version of the Old Testament with a Hebrew commentary.

Rev. Wm. Hutchison graduated at Yale College in 1854, and went out in 1858 to Constantinople to establish a mission in Turkey. The condition of his wife's health compelled him to return. In 1865 he became principal of the Norwich Free Academy, and filled this position faithfully and honorably till his death.

Professor Packard was born in 1836. He graduated at Yale College in 1856, and continued his studies at Berlin under Boeckh, Bekker, Haupt, and Kiepert. At the age of 30 he received his appointment as professor of Greek at Yale. The Transactions of the American Philological Association, of which he was president in 1881, contain a number of elaborate essays by him. In 1883 he was sent out as director of the newly founded School of Classical Studies at Athens, became very ill on the way thither, and died soon after his return home.

Hon. Stephen Salisbury, of Worcester, Mass., had been a member of our Society since 1860. He was one of the oldest members of the Massachusetts Historical Society, for forty four years a member of the American Antiquarian Society, and for thirty years its president and principal benefactor.

Mr. Tracy graduated at Yale College in 1832, and achieved a prominent position at the bar of New York City.

Reports of letters of interest to the Society were given, and some extracts were read. Dr. Toy told of the travels of Dr. Ward in Mesopotamia, of his successful explorations for sites favorable for archaeological research, of the prospect of valuable finds hereafter, and of the sickness of his companion, Dr. Sterrett, at Bagdad. It was proposed that measures be taken to set forth to the proper authorities the desirability of establishing a consulate of the United States at Bagdad; and further, that a scheme be considered for the raising by England, France, Germany, and the United States of a joint purse for excavations, Turkey to be a partner without contribution, and the antiquities to be divided among the five parties.

With reference to his correspondence with Prof. Long and Dr. Ward, Prof. Hall reported as follows :

A letter from Prof. Albert L. Long, received just as I was starting for the meeting of the Society, states that the Greek MS. noticed by me in the Proceedings of the meeting at Baltimore in October, 1884, is now his property, and he proposes to collate it thoroughly. Also, that he has found a fragment of a Syriac MS. of the Gospels, containing a portion of Luke, written in fine large Estrangela, on stout vellum. He transcribed a few lines, which appear to me to be of the Harklensian version, though I have had no opportunity to compare. It is not Peshitto, but is in the style of the Harklensian, at least. He enclosed a scrap of parchment from a like MS. One side contains portions of Matthew xvi. 18, 19, 21, in the Harklensian Syriac version. The other side seems not to come from any portion near it; whence I conclude that the scrap is from a Lectionary (Jacobite). It seems to be the only bit of Harklensian MS. in the country. The writing is of the

splendid large Estrangela that was used for several centuries in the most luxurious MSS., and contains no certain marks of date. It is not recent, however. Prof. Long also adds that his letter to Dr. Bliss, mentioned in the Proceedings, was a hasty one, written in order to induce the purchase of the MS. when there was fear of losing it, and by no means intended for publication, or as the result of anything but cursory examination.

In March last I received a package of fragments of Syriac MSS. from Rev. Dr. W. Hayes Ward, which he had obtained from a monastery in the Tûr (he does not give either the name of the monastery or its exact locality), which are rather valuable as specimens of the writing than for other reasons. I have had time to examine carefully only two of them. Of these, one is a leaf from a Lectionary, in splendid Estrangela, of uncertain age, containing portions of lessons from Matthew, Luke, and John. This leaf was $15 \times 10\frac{1}{2}$ inches in dimension, written in two columns, 23 lines to the column, letters $\frac{1}{4}$ inch high, with the long strokes reaching $\frac{1}{8}$ inch farther above and below. One side contains thequire number, 6. The rubricated title to one of the lessons is present : viz. " Lesson of the [1?]th Sunday after Easter, at vespers. From Luke." The figure I have bracketed and questioned appears to me to be 10, and the whole number 11, but the letter which represents it is almost washed away. But the doubt is small. The following lesson is Luke xvi. 19-24, middle of the verse, where the fragment ends. The version is Peshitto, with some unimportant variations from the printed text.

Another fragment is written in old Estrangela, apparently of the eighth century, parchment leaf $9\frac{1}{2} \times 6\frac{1}{2}$ inches, two columns to the page, 27 to 29 lines in a column. One column and a large part of the next are taken up with the end of a homily, whose subscription, in red, reads : " Ends the homily on the love of poverty, which is the thirty-seventh ; and it has *stichi* one thousand one hundred and seven ;" but the number for "one hundred" is defectively written, and might be merely the letters, used numerically, for 41, making the number of *stichi* 1041 + 7, if that were not rather an absurd way of writing. The expression in question is the connective *waw*, the letter *mim*, and a defective *olaf*.

Following this is one line of dots and dashes, and then the title of the Letter of King Abgar to Jesus, the letter itself, Jesus's reply, and part of a sentence of narrative, with which the fragment ends. In *Hebraica* for April last is published the text, but with some errors both of transcription and printing, and consequent errors in the translation as there given. The text of these letters is quite different from that in Phillips's *Doctrine of Addai* ; but on recourse to the Greek text as preserved in Eusebius's *Hist. Eccles.*, i. 13, I find that the matter there and that of this fragment stand related to each other as original and very close translation, with a few slight differences. The title to Abgar's letter is different in the two, that of the letter of Jesus is the same ; and other variants are found either in different MSS. of the Greek text of Eusebius or in Latin translations of it. Were it not for the fact that the Syriac includes the beginning of the sentence which follows the letter

of Jesus in Eusebius, I should say that this is original, and Eusebius a translation. Still, the letters bear no marks of translation from Greek, nor does that following sentence—which latter may have been taken by Eusebius from the same source as the letters themselves. Also, this MS. omits the matters which Eusebius inserts between the two letters. Still further, the letters in Eusebius bear most certain marks of having been translated from the Syriac, independently of any Syriac version to compare with it. E. g., the expression *κατὰ νοῦν ἐθέλην* is hardly fair Greek for ‘I concluded’; but it exactly renders the familiar Syriac **ܟܬܝܒܬܝ**, which is actually found in this MS. So *τοπάρχης* is not very common Greek, but it is exactly the Syriac **ܩܕܝܫܐ ܕܥܝܪܐܢܐ**—which likewise occurs here in the MS. (The MS. is much faded, and very hard in spots to decipher, and the Greek text enabled me to discover my errors of transcription.)

I may add here, with reference to the note in Migne, tom. xx., p. 122, note 61, about *Θιχαίνης υἱός*, *Vohaniae filius*, *Vohame*, *Euchame*, *Θιχάμων*, etc., that the Syriac has **ܩܕܝܫܐ**, which means ‘the black,’ though it may be a proper name. (Migne omits it in his text: but see the note above referred to.) It is the common Peshitto N. T. word for ‘black,’ and apparently akin to the Greek *αἰχμός* etc., though *εἰχάμα* (or *-μων*, or *-μης*) would be a natural Greek reproduction as a proper name.

However, since this work with Eusebius, I have received a note from Prof. Theodor Nöldeke (to whom I had sent a copy of the Syriac), which says that this MS. text is the same with that found in Cureton’s Ancient Syriac Documents, except some unimportant variations, and is a part of the Syriac translation of Eusebius. Cureton’s work I knew of, but could not find it, either in New York or in Cambridge.

Of the other fragments, the most remarkable is a folio (two leaves) of vellum, each leaf rather over 16 × 11½ inches in dimension. It is a service-book, written in most magnificent monumental Estrangela, lines running across the whole page, twelve lines to the page, letters ½ inch high, with long strokes extending ¼ inch farther above or below. Unfortunately it is very badly damaged by water, and most of it only decipherable with great difficulty. One ornament, just below a line wholly occupied with the words for ‘Hosanna, Hallelujah,’ is in green and yellow, of the well-known woven pattern, followed by a rubric of the **ܩܕܝܫܐ** for vespers, of a day or feast whose name is mutilated. What follows, to the end of the leaf, is mostly decipherable, but just enough is obscured to deter me from giving it the necessary time.

Next are three leaves filled with ecclesiastical rules or precepts, with numbers in the margin, rubricated places, and here and there a Greek word reproduced in Greek uncials in the margin. These are on vellum, 11½ × 7½ inches in dimension, writing in rather old Jacobite, two columns to the page, and 39 to 41 lines to the column. As a whole they are much damaged, but a large portion of them is easily legible.

Another vellum fragment is 15 inches wide, but only the top of the leaf is entire. It is much damaged, but written in a beautiful old Jacobite, nearly like the Estrangela, but more like the Beirût MS., and may date from the 9th century or a little later. It is written in three columns

to the page ; and it is as regular a piece of writing as I ever saw, showing scarcely any of the marks which distinguish manuscript from type. It is so much damaged that I have not yet tried to read it.

Then follows another vellum fragment, written in two columns to the page, each column 12 inches long and $3\frac{1}{4}$ inches wide ; but the leaf is mutilated. The top margin is 2 inches wide, and the outer margin $2\frac{1}{2}$. The inner side and the bottom are cut or torn away. It is from a service book for saints' days, with proper rubrics. Written in old Jacobite, much like the last, in larger characters, and only a little less finely executed. One of the few entire rubrics present is "Supplication of [the feast of] my Lord James (or Jacob)," with the number 2 in the margin. The column contains 32 lines.

The rest are on paper, written in Jacobite, and not very ancient. Two of them are from service-books, in which the rubrics mark the priest's part and the people's response ; the rubric being usually only the word "priest" or "people." Another pair of leaves is in roughly written Jacobite coarse script, faded and mutilated, in which a hasty look shows supplications to the "Lamb that was once offered, Lamb that was bound for the sacrifice of the Messiah, Redeemer of the world," etc. Another fragment of a leaf, in much finer and better Jacobite, and apparently older than the other paper fragments, is from a prayer-book, but not a single whole line is present.

With reference to his paper in the second half of the eleventh volume of the *Journal*, Prof. Hall would add the following note.

Since writing my article for the *Journal* on the American Arabic Bible of Drs. Eli Smith and C. V. A. Van Dyck, Mr. Benjamin E. Smith, son of Dr. Eli Smith, has received from Beirût a communication respecting matters connected with that Bible and its translation, which demands some attention. These documents were a Report of Dr. Eli Smith on the Arabic Version of the Scriptures, dated March, 1844, made to the Mission authorities or to the Mission in the field ; another Report by Dr. Smith on the Translation of the Scriptures, then in progress, dated April, 1854 ; and a document compiled by the present librarian of the Theological Seminary of the Syrian Protestant College at Beirût, and consisting largely of extracts from written accounts furnished by Dr. Van Dyck relative to the Bible translation : in which document, however, it is not possible to distinguish always between the compiler's own work and the quotations from Dr. Van Dyck. The two reports of Dr. Smith deserve to be printed entire, as they supply a picture of the state of things not elsewhere to be had.

It is clear that in the Old Testament Dr. Smith left a MS. translation of the Pentateuch, the prophetic books of Hosea, Joel, Amos, Obadiah, Jonah, Micah, Nahum, and 52 chapters of Isaiah. Likewise, he had printed 16 chapters of Matthew, besides translating the entire New Testament. It is also true that these printed chapters of Matthew were destroyed ; but it is the opinion of the librarian that all Dr. Smith's MSS. of all the work that he did on the translation of the Bible are preserved in the Mission Library, "under lock," in tin boxes, and highly

valued by the Mission. If this opinion is correct, the story that Dr. Smith's MS. translation of the New Testament was destroyed is untrue, and grew out of the fact of the destruction of the printed sheets of Matthew—which, of course, were destroyed only because of their following a Greek text different from the *ignis fatuus* of the *textus receptus*. I have written to Dr. Van Dyck to ascertain the exact state of the case, and shall doubtless be able before long to present it, correctly and clearly. If possible, the two reports of Dr. Smith, above-mentioned, and the accounts formerly written out by Dr. Van Dyck and now in the Mission library, should be printed *in extenso*. When I was in Beirût, all such matter was inaccessible, and I think it was not generally known by the missionaries that such documents were in existence. At all events, I inquired pretty faithfully, and was answered in a way such that I could interpret it only in that manner. The fifteen years or more that had intervened since the first printing of the Bible had been far more productive of myth and oblivion than was desirable.

Besides the papers above mentioned, an important pamphlet relative to the electrotyping of the Arabic Bible in New York was published by the American Bible Society in 1865, entitled "The Arabic Scriptures." Especially valuable are I. Preamble and Resolutions adopted by the Syrian Mission at the annual meeting held at Beirût, March 30, 1864; II. Letter of Dr. W. H. Thomson to the American Bible Society, dated Beirût, August 30, 1864; and III. additional statements, in each of which is a valuable historical item or two, though much of the matter is declamatory; and [IV.] estimates of cost, and formal action of the authorities of the American Bible Society. The addresses at the Bible Society Anniversaries, about that time, were eloquent and of great value in their place, but they add no facts further than the sources already mentioned.

Mr. Rockhill writes from Peking that he is renewing a suggestion formerly made by Dr. Williams that the State Department make over to the Oriental Society a lot of valuable Chinese books given by the Imperial government to the United States government, and which have lain stored and unused for years. He announced his intention of sending a parcel of Tibetan manuscripts to our library, and reported the establishment of the Peking Literary Society, which, with such members as Arendt, Baber, Bushell, Edkins, and Martin, was likely to do good work in promoting Oriental and literary studies in the Far East. •

Mr. Charles Theodore Russell, Sr., of Cambridge, said that he was confident that if the facts were only brought to the attention of the Secretary of State in the proper manner, they would receive due and prompt consideration, and that the works in question would be made accessible to scholars, in the library either of the Oriental Society or of Congress. On motion of Prof. Goodwin, it was voted, after discussion, that a committee of three, consisting of the President and two others to be appointed by him, and with power to add others to its number, be authorized to consider this matter, and take such steps as it should deem fit to bring about

the desired result. The Chair appointed Mr. Russell, and Dr. Peter Parker, of Washington.

Mr. Russell moved that the same committee be authorized to consider the question of the establishment of a consulate at Bagdad and take whatever action might seem judicious and feasible in the premises. The motion was adopted.

The miscellaneous business was finished at 12.30, and the Society proceeded to the hearing of communications. A recess was then taken from 1 to 2 p. m. It became evident later that an evening session would be necessary; and so, after discussion, it was voted that this be held in the Hall of the Academy, beginning at 7.30. Papers 12-17 were presented in the evening. The following communications were presented at the meeting :

1. On Naville's Identification of the city Pithom; by Rev. L. Dickerman, of Boston.

Mr. Dickerman explained at some length the reasons which led him to question the identity of the store-city Pithom, stated in Exodus (i. 11) to have been built by the children of Israel, with that place of which the remains have been found by the Egypt Exploration Fund expedition under Naville, at Tel-el-Maskhutah.*

The evidence of ancient authors shows that Clysma was the port on the Arabian Gulf at the eastern end of the canal (river of Ptolemy or of Trajan), and that Heroöpolis was a town on that canal, 8½ miles from Clysma. It becomes then an interesting question, where the head of the gulf was. Rosière has argued elaborately that since the beginning of the historical period it can only have been where it is now, at Suez. Lepsius denies any upheaval during historic time, on account of the remains of an ancient canal traceable for some distance north from Suez. Explorers agree that there are no evidences of a recent sea-bed in the region. If the land from Suez to Lake Timsah has been upheaved since the Exodus, it would be strange if the Wady Tumeilat was not upheaved too. But if the Wady had been ten feet lower than it is now, the canal would have flooded the whole valley with water from the Nile. If the "young man" stated by Lucian to have sailed from Clysma to India found salt water 9 miles from Tel-el-Maskhutah, there must have been an upheaval which raised a few square miles smoothly, without jar, crack, or historical record.

The Septuagint substitution of "Heroöpolis in the land of Ramses" for the "Goshen" in the Hebrew of Gen. xlvi. 28 need not have been from superior geographical knowledge of the location of a city, never large, which centuries before had ceased to exist. Rosière and others regard it as indisputable that the LXX. mistook the Hebrew verb *horoth* 'direct' for the city-name *ἡρων*. The Coptic version puts Pithom instead of Heroöpolis: whether from evidence that Pithom was the place of meeting is questionable; they simply knew that *ἡρων* was no fit translation of *horoth*. It is not to be supposed that they changed the name for the mere pleasure of using a synonym.

*The Store City of Pithom and the Route of the Exodus, by Edouard Naville, London, 1885. 4to.

Mr. Dickerman proceeded to describe the monumental evidences on which Naville bases his claim of identification. On the inscribed monuments discovered by him, he finds such expressions as these: "the good recorder of the abode of Tum;" "the head of the prophets of Tum;" "this abode was erected to Tum;" and other the like. But in all these texts, *pi-Tum* is the abode or house or sanctuary of Tum, and never the city. On all the monuments of the time of Ramses, the time of the oppression, there is no mention of a city Pithom. The name Thuku, on the contrary, is always accompanied in these inscriptions either by the hieroglyphic determinative for 'city' or by that indicating a region inhabited by foreigners. We have no right to spread the name of the temple over the city, especially as the city has a name already. No "city of Pithom" is mentioned save in the badly mutilated 10th and 13th lines of the Ptolemean tablet called by Naville the "stone of Pithom." As a parallel case, Maspero (1877) criticises the claim of Brugsch to have found at Tanis the city of Ramses, because of finding a temple there to the deified Ramses, or a Pi-rauses, and denies the right of extending the name of the sanctuary to the city, still more of identifying a Ramses-Tanis thus obtained with the Ramses of Ex. i. 11. An argument valid for the shores of Lake Menzaleh is equally good in Wady Tumeilat. Before Naville writes with so much confidence of "Heroöpolis-Pithom," he should show in some intelligible connection the words *em tima pi-tum*, or *pi-tum uui*.

The Thuku of the monuments is assumed by Naville to be the biblical Succoth. Doubtless the Egyptian *th* is sometimes transcribed by the Hebrew *samekh*, and the Egyptian *u* or *ut* equivalent to the Hebrew *oth*. But philologists—e. g. Revillout in the *Academy* of April 4th—are not enthusiastic in the identification of the two names.

Hence, while not impossible, it is also not proved, that Heroöpolis, which is now Tel-el-Maskhutah, was once the city of Pithom, also the city of Succoth, in the eighth nome of Lower Egypt.

In conclusion, Mr. Dickerman called attention to the value in other respects of the results of the exploration, which make the first work of the Fund worthy of grateful remembrance.

2. On Naville's Identification of Pithom; by Rev. Wm. C. Winslow, of Boston.

Naville's identification of Pithom with Tel-el-Maskhutah has been disputed by only one great Egyptologist, Lepsius, and that when he was in failing health and had only imperfect evidence before him. He admitted the disclosure of a store-city, but believed it to be the Raameses of Ex. i. 11—equally as important, perhaps, as Pithom (cf. *Academy*, Feb. 28, 1884).

Naville's Pithom is accepted as the Pithom of Ex. i. 11 by Brugsch, Revillout, and Pleyte, reflecting German, French, and Dutch opinion, and by Ebers, Poole, Maspero, Rawlinson, Sayce, Tomkins, and others. If the unearthed city is not Pithom, let us dig further to find what it is.

Mr. Winslow reviewed some of the principal arguments. Naville's discovery agrees with the description of Pithom as a "treasure" or

“store-city” and as a “fortified” city. The treasure was grain, and the walls were of unusual strength. The Pithom bricks also agree with the ones described in Exodus : some are made with straw, some of Nile mud without any straw, and some with fragments of reed—the “stubble” of our version (Ex. v. 12). Only a few have the royal stamp, but this is natural considering the vast number used. In the heart of the land, the bricks were not always stamped (Birch’s Wilkinson, i. 36, ii. 297). Tomkins has shown that it was uncommon to use mortar with crude brick, and yet this is just what Naville found, and it harmonizes with the tradition of Ex. i. 14.

The employment of the Israelites for constructing a fortified commissary depot on the frontier for the outgoing and returning armies of Rameses II. was a natural and advantageous one. The identification of Naville’s Pithom with Heroöpolis and Ero by inscriptions found on the spot locates Pithom at Maskhutah; and the identification of Pithom with Patumos and Heroöpolis has been made, for example, by Birch (Rawlinson, ii. 326). Naville derives *Ἡρώ* from *ar*, a term applied to the keeper of the storehouse; and Tomkins thinks that *HPOY* represents Egyptian *aru*, ‘storehouses.’ That Succoth (Thuku) was the civil name and Pithom the sacred name of the same place is a view which would agree well with Papyrus Anastasi vi., which places Pithom in the region of Succoth. Thuku was first the name of the district, and then the name of the capital thereof.

The canal of Rameses, according to Herodotus (ii. 158, ed. Wesseling), began near Bubastis and ended “at Patumos, in [on or at] the Red Sea.” Even now the marshes east of Maskhutah become lakes at certain seasons, and these, it is probable, were identical with the end of the northwestern arm of the sea.

A Latin MS. of the tenth or eleventh century, found at Arezzo (see *Academy*, March 22, 1884), tells of a lady’s pilgrimage from France to Egypt and the Holy Land, about 370 A. D. This MS. says that Pithom was on the border, and adjoined Ero or Hero, formerly Heroum, where Joseph met his father; and that the pilgrim went from Hero to Raameses, about twenty miles distant. The LXX. made Joseph meet his father at Heroönpolis (Gen. xlvi. 29). It thus appears that Heroönpolis and Ero were placed at the same locality as late as the fourth century of our era. And Pithom, Succoth, Patumos, Heroöpolis, and Ero, juxtaposed as we have seen, are supported, at least in name, by the two Latin inscriptions found by Naville *in situ*.

As for the monuments, the colossal hawk of black granite with the oval ring of Rameses II. identifies that monarch as builder of the city, since nothing found antedates him. The statue of Ankh-renp-nefer identifies that person as “the lieutenant of the district of Succoth, the good recorder of Tum,” etc. The papyri already cited say that the governor of the district was “Atennu,” and this very title Naville has found on this statue.

The statue of Aak, unearthed at Maskhutah, addresses “all the priests who go into the sacred abode of Tum, the great god of Succoth.” The image of a priest in white limestone witnesses that it was set up

“in the abode of Tum, the great living god of Succoth.” The priest is called “head of the store-house” and “official of the temple of Tum of Succoth.” A sandstone fragment was found containing “not only the cartouche of Rameses II., but also the name of the region in which Pitum was constructed, Thuku.” The sacred name Pi-Tum (‘sanctuary of Tum’), or Pa-Tum, occurs fifteen times, and the civil name Thuku or Sukut, twenty-two times on the material disclosed by Naville. Various passages of the “Stone of Pithom” bear on the question. Mention is made of Tum as “god of Succoth,” and of “the city (or town) of the temple of Tum.” Line 10 connects Pi-Tum with the canal of Ptolemy. Line 28 speaks of “the city,” because it is there needless to repeat the proper name. In line 13 occurs *Pithom-Succoth*, and both names have the sign determinative of a town—which agrees with the view that they are sacred and secular synonyms.

3. On the Holy Houses from the Hebrew Scriptures; also from the original texts of the Chronicles, Ezra, Maccabees, Septuagint, Coptic, Itala, Chaldee, Syriac, Samaritan, Talmud, and leading Rabbis; by Prof. T. O. Paine, of Elmwood, Mass.

Mr. Paine said that the work here described was announced in the Proceedings of this Society for May, 1876, and would be issued in the coming autumn by Houghton, Mifflin & Co. (40 full-page plates, folio, and 129 figures scattered through the printed text); that his investigations and making of drawings had continued to the present date. He said that, according to his restorations from the Hebrew of Kings and Ezekiel, the outer court of the temple was six hundred cubits square, and the inner court was four hundred cubits square: in both cases including the court walls. He said that in his first studies, dating from Dec. 26, 1852, and published in 1861, he had made the inner court 400 cubits square inside instead of outside of the walls.

He stated that the ark of the flood was a gradine form, similar to forms discovered in the regions of the cuneiform ark-texts; that the ark had a water-tight hull, floating three decks of cabins, the above-water portion growing smaller and smaller upwards in three stories, like the chambers of the singers, altar, etc., in Ezekiel. That the ark, temple, and house of the king were of the same height, 30 cubits, the upper portion in each case being subdivided into three stories, with windows.

That the tabernacle of Sinai was identical in design with tents discovered on the ruins of ancient Nineveh, and like the cabin or home tent of the Arabs of to-day: the vertical walls being the *mishkan*, and the sharp roof, the *ohel*; these two terms being also applied to the whole structure.

4. On the “thesis” of Mr. Whitehouse, affirming Cairo to be the Biblical Zoan and Tanis magna; by Prof. J. A. Paine, of Tarrytown, N. Y.

Mr. Paine held this thesis (laid down and defended at the last preceding meeting of the Society: see its Proceedings for Oct., 1884; Journal,

vol. xi., pp. ccxv. fg.) to be wholly invalid, every statement, consideration, and argument brought forward in its support being either misrepresentative or incorrect; and he proceeded to refute it in detail and at considerable length. A much abbreviated abstract of parts of his paper is as follows:

I. As regards monumental evidence, it is in general passed unnoticed by Mr. Whitehouse, reliance being placed instead on Christian, Jewish, and Arabic traditions, wrongly construed. This is the direct opposite of the scientific and critical method of our day, which puts the monuments above all tradition, even above the Greek and Roman histories. Now the site of Sān, with its city, is called Zoan by the monuments. This is one of the names given to it not by Egyptians only, but also by Assyrians and Hebrews. The biblical "field of Zoan" is clearly identical with the Egyptian *sokhet Z'an*, 'field or territory of Z'an,' chief place of the fourteenth nome of Lower Egypt, and thus the Sān of the present day. This *sokhet* was the 'low country' of the nome, the marshy or pasture lands or Bukolia, low in comparison with the desert on the south-east, and adapted for grazing. The biblical "*sadeh of Zoan*" has nothing to do with "the technical term of Abulfeda, Sa'īd" (Whitehouse), because Sa'īd is only a modern Arabic name for Upper Egypt on both banks of the Nile, later even than Antoninus Martyr (whence it could not well have been translated 'campus' by him), and because the two words have no etymological connection, their resemblance existing only in their transliterated forms. The origin of the name Zoan is Hebrew, as that of Zar or Zor for the site is Phœnician; the one is a sign of Israelitic occupation, as the other of Tyrian commerce. The Egyptians themselves were accustomed to style it the "City of Foreigners," and to append the determinative sign indicating the presence of strangers. The Egyptian monuments and records know nothing of any Zoan at or near Cairo.

II. As regards Christian testimony, this "thesis" misconstrues the narrative of Antoninus. The Nilometer visited by him is made to be the one "at Rhoda." But it is well known that this was first constructed in A. D. 716, a century and a half after Antoninus, being an Arabic work, needed by the inhabitants of the new city of Cairo—a fact which Mr. Whitehouse might have learned from "Maçoudi," whom he quotes in the connection. In reality, the traveller briefly sketches a journey down the Nile. The "Cataracts of the Nile" visited by him are our "first cataract," between the island Philæ and Syene or Aswān. His "Nilometer" is the ancient and celebrated one at Elephantine, over against Aswān. Dropping down the river, he comes to Esneh, at his time the double town of Latopolis and Contra-Lato. Its old Egyptian name was Seni. Apparently, the Coptic Christians preferred to explain the name Latopolis in their own way, instead of accepting the Egyptian and Greek derivation from the fish *Latus*; and so ascribed the building of Lato and Contra-Lato to the daughters of Lot. It matters little whether Antoninus records his own interpretation or the local opinion on this point: in place of *Latus* we have *Lot*. He also confuses the Babylon of Lētopolis, down the Nile, with one of these two towns on

either bank at Esneh, simply because he was a stranger, and his information was insufficient to let him distinguish between Latopolis and Lētopolis. Further down, at the boundary separating the Thebaïd and the Heptanomis, he came to the city Antinoë, or Antinoöpolis, built by the emperor Hadrian in honor of his favorite, Antinous, drowned here; its ruins still mark the spot of the suicide and of the splendid Roman town. Directly opposite, the pilgrim encountered Tanis, the Tanis of Upper Egypt. Lying under the shadow of Hermopolis magna, it was not of considerable size then. The site is still called Taneh, and the mountain on the west Gebel Taneh. Probably in ancient times it was a place of much extent and importance, as the *Pe-sennu* or *Se-sennu* frequently mentioned in Egyptian records. Antoninus journeyed through its field or territory on his way down to Memphis. Perhaps he deemed this the *campus Taneos* of the Vulgate; yet, if he did, it was because he had never visited the true Field of Tanis magna at Sān in the Delta, and, not being acquainted with the greater, attributed all he knew to the less. Then he continued his voyage on the west of the Nile down to Memphis. Of this city he has nothing to describe, save the wonderful things presented in a certain church transformed from a temple. So far as his account goes, he did not cross the Nile to Old Cairo; and as for Cairo as Tanis magna, it had not yet been founded in his day. From Memphis he journeyed ever downward and northward, by way of Athribis, to Alexandria.

III. As regards Jewish testimony, the propounder of the "thesis" misconstrues the words of Josephus. This author calls Tanis a "town-let" (*πολιχίον*) purely descriptively, on account of the reduced importance of the place in Roman times. If he had meant to contrast it with another greater Tanis, he would have called it Tanis *μικρα*. Having touched at Alexandria, and having been so strongly impressed as to characterize this city as "inferior only to Rome in magnitude," he naturally belittled other places in the region, to him unknown. But the remains of the Roman period lately excavated at Sān tell a more truthful story, showing the place to have been no mean city even in the days of Titus; and this, the best testimony, is to be believed. The site of Old Cairo was occupied successively by Lētopolis, Babylon (built by Cambyses, B. C. 525), Fostāt (Mohammedan): the site has always borne some well-known name, and not Tanis magna; and there are no ancient remains to warrant the *hypo*-thesis of such a predecessor. Sān, on the contrary, has always borne the title "magna;" the Egyptians called it "the great city of the lower land," or "the great city;" the Greeks gave it the same epithet—thus Strabo, "the Tanitic nome, and in it a city, *μεγαλη Τανις*" (xvii. 1. 20); his other Tanis, near Hermopolis, was Tanis *μικρα*; the whole land had no third; no Tanis of any sort or size ever stood at or near Cairo.

Again, the words of Benjamin of Tudela are equally misconstrued. His friends and editors acknowledge that what he has to say of Egypt is what he heard, not what he saw. From the Tigris, his description leaps to China, falls back to India, and then jumps over to Aswān up the Nile—a flight of the mind, not an actual journey. Even the gross

inaccuracy of his Egyptian distances shows that he was not recording personal observation. He makes no claim that the *Zoan* he mentions is the biblical *Zoan*; and the non-biblical *Zoan* of his legend is not difficult of explanation.

IV. As to many well-established matters, the "thesis" and history are sadly at odds. The task is here attempted of reversing events long past. That Tanis-Sân was the source of Egyptian dynasties, and the residence of Egyptian kings, is beyond controversy. When Manetho and the monuments tell us that the XVIIth, XVIIIth, XXIst, and XXIIIrd dynasties were Tanitic, they mean that these had their capital at Tanis in Sân; and the record is not open to dispute. That Ramses II. made Sân his residence from about the time of the oppression, and continued to reside there till the day of his death, is equally undeniable. That Menephtah abode here till the date of the Exodus is the burden of every indication, etc., etc. The many inscriptions and tablets, the great examples of architecture, the magnificent works of art, found among the ruins of Sân, prove the presence at the site of numerous rulers of Egypt, from the sixth to the thirtieth dynasty. That Tanis at Sân was also the great port of entry for ancient Egypt, the busy and rich commercial emporium of the country, is not a subject of question or debate. To gainsay such a fact as this is merely to impeach one's own sense.

V. The author of the "thesis" concludes with one supreme argument: "Dr. Birch has shown that Tanen was a name for Memphis B. C. 1300. Menephtah II. had entrenchments drawn to protect the city of On, the city of the god Tum, and to protect the great fortress of Tanen (i. e. Memphis)." In other words of the same author elsewhere: "Jablonski's fairness compelled him to give weight to the objection that Zoan was the Greek Tanis at San-el-Hagar, the Peluthim of the Talmud, although it is now known that Zoan was Memphis, the Tannen of the papyrus of Menephtah." "Tanis is a nominative formed from Tanin. The Talmudist followed the Tannen of the papyri." "Zoan-Tanis-Memphis was at the entrance of the Delta." The argument is this: The city Tanis (Zoan), at Cairo as a suburb of Memphis, was the Tanen of Menephtah, by identity of name.—This is an unmitigated blunder. The Tanen referred to by Menephtah was no city, but a title of the deity Ptah! The added "Memphis" in parenthesis (not in the text) is an explanatory equivalent of "fortress," not of "Tanen." The "papyrus" spoken of is really one of the walls of a court to the temple of Amon at Karnak, bearing an inscription relating to the invasion of Egypt by the Greeks under the XIXth dynasty, in the reign of Menephtah. The passage in point, according to the translation of Dr. Birch, runs thus:

"To guard Heliopolis, the city of the god Tum;
To protect Memphis, the fortress of Tanen."

Brugsch's rendering is as follows:

"[He caused entrenchments to be thrown up
In order to protect the city On, the city of the sun-god Tum,
And in order to shelter the great fortress of Tanen (i. e. Memphis)."

Such parallelism of expression is very common: as On or Heliopolis is the city of the god Tum, so the great fortress or Memphis belongs to the god Tanen. Tanen is the most frequent epithet or alternative appellation of Ptah, and carries the sense of 'shaper, creator, father of beginnings;' even the compound title Ptah-Tanen occasionally appears. The great fortress referred to is the fortification for which Memphis was famous, and which is often put by synecdoche for the city itself: thus, the Great Bulwark, the Strong Seat, the City of the Wall, the Town of the White Wall (R. P. ii. 94; viii. 10, 12, 142); it is also called by Herodotus the Castle, and the White Castle (iii. 13, 19).

5. On the Canal of Joseph and other local Allusions to Middle Egypt in Genesis xlix. ; by Mr. F. C. Whitehouse, of New York City: presented by the Corresponding Secretary.

Relying upon Arabic and other tradition, Mr. Whitehouse presented the following paraphrase of verses 22-27 in the "Blessing of Jacob:"

"Joseph is, as the canal which bears his name, a fruitful branch of the Nile, even a fruitful branch by a lake, whose branches run over the wall of the Libyan Desert. The archers, even as the hot arrows of the sun, have sorely grieved him, and shot at him, and hated him. But his bow, curving in the vast sweep of its waters, abode in strength, and the arms of his hands were made strong by the hands of the mighty God of Jacob (from thence is the shepherd, the stone of Israel).* Even by the God of thy father, who shall help thee; and by the Almighty who shall bless thee with blessings of heaven above, blessings of the deep sea that lieth under, blessings of the breast, and of the womb. The blessings of thy father have prevailed above the blessings of my progenitors into the utmost western bound of the everlasting hills of the desert: they shall be on the head of Joseph, and on the crown of him that was separate from his brethren."

Professor Toy observed that there is no reason to suppose that this Genesis passage refers to anything but an Israelitish tribe. The Hebrew word rendered "branch" is never used of a stream of water.

6. On Superstitious Customs connected with Sneezing; by Mr. Henry C. Warren, of Boston.

The varying superstitious customs and beliefs respecting sneezing are rehearsed at considerable length, and with many references to the literature of the subject, by Tylor, in his *Primitive Culture*, i., pp. 88-94. His observations extend to the Zulus, Polynesians, and Moslems, as well as to the Indo-Europeans; but it is only with the latter that I at present directly concern myself. The exclamations, "God bless you," "Gott hilf," "Felicità," are current even at the present day. The question of this paper is, Why is it commonly the custom for the bystander rather than for the sneezer to repeat the formula?

With reference to this question, I would call attention to a Buddhist

*An explanatory gloss, equivalent to "from this Fayoum-Avaris went out the Hyk-Sos, who befriended Israel." See Proc. of Soc. of Biblical Archaeology.

“birth-story,” which, if it helps us to no conclusive answer, is at any rate interesting as showing the antiquity of these superstitions. This “birth-story” is one of the many tales which Buddha told of his fortunes in previous existences, and is found in Fausböll's *Jātaka*, ii. 15 ff. Fausböll has also translated the story proper, but not the introductory incident. I give the gist of it in an abridged translation from the original Pāli. The *Bodhisatta*, or one who was to become Buddha in a subsequent existence, may be rendered by ‘Future Buddha.’

“One day, as the teacher [Buddha] was seated preaching in the Royal Monastery, in the midst of the four classes of his disciples, he sneezed. The monks raised a shout and made a great uproar, saying, ‘May the Blessed Lord live! May the Buddha live!’ The noise was such that it put an end to the sermon. Said the Blessed One to the monks, ‘Mendicants, in the case of a sneeze does living or dying depend on the saying of “Live”?’ ‘No, indeed, Lord.’ ‘Mendicants, you shall not say “Live” on hearing a sneeze. Whoever shall say it, is guilty of a sin requiring confession and absolution.’

“Now it came to pass that the common people, when they heard the monks sneeze, used to say, ‘Live, reverend sirs.’ The monks had the bad manners not to reply. The people were offended, saying, ‘How is it possible for the priestly followers of the Çākya prince not to reply when “Live, reverend sirs,” is said to them?’ The matter was announced to the Blessed One. Said he, ‘Mendicants, one could not wish for more superstitious people than are the unconverted. I consent, mendicants, that if any one of you is saluted with “Live, reverend sir,” he shall reply, “Long live.”’

“The monks then questioned the Blessed One. ‘Lord, when did the custom of saying “Live” and replying “Live” arise?’ Said the Teacher, ‘Mendicants, the custom of saying “Live” and replying “Live” arose in ancient times.’ He then related a story.”

“The Future Buddha and his father Gagga attempted to pass the night in a house haunted by a *yakkha* or ogre. This *yakkha* had leave to eat all persons who entered except such as said ‘Live’ on hearing a sneeze, and such as said ‘Live thou also’ on hearing a ‘Live.’ He lived on a pillar. Thinking, ‘I will make Gagga sneeze,’ he sent forth small dust. The dust entered Gagga's nostrils. He sneezed. His son, the Future Buddha, did not say ‘Live thou’; so the *yakkha* came down to eat him. The Future Buddha thought, ‘This must be the one who made my father sneeze, the *yakkha* who eats every one that neglects to say “Live” on hearing a sneeze.’ So he addressed the first stanza to his father :

‘O Gagga, live a hundred years,
And twenty others added on :
Let no *pisācas** eat me up ;
Live thou a hundred autumns yet.’

* Observe that the Future Buddha says *pisācas* and not *yakkhas*. The *pisācas*, or goblins, were a race of supernatural beings apparently lower in the scale of existences than were the *yakkhas* (Skt. *yakṣa*) or ogres.

The yakkha, having heard the Future Buddha's words, said to himself, 'I cannot eat this man, because he has said "Live;" but his father I will eat.' So saying, he went to the presence of Gagga, who, seeing him approach, thought, 'This must be the yakkha that eats all those who do not say "Live thou also." I will say so.' So Gagga addresséd the second stanza to his son:

'Live also thou a hundred years,
And twenty others added on ;
Let the pisācas poison eat ;
Live thou a hundred autūms yet.'

The yakkha, on hearing these words, returned, saying thus to himself : 'These two cannot be eaten by me.'

Then the Future Buddha reprimands, tames, and converts the yakkha, and the story is brought to a close.

At first thought the English "God bless you" might seem to be uttered from purely altruistic motives by the bystander on behalf of his friend the sneezer. But, on the other hand, there are modern Hindu practices which indicate that the bystander (as contrasted with the man whose sneezing he hears) is alarmed for himself at the unfavorable omen, and acts on his own behalf accordingly. Thus a Hindu will desist from a journey, or an important piece of business, if he hears some one sneeze. (See *Panjab Notes and Queries*, June, 1884, p. 101, and Feb., 1885, p. 79.)

Now the chaffy Pāli story seems to contain a sound grain of suggestion, which may help to reconcile the two apparently opposing superstitions last noticed. I assume with Herbert Spencer (*Principles of Sociology*, i. 244-5) that involuntary actions like sneezing and yawning are often "regarded as showing that some intruder has made the body do what its owner did not intend it to do." As, then, the sneezer is possessed by an uncanny spirit, his own spirit being perhaps driven out, the superstition considers him helpless. This explains why he neither prays nor deprecates the spirit on his own account at first. The bystander is afraid, because he is in the presence of a malign influence. For this reason he tries to come to the rescue of the sneezer's natural self with some phrase like "God bless you" or "*Jīva*," which, although worded as if solely in behalf of the sneezer, is really motivated by the bystander's alarm for himself before the threatening evil spirit. The sneezer, then, with some such phrase as "Thanks, the same to you," or "*Tvam pi jīva*," recovers his power over his natural self, and accordingly says in his own name to the evil one, "Begone from us both."

Thus, in our Jātaka, it is not the sneezer Gagga, but the bystander, the Future Buddha, that speaks first. He says "Live" or "God bless you;" and, from the third line of the stanza, his motive seems to be, "Because otherwise I fear that the pisācas that have hold of you will eat me." Gagga's answer, "Live also thou," seems hardly more than what the Germans reply in the like case: namely, "Danke." By this formula he shows that he is again in his right mind, and his friend then no longer fears that the pisācas will attack him next, for they are

already banned. Then Gagga, by his recommendation that the pisācas eat poison, so to say, snaps his fingers in their face.*

References to these superstitions are not infrequent in Sanskrit. Böhtlingk and Roth (s. v. *ḷṣu*) cite other allusions, from Cāurapācīcārikā 11, MBh. xiii. 7584, etc. There is also a story in the Kathā-Sarit-Sāgara, chap. 28, in which a sneezing superstition plays a rôle. See Tawney's Translation, i. 253.

For a man that has sneezed or yawned, Aṅgalāyana (Gṛhya-sūtra iii. 6. 7) prescribes the repetition of a pious text. Here the sneezer feels conscious that he is not wholly overcome by the evil power that caused the sneeze, and so does something himself to drive it off.

Apparent exceptional cases, finally, in which people seem to regard sneezing as a lucky omen, may be accounted for on the supposition that they came to misunderstand the true significance of the "God bless you"—namely, as a weapon against an evil influence—and imagined it to be a congratulation.

Prof. Whitney remarked that the earliest mention known to him in Hindu literature of superstitious practices in connection with sneezing is found in the Jāminiya-Brāhmaṇa, at ii. 155, and reads as follows : *taṁ evaṁ santāṁ devā abhito nisedur : ayaṁ na eko vīro 'bhūt sa itthaṁ nyagāt kva bhavāma iti : sa ho 'rāca na vāi vīdma yo (mss. ya) 'bhāvam iti kim iti cukṣūṣāmi vā ity : atha ha sma tataḥ purā kṣutvāi 'va mriyante : taṁ ho 'cuḥ kṣuḥi jīve 'ti trā vakṣyāma iti sa ha cukṣāva taṁ ha jīve 'ty ūcus sa jīva : tasmād idam apy etarhi cukṣurāusam āhur jīve 'ti ;* 'Him, being in this plight, the gods sat down about : "he hath been our one hero ; he hath thus sung (?) ; where are we?" He said : "we do not know what I have been :—" why?"—"I want to sneeze." Now up to that time, people used to die when they sneezed. They said to him : "sneeze ; we will say 'live' to thee." So he sneezed ; they said "live" to him ; he lived. Therefore also at the present time they say "live" to one who has sneezed.' This passage certainly supports the ordinary view, that it is the sneezer himself who is regarded as in danger, and whom his friends save by a good wish or blessing. The altruistic character of the proceeding is sufficiently taken away by the implied understanding that he will do the same for them in a similar case : it is a social exchange of kind offices.

Professor Hall observed that sneezing was a good omen among the Greeks and Romans. So even in the Odyssey, xvii. 545. The Loves sneeze at a lover as a sign that he is to be happy, in Theocritus, vii. 96 ; compare Catullus, xlv. 18 ; and also Theocritus, xviii. 16, the epithalamium of Helen.

7. On some Manuscripts of Ptolemy's Star-catalogues ; by Prof. Isaac H. Hall, of New York City.

Professor Hall exhibited eleven photographs of manuscripts of Ptolemy's Star-catalogues, brought by Dr. C. H. F. Peters, of the Litchfield

* For the tone of the Pāli expression *vīsaṁ piṣācā khādantu*, compare the words of the tortoise to the cowhords, *yuṣṁābhār bhosma bhakṣitarāyaṇa*, Hitop., p. 112. 6.

Observatory of Hamilton College, some two years ago, from Italian libraries, whither he had gone for the purpose of collating, and establishing the text as accurately as possible for the use of astronomers. Nine of these were in the original Greek, in cursive script of various ages, one a Latin translation by Gherardo Cremonese, and the remaining one an Arabic translation. As Dr. Peters himself gave a long explanation of the MSS., and of his work on Ptolemy's Catalogue in general, at the meeting of the National Academy in October, 1884; and as he published in the proceedings of the Institute of Venice, some two years ago, a brief account of the material extant for a critical edition of the star-catalogue, with particular remarks on the special value of the Arabic translation, it is hardly worth while to go further into particulars here.

The specimens were the following: Greek Codices: Codex Venetus Græc. cccii., fol. 390 *b*; ccciii., fol. 142; cccx., fol. 90; cccxi., fol. 201; cccxii., fol. 104 (or 204, or 304—obscure); cccxiii., fol. 218; Codex Laurentianus Græc. i., fol. 102; xlvii., fol. 133 *b*; xlviii., fol. 97 *b*; Cod. Laurent. Latin. xlv., fol. ?; Cod. Laurent. Arab. clvi., fol. 77 *b*.

8. The Greek Stamps on the handles of Rhodian Amphoræ, found in Cyprus, and now in the Metropolitan Museum of New York; by Prof. I. H. Hall.

Gen. di Cesnola found in Cyprus some thirty complete amphoræ, all with stamps on the handles, besides a number of handles that were broken off. The vessels were chiefly used as packing casks. Their height is about two feet and a half, and their largest diameter a foot or more. They would not hold liquids unless coated on the inside with pitch; remains of figs and other fruit have been found in them, and sometimes salt. The stamps on the handles vary somewhat in their purport. Sometimes they have the eponym, the name of the (Doric) month, the name of the manufacturer or owner, and an emblem; but they vary so much in the character of their legends that each amphora or handle must be taken by itself. The stamps on the New York specimens are either circular or rectangular; but others occur of oval shape. They are sometimes quite easy to read, but more often rather difficult.

The paper presented in detail the description of the stamps, and gave their inscriptions, with explanations. It is printed in full in the Society's Journal, vol. xi. (pp. 389-398).

9. On a Greek Inscription from Tartûs or Tartosa in Syria; by Prof. I. H. Hall.

This inscription is one found on a marble tablet in the Serai at Tartûs by Mr. J. Loytved, Danish consul at Beirût, and general business man of the British schools under superintendence of Mrs. Mott. The squeeze was sent by Rev. H. H. Jessup of Beirût to Rev. R. D. Hitchcock, president of Union Theological Seminary, who passed it over to Prof. Francis Brown, who passed it over to me. Unfortunately a large portion of the inscription has perished; all that remains being the right hand side of the slab on which it was cut. How much is gone it is impossible to say; but probably from one-third to one-half of the whole is missing. The

ends of the lines are all there, except of the last. How many more lines there were originally, below, it is also impossible to say. Nor is it possible to fill out the lines and get a connected reading of the whole.

The squeeze is a direct cast, showing in relief (only) the letters that are intaglio on the stone; but it is a fine cast, and shows a beautiful piece of lettering. The length of the fragmentary lines, excluding the last, which is but a scrap, varies from about eleven to twenty inches. The letters are an inch high, very regular and beautiful, and of the late Byzantine type. The *alpha* has the V-shaped cross-bar, the *sigma* has the rectangular C-form, the *omega* is like an inverted *mu*, the *xi* has the uncial form, as does also the *delta*, and in some measure (except the cross-bar) the *alpha*. The *omicron* is pointed at the top. Ligatures occur frequently. For *ov* occurs the common ligature; $\eta\varsigma$, $\omega\nu$, $\nu\omega\nu$, $\mu\eta$, $\nu\eta\gamma$, $\nu\eta\varsigma$, $\mu\epsilon$, and $\eta\mu\epsilon$ occur as ligatures, made so by using a perpendicular stroke as common to two letters.

The inscription is an ecclesiastical one. Above are two heads, one of a male, the other of a female, saint. If these two heads are all the upper ornament, then about one-third of the inscription is gone. If there were three heads originally, then about half of it is gone. The faces proper of these heads are each about two and a half inches high by two inches wide; but the aureole or other ornament makes them each about five inches in diameter. Hanging at the neck of the woman is what appears to be a bit of a chain; at the neck of the man is a square ornament with a little cross.

The space between the lines of the inscription varies from three-quarters to half an inch.

The following is the inscription; marking those letters which are united in ligatures by a horizontal line above them.

1. . . . ΟΥΖΑΧΑΡΙΩΤΤΑΙΣ ΠΡΟΣΚΥΝΗΤΑΙΣ
2. . . . ΕΩΣΤΗΜΕΝΗΤΙΜΗΠΡΟΣΕΝΗΝΗΚΤΑΙ
3. . . . ΤΟΥΑΓΙΟΥ ΠΡΟΦΗΤΟΥ ΖΑΧΑΡΙΟΥ ΗΡΟΝΟΙΑ
4. . . . ΗΙΣΚΟΠΟΥ ΤΟΥΤΟ ΔΕΤΟΥΛΑΜΠΡΟ
5. . . . ΤΩΝΙΕΡΩΝΚΑΝΟΝΩΝΔΥΝΑΜΙΝ
6. . . . Η(or I)ΣΠΡΟΣΦΕΥΓΟΝΤΑΣ ΠΑΡΑΜΗΔΕΝΟΣ
7. . . . ΣΤΗΣΟΦΕΙΛΟΜΕΝΗΣ ΤΟΙΣ ΕΥΚΤΗ
8. . . . Ν(or I)ΩΝΠΟΙΝΗΣΩΦΡΟΝΙΖΟΜΕΝΩΝΤΗ
9. . . . ΧΕΙΝΔΕΚΑΙΠΑΝΗΓΥΡΙΝΗΡΟΣ
10. . . . ΗΡΙΟΥΟΙΚΟΥΗΕΝΤΕΦΕΦΕΞ ΗΣ
11. . . . ΤΤ* I (or N, or H?) ΗΜΕΡΑ . . .

In the last line there are marks as if an A might have preceded the Υ. The last A is assumed, though only its angular top is visible, which can scarcely have belonged to a Δ or Α. The breaks in this last line are provoking, because they render it difficult to determine whether *iota* adscript was used or not: a matter that becomes important in the case of ΠΟΙΝΗ in line 8. In the last line there is also visible at the end the top of a perpendicular stroke, of which nothing can be made. It is uncertain whether the last line is to be read (supplied) as ΑΥΤΗ ΗΜΕΡΑ or ΑΥΤΗ ΗΜΕΡΑΙ (of course ΤΑΥΤΗ is to be thought of as a possibility for the first word of the two).

The fracture of the left side of the stone is irregular; line 2 beginning one letter farther to the left than line 1, line 3 beginning one letter still farther to the left, line 4 even with line 2, line 5 even with line 1; and then the fracture slopes pretty regularly to the right, till the first letter of line 11 comes directly under the seventh letter of line 1. The ends of the lines are nearly in the same perpendicular line, except lines 1 and 2, which end about an inch and a half sooner than the rest; and line 11, which is a mere fragment.

It seems pretty plain that the general purport of the inscription has reference to the penance by which the worshipers at the shrine or church of the holy prophet Zacharias were chastened, in accordance with the provision made by the bishop, by virtue of the power of the sacred canons. When the substantial offering was brought, and the worshipers took refuge in no excuse, and paid the debt, and were chastened by the penance, they were to attend the solemn assembly, or procession, to the house of worship, five times in succession on the same day.

Of the matters that seem probable, in attempting to supply the missing parts of the inscription, it seems that *τοῦ ἁγίου προφήτ-* may be pretty certainly supplied at the beginning of line 1, *ί-* at beginning and *-τάτων* in the word at end of line 4, *-ρίους* in the word at end of line 7, *εἰκετ-* at beginning of line 10. Beyond that nothing seems easily fixed.

10. A brief Account of some recent Assyriological Publications; by Prof. D. G. Lyon, of Cambridge, Mass.

Without attempting to make a complete report, Prof. Lyon described some of the more important recent undertakings. The *Zeitschrift für Keilschriftforschung*, under editorial charge of Drs. Bezold and Hommel, has completed its first volume (Leipzig, Otto Schulze, 1884), and has issued parts 1 and 2 of vol. ii. Vol. i. contains articles in German, French, English, and Latin, furnished by the editors and Schrader, Sayce, Guyard, Oppert, Strassmaier, Dvořák, Amiaud, Jensen, Pinches, Halévy, and Nestle. Some of these articles have been published separately. The one by Dr. P. Jensen in vol. i., no. 4, and vol. ii., no. 1, makes a neat and valuable brochure of 91 pages, entitled *De Incantamentorum Sumerico-Assyriorum Seriei quae dicitur "Šurbu" Tabula Sexta* (Monachii, 1885). Herr Heinrich Zimmern issues as doctor-dissertation *Babylonische Busspsalmen umschrieben, übersetzt und erklärt* (Leipzig, Breitkopf and Härtel, 1885). This essay will soon appear in enlarged form as vol. vi. of the *Assyriologische Bibliothek* (Leipzig, J. C. Hinrichs), and gives promise of being one of the most interesting of that series.

Dr. J. N. Strassmaier has issued the fifth part of his *Alphabetisches Verzeichniss der Assyrischen und Akkadischen Wörter*, etc., pp. 769-960, and one part more will complete the work (Leipzig, J. C. Hinrichs). In the absence of a lexicon, that by Norris being incomplete, antiquated, and out of print, Dr. Strassmaier's *Verzeichniss* has special value as a concordance. The Assyrian material in the *Calver Bibellesikon* or *Biblisches Handwörterbuch* has been furnished by Prof. Friedrich Delitzsch, and adds very greatly to the value of this work (pp. 1036, Calv

and Stuttgart, 1885). Students of Assyriology are still waiting for Prof. Delitzsch's long-promised Assyrian lexicon, but biblical students have from his pen a glossary of the Assyrian words used by Ezekiel, in Baer and Delitzsch's edition of this prophet (Leipzig, 1884).

Dr. Eduard Meyer has published vol. i. of his *Geschichte des Alterthums*, about 175 pages of which are devoted to Assyrian and Babylonian history (Stuttgart, Cotta, 1884). The publication of part 1 of Prof. Paul Haupt's *Babylonisches Nimrodepos* places in the hands of students the original of the larger portion of the great poem commonly known as the Izdubar Epic (Leipzig, J. C. Hinrichs, 1884). A little older than the above works is Dr. Hermann Hilprecht's *Freibrief Nebukadnezar's I.* (Leipzig, 1883), a doctor-dissertation, which the enthusiastic young author intended to develop into larger form.

In England, the most important recent publication is the second half of vol. v. of the *Cuneiform Inscriptions of Western Asia*, plates 36-70 (London, 1884), by Sir Henry Rawlinson and Mr. T. G. Pinches. The grammatical papers and discussions of texts and history given by Mr. Pinches in the *Proceedings of the Society of Biblical Archaeology* are always valuable. His colleague in the British Museum, Mr. E. A. Budge, is joint author of some of the papers, and has also given as vol. v. of the "By-Paths of Bible Knowledge" a short account of *Babylonian Life and History* (London, The Religious Tract Society, 1884).

The paper read by M. Josef Halévy before the sixth international Oriental Congress, at Leiden in 1883, has appeared, under the title *Aperçu Grammatical de l'Allographie Assyro-Babylonienne* (Leiden, E. J. Brill, 1884). M. Halévy denies the existence of a Sumero-Akkadian language, and contends that the many cuneiform texts which are generally believed to contain such a language are only a secret writing of the priests. The *aperçu* is an attempt to explain this hieratic writing in its word-formation and its grammar. This is one of the greatest questions connected with cuneiform study, and M. Halévy, standing for a long time alone, won allies in the lamented M. Stanislas Guyard and more recently in M. Henri Pognon. The posthumous second part of vol. ii. of M. François Lenormant's *Les Origines de l'Histoire* appeared in Paris last year.

In America, Prof. Paul Haupt has contributed to this year's January number of *Hebraica* (Morgan Park, Ill., The American Publication Society of Hebrew) a valuable paper on Assyrian vowels. He has also given in the April number of the same journal a minute commentary on the confinement at Nineveh of a Kedarene prince, related in the annals of Assurbanipal. *Assyriology: Its use and abuse in Old Testament Study* is the title of an entertaining and scholarly address by Prof. Francis Brown (New York, Charles Scribner's Sons, 1885).

Professor Lyon also announced as in press a work of his own entitled *Assyrian Manual*, an aid to persons who wish to begin, with or without a teacher, the study of the Assyrian language. The manual will contain Assyrian texts, partly in cuneiform character, but mostly transliterated, and also paradigms, notes, glossary, and lists of cuneiform signs.

11. On the Garo Language ; by Prof. John Avery, of Brunswick, Maine.

The Garos* are a rude aboriginal tribe occupying the western extremity of the range of hills which forms the water-parting between the valleys of the Brahmaputra and Surma in the British-Indian province of Assam. Their neighbors on the east are the Khasis—likewise an aboriginal tribe—while on the other three sides they are bounded by a population consisting mainly of Assamese and Bengalis. They number about 109,000, and cover an area of 3653 square miles.

The Garos first became known to Europeans near the end of the last century, in connection with the newly acquired administration of eastern Bengal by the East-India Company. The acquaintance, however, was chiefly with parties who came down to the plains for trade or to plunder defenseless villages. It is only since 1866, when a British officer was detailed to reside in their hills, that their land has been surveyed and their characteristics have been accurately observed.

The Garo language is one of a numerous and loosely affiliated group of tongues, known as Tibeto-Burman ; and its nearest kindred are the Pani-koch, the Kachari, the Deori-Chutia, and the Tipura. It was first reduced to writing by American Baptist missionaries less than a score of years ago, and for this purpose the Bengali characters were used. In 1873, Rev. T. J. Keith published a small Garo and Bengali-English dictionary, and in the following year a grammar of 75 pages. These works are valuable, but abound in minor defects. They, together with a Garo version of a portion of the Scriptures, constitute nearly all our means for obtaining an insight into the structure of the language, without a visit to the hills themselves.

Twenty-eight characters were borrowed from the Bengali to represent Garosounds. The number, however, is not sufficient to indicate all minor differences of pronunciation. The letters are : vowels, *a, ā, i, u, e, o, anusāra, visarga* ; consonants, *k, kh, g ; c, ch, j ; l, th, d, n ; p, ph, b or v, m ; y, r, l ; sh, s ; h*. These are sounded for the most part as in *devanāgarī*, but *a* is heard as in *fall* and *th* as in *thus*. The absence of the sonant aspirates is noteworthy, and is a feature shared with Tibetan and other members of the group. The letters *k, ch, t, p, y, l* do not occur as initial in true Garo words. The *visarga* is not true to name, but denotes a sudden cessation of utterance.

Garo substantives have no grammatical gender, and sex is indicated by special words—as *mande*, 'man,' *mccik*, 'woman'—in the case of human beings, and by added words for 'male' and 'female' in case of the lower animals. All other objects are genderless. Plurality is denoted by an added syllable, which is usually *rāng*. This is commonly omitted when numeral words accompany the substantive. A singular feature of the language is that when a numeral occurs with a

* Since the meeting, I learn from a printed extract of a letter to Dr. Rost from Shillong, that the local government of Assam is doing much for the investigation of the native languages. A Tipura vocabulary is printed, and grammars of the Garo and Miri are soon to appear.

substantive a generic particle is prefixed to the former, varying according to the nature of the latter: thus, for human beings *shāk* must be used, as *bishā shāk gni*, 'two children;' but *mačchā mang gni*, 'two tigers.' So for round objects one uses *rang*; for money, *khāp*, *phel*, or *gang*; for boxes, tables, and the like, *ge*—and so on.

Garó nouns have declension by suffixes, but these are loosely attached to the base and may be omitted whenever the case is clear from the context. They cause no euphonic change in the base and are the same for both numbers. In the plural they follow the plural sign. The declension of *shang*, 'village,' will illustrate the whole subject.

| | | | |
|-------|-------|--|------------------------|
| SING. | Nom. | <i>shang</i> | 'a village.' |
| | Acc. | <i>shangkho</i> | 'a village.' |
| | Inst. | <i>shangei</i> | 'with a village.' |
| | Dat. | <i>shangnā</i> | 'to a village.' |
| | Abl. | { <i>shangoni</i> }
{ <i>shangonikho</i> } | 'from a village.' |
| | Gen. | <i>shangni</i> | 'of a village.' |
| | Loc. | { <i>shango</i> }
{ <i>shangonā</i> }
{ <i>shangei</i> or <i>-cinā</i> } | 'in a village.' |
| | Voc. | <i>O shang</i> | 'O village.' |
| PLU. | Nom. | <i>shangrāng</i> | 'villages.' |
| | Acc. | <i>shangrāngkho</i> | 'villages.' etc . etc. |

The general plan of this declension accords with that of the Dravidian tongues of Southern India and of the Scythian family in general. All declinable Garó words have a uniform declension. If two such words stand in the same case, the last only takes the suffixes. Since no stem-forming suffixes or internal vowel-changes are required in forming Garó substantives, any part of speech can be turned into one, provided the sense admits, by simply appending the proper terminations. Compound nouns are formed with great readiness and from a variety of elements.

Adjectives are declined or not according to the rule of position just given. They show no agreement in gender. They have no comparison in the Indo-European sense; but to express the thought that one object possesses a quality in a less degree than another, the first word is put in the dative, followed by the particle *bāte*, 'than,' and the second noun follows with the adjective, to which is appended a suffix *bātā* or *beā*. Thus, *uā shangnā bāte iā shang cambātā*, 'than that village this village is small.' To express the superlative, one has only to use the word signifying 'all,' and say 'than all villages this village is small.' Adjectives are readily turned into substantives or verbs.

The Garó has the usual complement of pronouns, excepting the possessive and the relative. The former is supplied by the genitive of the personal pronoun, and for the latter a participle or a verbal noun is commonly used. The Bengali relative *je* is sometimes borrowed, but other constructions are preferred. All the pronouns, except that of the first person, form the plural and are declined just like nouns. The first

person, *āngā*, forms its plural by change of base, and has a twofold stem, the one being inclusive and the other exclusive. Thus *ācingā* is 'we' including the person addressed, and *cingā* is 'we' excluding him.

The structure of the verb is in general very simple, but not incapable of some nice discrimination of thought. It has but one voice, the active; and to express passivity, the verb in the causative form is used impersonally, the subject being made the object: thus, to express 'the rice is eaten,' a Garo would say *mikho cāātā*, lit. 'it causes to eat the rice.' There is no distinction of number in the verb, nor of person except in the imperative. The three tense-relations, present, past, and future, are discriminated by suffixes added directly to the root without change of the latter. Past near at hand and past remote are distinguished by separate forms. Progressive action may be indicated in each tense by a particle *eng*, from *āngā*, 'become,' inserted before the tense-ending. The verb has an indicative, imperative, and a rudimentary conditional mode, though these are not distinguished by special mode-signs. It has also two derivative conjugations, a causative and a negative. There is one infinitive and three participles, two present and one past. One present participle is used only in a conditional sense. The inflection of *an*, 'give,' will illustrate these statements.

Indicative. Present, *āngā*, etc., *anā*, 'I, etc., give.'

Near past, *āngā*, etc., *anāhā* or *anjak*, 'I, etc., gave (recently).'

Remote past, *āngā*, etc., *anāhācim*, 'I, etc., gave (long ago).'

Future, *āngā*, etc., *angen*, 'I, etc., shall give.'

Conditional. Past, *āngā*, etc., *angencim*, 'had I, etc., given.'

Imperative. *nāā*, etc., *anbo*, 'give thou, etc.'

nā, etc., *ancinā* or *ancang*, 'let him, etc., give.'

Infinitive. *annā*, 'to give.'

Participles. Present, *anode*, 'if giving.'

anoā, 'giving.'

Past, *ane*, 'having given.'

Causative. *āngā*, etc., *anātā*, 'I, etc., cause to give.'

Negative. *āngā*, etc., *anjūā*, 'I, etc., do not give.' etc. etc.

Each of the above forms acquires a progressive sense by the use of the particle *eng*; thus, *anengā*, 'I am giving,' etc.

Compound verbs are extremely common in Garo, not only the sorts usual in English, but the two following unusual kinds: 1. When the idea of number is to be emphasized, a numerical particle may be inserted between the root and tense-ending of the verb, thus forming a sort of agreement between it and its subject or object; 2. The words called prepositions or postpositions in other languages are, when united with a verb, infixed in Garo. Thus, a Garo would say, not "forthcoming," or "coming-forth," but "comeforthing."

The structure of the Garo sentence is very simple. It has the inverted order, the verb invariably coming at the end. A substantive or pronoun modifying another one usually precedes it, while an adjective as commonly follows—in which case the adjective, and not the substantive, is declined. Adverbs precede the words they modify, and

prepositional words usually follow their cases. Nouns of agency often take before them the same case that the verb entering into their composition would have taken if standing alone. Relative clauses—seldom occurring—precede antecedent clauses.

The Garo vocabulary has already borrowed much from the Assamese and Bengali, and the rate of foreign addition will probably increase as the people become more civilized and trade more freely in the plains. It is not unlikely that at some future time the language will be entirely displaced by Aryan speech, as has already happened with more than one rude tribe of India; but when that will occur, if ever, we are not in a position to conjecture.

12. On Dr. Burnell's Argument in regard to the Date of the Mānava-dharma-śāstra; by Prof. E. W. Hopkins, of Bryn Mawr, Penn. : presented by the Corresponding Secretary.

In the preface to the translation of Manu begun by Dr. Burnell and completed by the writer, the latter intimated that the views expressed by Dr. Burnell in regard to the date of this law-book were not held by himself. He wishes at present to explain his grounds for objecting to Dr. Burnell's argument.

If we summarize the reasons inducing Dr. Burnell to assume the date he did in his Introduction, we find that they are the following :

1. *a.* The Sūtra-period of Sanskrit literature extended from circa 600 to c. 200 B. C. The work, being a metrical *śāstra*, cannot therefore be earlier than the first or second century B. C. *b.* Because Medhātithi is first mentioned in 1200 A. D., he must have lived about 1000 A. D., and the latest date is therefore about 500 A. D., because it is impossible that the earliest commentator came nearer than 250 or 300 years to the date of the work itself, and Medhātithi is, as we know, not the very first commentator. *c.* The style and language is that of the epic; the text resembles that of metrical rituals, which were chiefly composed in the early centuries A. D. *d.* The matter contains much that is foreign to the original Sūtras. The dialogues are in the style of the Purāṇas. The philosophy is Sāṅkhyan (dates of which lie between 300 B. C. and 150 B. C.), so that the earliest date would be about the first century A. D. As this system of philosophy was supplanted by the Vedānta in the seventh and eighth centuries A. D., we have 100 A. D. and 700 A. D. as the terminus ab quo and ad quem respectively.

2. *a.* The character of the work aside from this proves it is late, for we find *Çiva is god of the Brahmans but Viṣṇu is god of the Kṣatriyas" (*sic*), and in i. 10 we have Viṣṇu as incarnate deity; this is a point of contact with the epic. *b.* But epic poetry is popular, not meant for priests. Therefore this work was not for priests. But the Brahmans would only have written it for a king, therefore it must have been written for a king.

3. What king? Pulikeçi; because he founded the West Cālukyan dynasty, which was the chief dynasty of the time, and this king belonged to the Mānava-gotra. The work could have been written for no one but a powerful king, and in a time of peace. These conditions are

filled by Pulikeçi; the place is, therefore, limited to his capital, Kalyānapurī, and the time to his reign, i. e. about 500 A. D.

4. The author was a northerner, because he speaks of persons not knowing Sanskrit.

The result of the argument is this: The date of the text is between 100 and 500 A. D. The work is a popular manual written by a northern Brahman for the benefit of king Pulikeçi at Kalyānapurī.

Objections. As the writer does not believe any of these statements, he thinks it well to give his reasons in full, taking up each of the arguments in turn.

1. *a.* The date. Granted that the limits of the Sūtra-period may be defined as closely as Dr. Burnell assumes, it does not follow that the Çāstra-period did not overlap the Sūtra-period. At the same time that the Brahmins used the Sūtra (which is nothing but a technical handbook), the popular form in easily understood verse may have existed for the benefit of the laity. *b.* Because Medhātithi is first mentioned in 1200 A. D., it is not thereby proved that the latest limit of the work is 500 A. D., for we do not even know that the commentators preceding him were not contemporaneous. But granting that when he says "pūrve" he means commentators long since deceased, we do not know how long. Within 500 years after Medhātithi we find three or four later commentators—that is to say, the extreme limit or latest date is also not at all certain. *c.* The "epic style" is poetry. The Mānava text is "rhythmic prose," which, as Bradke has pointed out, is quite different. The first is really poetry, the second is merely an attempt to put prose into a form likely to be remembered. These two do not necessarily belong to the same era. But if they did, who knows the terminus ab quo and ad quem of the Epic? *d.* The statement that the work contains matter foreign to the Sūtras is incorrect except in chapters i. and xii. Now these (especially the first) were probably later additions to the completed work. The duty of kings (chapter vii.) is an integral part of the Sūtras: e. g., cf. Apastamba; this is the only part really foreign in Dr. Burnell's view. The chapters i. and xii. are at the extremities of the work, where late additions are usually found, and do not of themselves affect the intrinsic worth of the main portion.

2. *a.* It is not stated that "Çiva is god of Brahmins," etc.; this is a mistake. The Viṣṇu quotation is in book first, which, as the commentators themselves admit, is not part of the original work. It is probably taken from the Epic, where it occurs several times. *b.* Because the Epic was "popular," it is not thereby proved that the Çāstras were and, though this is probably the case, yet it seems absurd to assume that all the minute directions for the Brahman student and rites of purification and special rules for the ascetic were written solely for a king, who had nothing whatever to do with them. In fact, in the Epic, the kings are generally wofully ignorant of just these rules, and always have to be instructed in them.

3. It is entirely a gratuitous and unfounded assumption to claim that the work must have been written for a king. If it were written like the Epic for a special king, it would contain, as the Epic does, refer-

ences in the vocative to the king. But the assumption goes against all we know of Çāstra development. The very expression "composed for a king" seems absurd. It is putting the development of the Sūtra literature back to the Hindu conception of a promulgated Çāstra without antecedents. We might just as well assume Manu as the "author." Everything shows us that there was no special author. Nor does it seem a happy conjecture to select Pulikeçi as the king for whom the work was composed. He is only one of many kings of his dynasty, and in no wise to be preferred in this respect to others. The writer has shown in his article on "Manu in the Mahābhārata" that many kings claim to belong to the Mānav(y)a gotra and yet use other law-books : in fact, do not seem acquainted with that of "Manu" at all, though their contemporaries may allude to him. Why select Pulikeçi I., any more than his father or sons? "It must have been written in peaceful times," Dr. Burnell says; but Pulikeçi I. was always at war (cf. his history as given in the inscriptions). Again, even assuming him to be a king for whom the work was composed, we do not know with any certainty the date of Pulikeçi I. Again, this king was a Cālukya. Now when the later Cālukya inscriptions quote verses from the law-book, they quote from Vyāsa's law rather more than from Manu : i. e. they attribute the verse in regard to stealing to any sacred authority indifferently, just as other kings do. If the work was specially written for this dynasty, it must have been of little account with them. Finally, as to the place : granting all denied above, the capital was Kalyāṇapurī only for a limited time, so that the place would even then be dubious.

4. Its author is not proved to be a Northerner come to the South to civilize the country (as Dr. Burnell assumes), in spite of "his" allusion to those who speak Sanskrit. For we read in the Mahābhārata of "Northern Mlecchas," i. e. of those who do not speak Sanskrit.

• Résumé : Just as prose Sūtras show *çlokas*, so *çloka*-Çāstras are nothing but the popular easy form overpowering and driving out the Sūtras. There is no reason for rejecting the development from a Sūtra in this argument of Dr. Burnell. We cannot judge the age of the work by its latest portions. We have no grounds for narrowing the date to the time of Pulikeçi I. The writer does not think that Dr. Burnell's Introduction gives any light at all on the problem.*

13. Remarks upon the Origin of the Laws of Manu ; by Prof. W. D. Whitney, of New Haven, Conn.

* In regard to the suggestion of Max Müller, in his review of this work (*Academy*, Jan. 3), that Dr. Burnell's Introduction does not contain all his collected data, the writer would state that Dr. Burnell's MS. was clearly written, and contained numerous additions in the shape of slips and notes subsequently added - in none of which, however, was any hint given of further grounds to support his theory. The same reviewer has pointed out that, though it were proved to be the case that the priests of Pulikeçi belonged to the Mānava-çākhā, there would still be no ground for assuming that these priests possessed a Mānava-dharma-çāstra, or the preceding works of the same school.

Professor Whitney spoke in substance as follows: As the subject of the authorship of the Mānavan law-book has been brought up for discussion by Professor Hopkins, I will add a few further words upon it. With Mr. Hopkins's rejection of Burnell's date, and of the reasoning upon which it is founded, I fully concur, deeming the question of period not less an open one than before this last attempt at its settlement. But also the question as to the connection of the work with a Mānavan Vedic school and its *sūtras* appears to me equally undetermined. When the suggestion of such a connection was first made (by Weber, and, apparently independently, by Müller), it was a very acute and creditable one, and marked a distinct stage of progress in our comprehension of the history of Indian literature. It was widely accepted, and has even become the popular view among scholars. I find myself quoted in its favor in Burnell's Introduction—not because I have contributed anything to its establishment, but because I reported it in a summary sketch of Sanskrit literary history.

The doctrine in question includes two elements. First, a recognition of the fact that the *dharma-śāstras*, or recent general law-books, are a natural development out of the old *sūtras* as handed down in the schools of Vedic study. This is by far the more important and valuable element; and it is so well supported by considerations of various kind that it seems as firmly established as anything can be in this department of knowledge. Then, second, that the coincidence of the name Mānava, belonging to this particular law-book, with the name of a certain recognized Vedic school, points to a derivation from that particular school—*mānava* meaning 'of the Mānavans,' and not, as usually understood, 'of Manu.' This was all very well as a conjecture; but, to win a higher character, it needed to be backed up by some amount of positive evidence, derived either from the traditions of the school or from the law-book itself. And none such appears to be forthcoming. The *grhya-sūtra* of the Mānavans, on the one hand, has recently come to light, and has been worked up by Bradke, who furnishes a full account of it in the Z. D. M. G. (vol. xxxvi., 1882, pp. 417-477); and, with the best good-will to the contrary, he is obliged to confess that he can find no sign of any relationship between the two works. Then, on the other hand, there is nothing in the association of the modern law-book with the epithet *mānava* or the name Manu to constrain us to seek a historical basis for such designation. Attribution of authorship, in Hindu literary history, proves nothing at all, unless in the absence of any indication whatever to the contrary—if even then. The traditional explanation of the name is altogether sufficient. Manu (as shown in detail by Professor Hopkins in his article "Manu in the Mahābhārata") is a legendary being, appealed to rather more frequently than any other, beginning even with the time of the Brāhmaṇas, when something is to have a show of authority given it. He is cited in the various *sūtras* and *śāstras*, just as Yama and others are cited: and this, not because there is a Manu's law-book in existence—for the citations are in general not to be brought into any connection with the work so called: on the contrary, it appears to be because of such citations that there comes to be a Manu's

law-book. It might have been expected that some treatise would be attributed to Manu, just as to Yājñavalkya, to Vaṣiṣṭha, to Vishnu, and so on. And the manner of its association is pretty clearly read in its own account of its origin. There is a versified *dharma-ṣāstra*, of considerable antiquity among the treatises of its class. It quotes "Manu" here and there, as the rest of them do, showing that its constructors laid no claim to an exclusive Manu-authorship for it. It is put, then, apparently artificially and by an afterthought, into the mouth of Bṛhgu, a legendary sage and ancestor who wears that character even in the earliest Veda; and finally, by a latest afterthought, Bṛhgu is made to proclaim it on behalf of Manu, and under the latter's direction. It is a nameless depiction, put in a Bṛhgu-frame, with a Manu-rim about it. If it was really "Mānavan" because of its derivation from the Mānava-school, there needed no such roundabout process as this to give it title to the name. But if the Manu-rim was tacked on to give additional and clearer reason for what had an underlying reason already, why the intervention of the Bṛhgu-frame? It is this intervention that shows most decisively the artificial character of the whole attribution of authorship. For that Bṛhgu might be a later intrusion between Manu and his work, as Bradke hesitatingly suggests, appears in the highest degree implausible.

There is, of course, nothing cogent about this reasoning. But it is sufficient to refute the claim now coming to be made as a commonplace by writers on Indian literature, that "Manu's law-book is a metrical version of the *dharma-sūtra* of the Mānavan school, and has its name from thence," and to remind the question of its origin back to the category of the unknown—where it may, probably enough, always remain. It is very little that we know as to the history of the *dharma-ṣāstras* in general; and of this one, not more than of the rest. We know not, for example, how it should have obtained such vogue and consideration (for real authority it does not possess), for which nothing in its character seems a sufficient reason. Perhaps, after all, it was only owing to the name: so that the trick of the last redactors, in calling it Manu's, met with undeservedly great success.

14. Numerical Results from Indexes of Sanskrit Tense- and Conjugation-Stems; by Prof. Whitney.

Professor Whitney reminded the Society that three years ago he called its attention to a plan he had formed, and already partly executed, of giving a full account of the roots found quotable in the Sanskrit literature, with the tense- and conjugation-stems and the primary derivatives made from them, each item being accompanied with a definition of its date in the history of the language; and that he presented a specimen of the work, anticipating its publication within no very long time. In the Proceedings of the meeting in question (at Boston, May, 1882; see the Society's Journal, vol. xi., pp. cxvii.-cxx.) was printed the specimen, with an invitation of suggestions of improvement; and later a somewhat modified specimen was sent out, with a similar invitation; but no response was received from any quarter: so

that the work, which is now all in type and will soon be published (about 250 pages, 8vo : Leipzig, Breitkopf und Härtel ; Boston, Ginn & Co.), is carried out on the plan communicated to the Society. It seemed altogether desirable to add to it at the end Indexes of stems, which should give an approximate idea (all that can be accomplished by such a method) of the relative importance of each given formation in the entirety of the language ; and further, in order to make these Indexes contribute more efficiently to the illustration of its history, the plan was adopted of giving the stems of each formation in three divisions : **A.** those found to occur only in the older language, of Veda, Brāhmaṇa, and Sūtra ; **B.** those found both in the earlier and in the later language ; **C.** those quotable only from the later language, epic and classical. A conspectus of the numbers of stems of various formation, in these three divisions, was now presented by Professor Whitney, who also pointed out briefly some of the indications derivable from them for the history of Sanskrit.

Of the present-stems, numbering in all 1136, the distribution is found to be as follows :

| | A.
earlier
lang. | B.
earlier
and later. | C.
later
lang. | total. |
|--|-------------------------------|------------------------------------|-----------------------------|--------|
| root-class (<i>ad</i> -class, second class) | 80 | 49 | 14 | 143 |
| reduplicating class (<i>hu</i> -class, third class) | 33 | 16 | 0 | 49 |
| nasal class (<i>rudh</i> -class, seventh class) | 16 | 13 | 0 | 29 |
| <i>nu</i> -class (<i>su</i> -class, fifth class) | 24 | 22 | 4 | 50 |
| <i>u</i> -class (<i>tan</i> -class, eighth class) | 4 | 4 | 0 | 8 |
| <i>nā</i> -class (<i>krī</i> -class, ninth class) | 31 | 17 | 5 | 53 |
| | 188 | 121 | 23 | 332 |
| <i>ā</i> -class (<i>bhū</i> -class, first class) | 175 | 212 | 142 | 529 |
| <i>ī</i> -class (<i>tud</i> -class, sixth class) | 72 | 53 | 17 | 142 |
| <i>yā</i> -class (<i>div</i> -class, fourth class) | 41 | 64 | 28 | 133 |
| | 288 | 329 | 187 | 804 |
| Totals | 476 | 450 | 210 | 1136 |

The general facts here presented—as the great superiority in numbers of stems of the second general conjugation (804 to 332), and the almost limitation to it of the stems of late formation (187 to 23)—are familiar ones ; also, that, in the first general conjugation, the stems found in the older language alone (188) considerably outnumber those belonging to both the other divisions together (121 + 23 = 144), while in the second conjugation this relation is more than reversed (288 to 516).

The accented *yā*-class, or passive stems, and the *āyā*-class, or causative etc. stems, are given further on ; since the former, though essentially a present-stem only, becomes allied in history to the secondary conjugations, as having like them a special office.

| | A. | B. | C. | total. |
|--|-----------|-----------|-----------|--------|
| The perfect-stems have this distribution : | 169 | 191 | 113 | 473 |

Nothing noteworthy appears here, as the perfect is a formation of nearly equal frequency in all periods of the language.

With the aorist-stems, the case is very different, as will appear from the following table :

| | A. | B. | C. | total. |
|---------------------|-----|-----|----|--------|
| root-aorist | 112 | 18 | 10 | 140 |
| <i>a</i> -aorist | 61 | 18 | 7 | 86 |
| reduplicated aorist | 106 | 18 | 30 | 154 |
| <i>s</i> -aorist | 99 | 37 | 9 | 145 |
| <i>iṣ</i> -aorist | 136 | 21 | 17 | 174 |
| <i>siṣ</i> -aorist | 10 | 3 | 6 | 19 |
| <i>sa</i> -aorist | 14 | 5 | 0 | 19 |
| | 538 | 120 | 79 | 737 |

Of the reduplicated aorists, 6 are made from causative quasi-roots in *p*; and there are 14 *iṣ*-aorists from secondary-conjugation-stems (8 desiderative, and 6 causative).

Here is seen especially (as pointed out in some detail a year ago to the Society) the great predominance of the aorist-formation in the earlier language, as compared with the later (more than seven tenths of the stems being found in that division exclusively, not to speak of the much greater frequency of their forms there). Further, the almost sporadic character of the last two forms of aorist—which effectually forbids any originality or importance being attributed to them in the history of aorist formation. The class of *a*-aorists also appears to be made up in no small part (it may be remarked) of transfers from the root-class.

The statement for the future-stems reads thus :

| | A. | B. | C. | total. |
|---|-----|-----|-----|--------|
| <i>s</i> -future without <i>i</i> | 46 | 59 | 26 | 131 |
| <i>s</i> -future with <i>i</i> (<i>iṣ</i> -future) | 44 | 43 | 71 | 158 |
| periphrastic future (in <i>tar</i>) | 18 | 10 | 30 | 58 |
| | 108 | 112 | 127 | 347 |

In the Veda occur only a few futures of the *s*-formation (about 40), and none of the other. A disproportionate increase of the *iṣ*-future in later time is noticeable here. From 39 roots are made futures of both the *s*- and the *iṣ*-form.

The secondary conjugation-stems are thus distributed :

| | A. | B. | C. | total. |
|--------------|-----|-----|-----|--------|
| passive | 37 | 105 | 117 | 259 |
| intensive | 105 | 21 | 41 | 167 |
| desiderative | 60 | 49 | 53 | 162 |
| causative | 111 | 247 | 207 | 565 |
| | 313 | 422 | 418 | 1153 |

The total number of roots from which intensive stems are made is only about 150, there being a number of instances in which more than one stem is made from the same root. Of the desideratives, less than a quarter have the intermediate *i* before the sibilant; nine roots make stems both with and without the *i*. The intensive, it will be noticed, is a dwindling formation, while the desiderative is an increasing one.

Both passive and causative, also, grow in frequency, although neither is rare at any period; there are more causative-stems even than (unaccented) *a*-stems of the present.

The tertiary stems, or derivatives from secondary stems, number as follows:

| | A. | B. | C. | total. |
|-------------------------------|----|----|-----|--------|
| passives from desideratives | 2 | 1 | 8 | 11 |
| passives from causatives | 9 | 28 | 110 | 147 |
| desideratives from causatives | 12 | 5 | 21 | 38 |
| causatives from intensives | 3 | 0 | 1 | 4 |
| causatives from desideratives | 0 | 0 | 2 | 2 |
| | 26 | 34 | 142 | 202 |

Most of these, it is seen, are only sporadic formations: exceptions are the desideratives from causatives, which appear in fair numbers (in no small part, it is true, only in derivative noun-stems); and the passives from causatives, which grow rapidly in popularity, so as to be tolerably frequent later.

Finally may be mentioned a few scattering formations:

| | A. | B. | C. | total. |
|--|----|----|----|--------|
| 3d persons sing. of the passive aorist | 47 | 12 | 33 | 92 |
| aorist optatives active | 48 | 5 | 10 | 63 |
| aorist optatives middle | 54 | 1 | 0 | 55 |
| periphrastic perfects, primary conj'n | 8 | 3 | 9 | 20 |

The active aorist optatives all belong to the root-aorist; just over half of them are made from roots which have no other aorist forms of this formation; only half of them show forms containing the real precative-sign, or sibilant interposed between optative mode-sign and ending. The middle forms are from 44 roots; since several roots make more than one stem, and one root (*van*) even four stems. Less than a quarter of the stems (only 13) make forms containing the true precative *s* (which is found only in 2d and 3d sing.). From the *s*-aorist come 18 stems, from the *is*-aorist come 14: these two constituting the recognized "precative middle" of the Hindu grammarians; but there are also 4 from the *siṣ*-aorist, and 15 from the root-aorist, besides the isolated *vidēsṣa* (*a*-aorist), and 3 reduplicated stems, respecting which one may fairly question whether they belong more to the reduplicated aorist or to the perfect: one of them, *vīriṣiṣṭa* (Bhāg. Pur.), is the only example known to me of a middle precative in the whole epic and classical literature of the language—and even it is unauthorized by the native grammar.

The "roots" from which verbal forms can be quoted count somewhat over 800; but this includes no very small number of such as are obviously secondary formations, or phonetic variants, or artificial—that is, taken up out of the grammarians' lists and used once or twice. Nearly 500 of these occur in both divisions of the language; about 200 are found only in the earlier period; the remainder (about 130), only in the epic or the classical period, or in both.

15. On Multiform Presents and on Transfers of Conjugation in the Sanskrit Verb System; by Prof. C. R. Lanman, of Cambridge, Mass.

In the Proceedings for October, 1882 (Journal, vol. xi., p. cxxvii.), Professor Bloomfield made an attempt to discover any possible differences of use in the different present systems from the same root in the Veda. The results were mainly negative. Meantime, however, Professor Whitney's book, mentioned in the preceding article, has been put in type. Its collections cover the entire history of the language, in all its periods; and they are arranged in such convenient and altogether admirable order, that a new study of the ample material seems very promising.

So far as Professor Bloomfield's inquiry is concerned, it is indeed doubtful whether any very striking positive results could be reached. But the study of these multiform presents suggests some other questions, whose answers, if attainable, would be interesting and important: What are the general tendencies in the growth of the language as concerns its system of conjugation? What is the extent of the multiform presents?—that is, how commonly do roots form present stems in more than one way? Are there decided tendencies of certain formations to go in pairs?

The foregoing article offers interesting items of answer to the first question. As for the second—out of 800 bona-fide roots of the language, over 112 (14 per cent.) form presents in two ways. The large number of 50 or more form presents in three ways. The roots with four presents number 16, and are *iṣ* 'seek,' *ṛj*, *ci* 'gather,' *tṛp*, *dhā* 'put,' *bhṛ*, *mad*, *mī* 'damage,' *mṛj*, *rudh*, *vaç* 'be eager,' *çam* 'labor,' *sā* 'bind,' *sū* 'generate,' *stu*, and *hi*. Those with five presents are *i*, *kr* 'do,' *kṣi* 'destroy,' *dā* 'give,' *dhū*, *pi* 'swell,' *pṛ* 'fill,' *vṛ* 'cover,' *han*, and *hū*—ten in all. Finally, the root *r* forms its present in six different ways (counting *ṛṇu* and *ṛṇva*), and *tṛ* in seven—or in eight, if we count the sibilant presents. The above are understatements rather than the contrary, sporadic or doubtful doublets being sometimes omitted.

Among the double presents, the *a*- and *ya*-classes appear oftenest in combination, namely in 26 verbs, e. g. *tāpati*, *tāpyati*; next come the *a*- and *i*-classes, with 18 verbs, e. g. *kārṣati*, *kṛṣāti*; then the *a*- and root-classes, with 15; and last the *ya*- and root-classes, with 11. The other doublets are miscellaneous and sporadic combinations.

The question, Do differences of function run parallel with differences of form, has, of course, some positive answers which are palpable. Thus, the mode of forming the present with accented *yā* has a perfectly clear function as designation of the passive. The elements characteristic of the intensive and desiderative have also distinct sematologic value, and, in a less degree, those that mark the causative. Of the primary presents, those made with unaccented *ya* are prevailing intransitives, denoting a state of feeling or condition of mind or body.

If one were to take up again and extend the inquiry of Professor Bloomfield, now that we have the material so complete and in so accessible form, the first thing to do would be to eliminate from the question such multiform presents as are not original, but simply the result of a

secondary transfer from some older to some later method of conjugation (e. g. *duhati*, from *dōgdhi duhānti*). These for the most part may be regarded as exclusively formal changes. There would then remain a large number of multiform presents of independent formation (e. g. *pāvate* beside *punā'ti*), where functional differences might be suspected, or at least looked for.

I propose to take this first step here, without going any farther, and to examine and classify these transfer-presents.

These transfers are, with one or two wholly sporadic exceptions, invariably from the first general conjugation to the second. The general direction of the transfers is just what we should expect if to be *a priori*. As appears from the preceding paper, the stems of the second general conjugation greatly outnumber those of the first (804 to 332), just as the *ω*-verbs do the *μ*-verbs, and the "regular" verbs (with *ed*-preterits) the old "irregular" ones in English. There is always a tendency in language-users to reduce apparent irregularities to a dead level of uniformity. This is exemplified in the little child's *I goed* or *runned* instead of *I went* or *ran*; in the later Attic *δεικνύω* for the old *δείκνυμι*, and even in the Homeric *δαμῆ* (*δαμναετι*) by the side of *δάμνησι* (*δαμνητι*). This tendency of the verbs into the second or *a*-conjugation is entirely parallel to the transfer of the nouns from various consonant declensions into the *a*-declension, and to the excessively common movement of the same kind in Pāli.

As appears from Professor Whitney's results, given above, the first conjugation holds a much more important place in the earlier language, and loses all its vitality in the later. It would therefore be wholly in keeping with the character of these transfer-forms that they should appear as a rule in later texts than their originals of the first conjugation. And this we find to be the fact.

The indexes show a total of 332 stems of the first general conjugation. Their roots exhibit no less than 81 transfers to the second general conjugation; that is, about a quarter of them do so. By far the largest number of these transfers, 36, are from the root-class; 16 are from the reduplicating, and 13 from the nasal class; 9 from the *nā*-class, and 7 from the *nu*-class. The transfers are to the *a*-class and the *d*-class.

To make the explanation of doublets as transfers possible, there must be some important point or points that coincide in the two series of forms. Thus the old nominative *pād* makes an acc. *pād-am*; and corresponding to this ambiguous form, as if it were *pāda-m*, is formed a later nom. *pāda-s*. So in the Veda, *dviṣ* inflects *dvéṣ-ṭi dviṣ-ānti* but, corresponding to this ambiguous form, as if it were *dviṣā-nti*, is formed in the later language *dviṣā-ti*, etc. The several classes of transfers I will briefly enumerate, giving first a characteristic form of the old conjugation, then an example of an ambiguous one in brackets, and then a characteristic form of the transfer-conjugation.

Root- to *a*-class. a. *āniti* [*ānanti*] *ānati*; similarly, *vamiti*, *vamati*; *ḡvasiti*, *ḡvasati*; *stanīhi*, *stanati*; *svapīti*, *svapati*; following their analogy, *jakṣīti*, *jakṣati*; b. *rodīti* [*arodat*] *rodati*; c. *amīti* [*amanti* and mid.] *amate*; d. *ātti* [*adānti*] *adasva*; *chantti* [*chandanti*] *chan-*

dati; **e.** *eti* [subjunc. *ayati-te*] *ayate-ti*; *çete* [*çäye* 1s.] *çäyate*; **f.** *ä'ste* [*äse*] *äsate*; similarly, *idate* 3p., *idämahe*; so *irte*, *irate* 3s.; *ište*, *içate*; *caşte* [*cakşe*] *cakşate*; *takşati* 3p. [?] *takşati* 3s.; *vaşti* [*avaçam*] *avaçat*; *hanti* [*ahanam*] *ahanat*; *çasta açät* [*açasam*] *açusat*, 'cut'; so *açät*, *çäsati*, 'orders'; **g.** [*sämi*] *santi seyam set* are perhaps best regarded as presents to the old aorist *asät*, as if this were imperfect. Observe that the accent of *svap*, *an*, and *çvas* wavers. Forms under *d* might be reckoned to the *ä*-class.

Root-class to *ä*-class. **a.** *äniti* [*anánti*] *aníti*; similarly, *dogdhi*, *dahet*; *dveşti*, *dvişati*; *mārşti*, *mŗjati*; *roditi*, *rudanti*; *leđhi*, *lihati*; *vetti*, *vidati*; **b.** *kşēti* [*kşiyánti*] *kşiyāti*; so *bravīti*, *abruvam*; *yāuti*, *yuvati*; *rāuti*, *ruvati*; *sū'te*, *suváti*; *stāuti*, *astuvat*; **c.** *hanmi* [*ghnantī*] *aghnam*.

Reduplicating to *a*-class. The transitions in this category are among the most interesting. The verbs *dadāmi*, *dadhāmi*, and *tişthāmi* all belong to the redupl. class, as is clear from the Greek. All show secondary *a*-forms even in the Vedic period, e. g. *dada-ti* 3s.; but with the first two the process of transfer was not carried out, while with the important *tişthāmi* it became so complete that no form belonging unquestionably to the *hu*-class is quotable. Although no *hu*-class form is quotable for *han* and *hi*, yet *jighnante* and *jighyati* 3s. are clearly transfers. Here belongs *sīdati*, if *sūdāmi* is for *sīsdāmi*. Exactly like the case of *tişthāmi* are those of *jighrāmi* and *pībāmi*, except that here forms of the *hu*-class are quotable, e. g. *pīpānū*, *jighrati* 3p. In the later language, *bībhyati-anti* and *jahati-anti* coexist beside the older *bībheti-yati* and *jahāti-ati*. The forms of both kinds are confined to the Veda in the case of *mā* 'bellow,' *çū*, and *sac*, which make *mīmāti* and *mīmanti*, *çīçā-ti* and *çīçā-nti*, *sa-çc-ati* 3p. and *saçca-nti*. Sporadic *a*-forms are found from *dī* 'shine,' *dhī*, and *pi*—see Whitney, Gram. § 670 ff.

Nu- to *ä*-class. Here belong *invōti* [*invānti*] *invāti*; and so the stems *rñvá*, *cinvá*, *duvva*. On account of the accent, we should expect transfers to the *ä*-class only, not to the *a*-class; but we find *jinō-şi* *jinva-ti*, *pinv-āte* *pinva-ti*, *hino-ti* *hinva-ti*.

Nasal to *ä*-class. Since the transfer is from a weak form of the *rudh*-class—*unātti* [*undānti*] *undati*—the transfer-form ought to have the accent on the *a* and so be referred to the *ä*-class. In fact the accent is indeterminate in all cases save, on the one hand, *rñjā* and the doubtful *pñşā*, and, on the other, *tūñja* and *pr'ñca*. The stems are: *añja*, *unda*, *umbha*, *ckinda*, *bhauñja*, *yñja*, *ruudha*, *piñsa*, *çñsa*, *hiñsa*.

Nā- to *ä*-class. Here belong the stems *prñá*, *nrñā*, *çrñā*, *mīna*, and the doubtful *dhunet* (cf. *dhunīyāt*). Professor Whitney reckons *grñha*, *jāna*, *badhna*, and *mathna* to the *a*-class: hardly, perhaps, with constraining reason.

The Epos shows the forms *dadmi* and *kurmi*, which answer, as singulars of the root-class, to *dadmas* and *kurmas*.

Of interest, finally, are the transitions within the aorist-system. Thus beside the series *akar-am akar akrām*, we have *akara-t*, etc. Many of the simple *a*-aorists are such transfer-forms. So beside *agan*, *aghas*

atan, adhāt, abhūt, etc., we find *agamat, aghasat, atanat, adhat, abhvat, etc.*; see Whitney, §847. These aorist stems sometimes serve later as the base of a present system—so *gama, voca, sara, cf. asūt*.

16. On the Verbs of the so-called *tan*-class in Sanskrit; by Prof. A. H. Edgren, of Lincoln, Neb.: presented by Prof. Whitney.

Professor Edgren points out that, while the verbs of the *su*- and *tan*-classes of the Hindu grammarians are distinguished by the latter as taking respectively *nu* and *u* as class-sign, it was suggested already by Bopp that, since all the roots of the *tan*-class save one themselves end in *n*, the two classes are virtually one, and may be treated as such. Most later grammarians have been content to reproduce the Hindu classification; but the writer, in his own brief grammar (T.übner & Co., 1885), has ventured to identify the two classes in question, assuming the final nasal of the *tan*-roots to have been lost before the nasal of the class-sign, in accordance with the theory as to such mutilations put forward and formulated some years ago by Brugman and others (e. g. *ta-ta* from *t'n-ta*, with loss of radical *a* and then conversion of the remaining vocalic nasal to a vowel *a*). Recently (in the *Bulletin de l'Acad. roy. de Belgique*, 1880), M. Van den Gheyn, of Antwerp, attempts to show that, out of the nine *tan*-verbs ending in *n*, at least seven did not have that nasal originally, it having been artificially transferred from the class-sign to the root; and he proposes to remove in this way the *tan*-verbs to the *su*-class. The object of this paper is, then, to determine, by examining the inflectional and derivative forms belonging to the roots of the *tan*-class, and also the kindred words in cognate languages, the true relation of that class to the *su*-class, and whether any one of the theories referred to above is to be accepted as satisfactory.

Of the ten roots counted to the *tan*-class by the native grammarians, two are obviously false: viz. *ṛṇ*, with present *ṛṇoti*, and *kṣiṇ*, with present *kṣiṇoti*: they are only inflections of the roots *ṛ* and *kṣi* according to the *su*-class; and a third, *ghṛṇ*, is doubtless a similar perversion of *ghṛ*—and besides, it never occurs in the language, unless in a few derivatives, as *gharma, ghṛṇa, ghṛṇi*, the kindred words in related tongues (Zend *garema*; Gr. *θῆρ-μῆ, θῆρ-ος*, etc.; Lat. *for-mus* etc.; Goth. *warm-jan*; Sl. *gr-e-ti*; etc.) favor this view of its character. Further, the alleged root *tṛṇ*, 'graze,' is evidently fictitious, made to furnish an etymology for *tṛṇa*, 'grass.'

As regards the five roots *kṣan, tan, man, van, san*, there is every reason to regard their nasal as genuine and original—at least, when their existing inflectional and derivative forms were evolved. It is contained in all their verb-forms, save only the verbal nouns in *ta, tvā, tya*; where, as generally admitted, the root is shortened from loss of accent: for the occurrence of such by-forms as *tāyate, siṣāsati*, etc., is no more significant than that of *jāyate* beside *jan*. It is found also in their numerous derivatives, except the stems in *ti*, which follow the analogy of the participles in *ta*. Finally, related words in the cognate tongues also have a nasal: e. g. *κρον-ος; τειν-ω, ten-do, ten-ax, than-jan; μεν-ος, mon-eo, ga-mun-an*; perhaps *ven-us* etc. (for *san*, no kindred

words have been found) ; and the exceptions (chiefly Greek, as *τα-σις*, *ε-τα-θην*) are doubtless due to the same causes which have made the Skt. *ta-ta* etc. While, then, it is past question that the nasal in these roots is no artificial transfer from the class-sign, but really radical, it nevertheless does not follow necessarily that in a tense-stem like *tanu* the class-sign is *u* only : the significant fact that all the verbs of the class (except *kr*) end in a nasal drives us to seek another explanation. No instance, it is believed, can be adduced from the whole language of the loss of an initial nasal, or of any other initial consonant, of a suffix or ending ; whereas the disappearance of a final nasal of a root or stem before a suffixal consonant is a common occurrence in Sanskrit : e. g. *ta-ta*, *ta-tvā*, *ta-ti*, *-ta-tya*, *ha-tha*, *-ha-bhis*, *rāja-bhis*, *jīva-su*, *bali-bhyas*, etc. etc., for *tan-ta* etc. There is likewise the same absence of accent from the root in all the forms of this conjugation, which has been seen to be the probable cause of the abbreviation of words like *tata* ; and it shows its effect in the weakening of the root in the forms of the *su*-class : e. g. *stṛ-ṇo-ti* from the more original root-form *star*. Hence it must be regarded as highly probable that *ta-no-mi* is for *tan-no-mi*—whether by the direct loss of the *n* or by its vocalization, is immaterial to the argument.

As regards, finally, the sole remaining root *kr*, which in the oldest language was conjugated according to the *su*-class (*kr-ṇo-ti* etc.), its later *tan*-inflection is entirely anomalous : it may be that the very frequent use of this verb made it susceptible in some way to modification by dialectic or other influences. At any rate, it cannot be made to form all alone a separate verb-class.

The general result appears to be, that, of the list of ten roots that have been reckoned to the *tan*-class, four must be struck off as fictitious, five transferred to the *su*-class as regular, and one as irregular ; and that in this way the *tan*-class will disappear entirely.

Professor Whitney said that, while he agreed with the author in rejecting Van den Gheyn's view, and regarding the derivation of *tanomi* from *tan-nomi* as not impossible, he yet was unwilling to accept this latter process as proved, so long as it remains so questionable what the original character of the *nu* is, and as other instances of the loss of *n* before *n* are not found. If, for example, the class-sign is ultimately a noun-suffix, *nu* and *u* might be possible side by side, like the elements from which are made the gerunds *-ṛutya* and *-bhūya* respectively. The modification of *krṇu* into *kuru* is not easily accounted for ; and there are other indications of the addition of *u* to a radical final *r* in Sanskrit, in the roots (doubtless of secondary origin) ending in *rv*, as well as in the RV. form *turute* from root *tṛ*. It may be added that in *hanomi* (Pārask. Gṛh. Sū. i. 3. 27) we have another sporadic example of a *tan*-form, but one of very questionable value.

17. On a Sauskrit Manuscript of a Hindu Treatise on Logic, the Nyāya-siddhānta-mañjarī ; by Prof. Lanman.

Just after our last October meeting, I received, through the kindness of Professor Isaac H. Hall, a MS. of the above-named work, now in my

possession. Dr. Hall bought it at a shop in Philadelphia, Penn.; but the vendor did not know where it came from. On the inside of the cover, however, are the words: "J. Jay Joyce, Jr.; presented by Rev. Prof. Banerja, Calcutta; through kindness of the Rev. S. E. Appleton."⁵

This MS. of the 'Garland of the Doctrines of the Nyāya' is about 200 years old. It is an excellent MS., clearly written in *nāgarī* on 39 leaves, $9\frac{1}{4} \times 3\frac{1}{2}$ inches in size. The outside page of the first leaf and of the last is blank. There are from nine to eleven lines on a page. Each line contains about twice as much as a line of our Journal, so that an edition of the text would require about 30 Journal pages.

It begins:

praṇamya paramātmānam jānakīnāthaçarmanā

kriyate yuktimuktābhīr nyāyasiddhāntamañjarī.

*iha kila nīkīlalokavimokṣamukhyopāyaṃ mananopāyaṃ ātmanasat-
tvajñānam āmananti; tac ca pramāṇādhiṇam iti pramāṇam nirūpyate.
tatra pramāṇyāḥ karaṇam pramāṇam. pramā ca yathārthānubhavaḥ.
tad āhur ācāryāḥ. yathārthānubhavo mānam iti. nann kim idam yā-
thārthyam? kiṃ cānubhavatvam? ucyate: etc.*

It ends:

*jñānasya saṃnikarṣe kim mānam iti cet; rajatateçprakārapraty-
akṣam ity areḥi. tatrāiva kim mānam iti cet; tatprakārikā pravṛttir
iti saṃkṣepaḥ.*

The colophon reads:

*iti çri-bhaṭṭācārya-cūḍāmaṇi-viracitā nyāyasiddhāntamañjarī samūp-
tiṃ agamat saṃvat 1754 çakre 1619 māghe māsi çuklapakṣe aṣṭamyaṃ
ravivāsaṛe sutāropanā ? |mnā anantena likhitam idam pustam mañjar-
yāḥ parārtham svārtham ca.*

That is: 'The Nyāyasiddhāntamañjarī, composed by Çri Bhaṭṭācārya Cūḍāmaṇi [an epithet of Jānakīnāthaçarman], is ended: on a Sunday, the eighth day of the bright lunar fortnight of the month Māgha, A. D. 1697: this MS. of the Mañjarī was written by Ananta, whose surname [?] was Sutāra, for the use of others and of himself.' Māgha begins with the winter solstice.

MSS. of this work are not infrequent. Burnell, Skt. MSS. in the Palace at Tanjore, p. 119a, cites one beginning as above. He adds that the work is little studied in South India. Bhandarkar, in his Bombay Report for 1882-3, p. 115, mentions two and a commentary. Lewis Rice, Cat. of Skt. MSS. in Mysore and Coorg, 1884, p. 114, mentions three, and a fourth ascribed to Golāṭa Bhāskara. Fitzedward Hall, Bibliography of the Indian Philosophical Systems, p. 24, mentions three, one very correct. Aufrecht mentions a part of one as among the Bodleian MSS., p. 240a. Weber mentions a part of a commentary to the work in the Berlin Catalogue, 1853, no. 699. The work is an elementary one; but it might well be worth editing.

The following paper was not received until after the Society's adjournment, but, by the author's desire, it is included in the Proceedings of this meeting.

18. On some Vedic Derivatives of the root *praç*, 'ask,' hitherto misunderstood; by Prof. M. Bloomfield, of Baltimore, Md.

The root *prach* or *prch*, 'ask,' as is well known, is a secondary form: to wit, a part of the stem of an inchoative present, *pr[ç]-cha-ti*, transferred in use to a verb-formation outside the primary present-system, i. e. to the perfect, *paprâcha*; to the verbals, *-prchya*, *-pr'cham*, *-pr'che*; to the passive, *prchâte*; and further to the derivatives, *prâch-*, *prchâ*, *prchaka*, *pr'chya*, and *piprçhîsu*. Most of the remaining forms and derivatives, *âprât*, *âprâkṣit*, *prṣtâ*, *prâṣtum*, *prâkṣyati*, *prṣtvâ*, *prâṣṭavya*, *prâṣṭr*, may be referred to either form of the root, to *praç* or to *prach*; but for those belonging to the oldest dialect, notably for *âprât* and *âprâkṣit*, a reference to *praç* is preferable (cf. Whitney, Skt. Gr., § 220). Finally, for the original form *praç*, the Vedic *praç-na*, 'question, debate,' gives unmistakable testimony, to say nothing of the evidence of the related languages.

I believe that there are three other Vedic words which are certainly derivatives of *praç*, 'ask,' though they have hitherto been misunderstood. These are:

1. *prâ'ç*, 'debate, dispute';
2. *prâtiprâç*, 'opponent, one disputing against another';
3. *prâtiprâçita*, 'one assailed in debate,' or, simply, 'opponent.'

These words occur in an exorcism addressed to the *pâtâ*-plant, Atharva-Veda ii. 27. Verses 2-6 do not affect the question here in hand; I therefore quote only the first and last.

- | | |
|--------------------------------------|----------------------------------|
| 1. <i>néc châtṛuḥ prâ'çam jayâti</i> | sâhamânâ 'bhâbhû'r asi: |
| <i>prâ'çam prâtiprâço jāhy</i> | <i>arasâ'n kṛṇv oṣadhe.</i> |
| 7. <i>tâsya prâ'çam tvâm jāhi</i> | <i>yô na indrâ 'bhidâ'sati:</i> |
| <i>âdhi no brâhi çâktibhî.</i> | <i>prâçî mâ'm ûttaram kṛdhî.</i> |

The hymn has been translated by Weber, 1873, *Indische Studien*, xiii. 190; by Ludwig, 1878, *Der Rig-veda*, iii. 461; and by Grill, 1879, *Hundert Lieder des Atharva-veda*, p. 18. All three derive the words *prâ'ç* and *prâtiprâç* from the root *aç*, 'eat,' with *pra*, and regard the hymn accordingly as an incantation against robbers of provisions, pronounced in order to protect granaries and store-rooms. The renderings of the above-quoted verses by Weber, Ludwig, and Grill, respectively, are as follows:

1. Dass mir die Vorräthe der Feind
nicht raub'! sieghaft du, mächtig bist!
Schlag' fort, die mir die Vorräthe
schäd'gen, mach' kraftlos sie, o Kraut!
7. Vernichte dessen Vorräthe
o Indra! der uns feindet an.
Segne mit deinen Kräften uns!
lass in Vorräth'n mich oben stehn!

1. Nicht der feind soll genusz von speise erlangen; überwältigend, sigerin bist du; | den genusz des genuszfeindlichen schlage, mach ihn saftlos [*arasâ'm*], o kraut.

7. Dessen genusz von speise vernichte, der o fürst uns anfeindet, |
segne uns mit deiner kräften ; an genusz mach mich zum höchsten.

1. Der Feind raub nicht die Zehrung uns ;
du bist ja mächtig, überstark ;
Wer uns die Zehrung vorwegzehrt,
dem nimm, o Kraut, die Lebenskraft !
7. Den Vorrath, Indra, schlage dem
in Boden, der uns feindlich ist ;
Durch Machterweise sprich uns zu,
den reichsten Vorrath schenke mir !

These translations entirely miss the point of the hymn. It has nothing to do with provisions or granaries. It is rather a charm uttered by an intending disputant before entering upon a debate in the *sabhā* or *pariṣad*, the assembly of the village, and addressed to the *pāṭā*-plant. I render :

1. May the enemy not win the debate. Thou art mighty and overpowering. Overcome the debate of [each one] who debates against us. Render them stupid, O plant.

7. Overcome thou the debate of the one who is hostile to us, O Indra. Encourage us with thy might. Render me superior in dispute.

The general interpretation and this translation are suggested by the *Kāuṅcika-sūtra*, xxxviii. 17 ff. *Sūtra* 17 reads : *iyam vīrud iti madugham khādann aparājītāt pariṣadam āvrajati*, 'With the hymn, "This plant" [A V. i. 34], he approaches the assembly from the northeast, while chewing honey-plant.' The commentator *Dārila*, explains the purpose of the ceremony : *pūrvottare* koṇāt pariṣadam āgacchati : janasamūham jyeṣṭi* madhukam* bhakṣayan* āvrajane mantraḥ. . . . pratyarthajapa-doṣaṣamanam prāyaścittam*, 'He approaches the assembly from the northeast : namely, the eldest [chieftain] approaches the crowd, reciting the charm while approaching. This is a *prāyaścitta*-ceremony, which counteracts the harm arising from hostile whisperings [i. e. the recitation of hostile incantations].' The hymn i. 34 is employed because it contains the praise of the persuasive *madugha*.

The next passage, *Sūtra* 18 ff., rubricates our hymn ii. 27, cited above. 18. *nec chatrur iti pratiprācītam : 19. anvāha : 20. baddhānti : 21. mā-lāṁ saptapālācīm dhārayati*. The translation, along with the bracketed commentary, is as follows : 18. 'With the charm, "May the enemy not" [he approaches] the one against whom the debate is directed [from the northeast, while chewing *pāṭā*-root].' 19. He addresses with the charm [his opponent].' 20. 'He binds [the *pāṭā*-roots together].' 21. 'He carries a *pāṭā*-garland containing seven leaves.' *Dārila*'s words are : to 18, *pāṭāmūlāni khādann aparājītāt pratiprācītam āvrajati* : to 19, *prativādinam anvāha* ; to 21, *pāṭhā*-srajam parṇām* vibharti sarvasya dhāraṇasya bāhū bandhamantraliṅgāt*. For the last, cf. verse 3 of ii. 27.

From all this, it is perfectly clear that the rite is one which takes place

* I have starred words whose reading is evidently faulty.

in the *pariṣad* or communal assembly, and that the scholiast's *prativā-dinam*, 'opponent in dispute,' is a gloss to *pratiprācītam*. This last is accordingly a *quasi*-denominative participle from *pratiprāc*, 'debater-against' (Whitney, Grammar, 1176b), and means 'debated against.'

The word *prāc* occurs once in the Kāuṣika-text proper, xxxviii. 24, and with the same meaning, 'dispute.' The passage is: 23. *brahma jajñānam ity adhyāyān upākarīṣyann abhivyāhārayati*: 24. *prācam ākhyāsyān*: 25. *brahmodyanī vadiṣyān*. Dārila's comments are: to 23, *npākarmasu ṣiṣyān abhivyāhārayati sūktam*: *kalahaparihāra*doṣanā-ṣāt prāyaścittatvam*; to 24, *pratipraçnam kathayīṣyān sūktam abhivyā-hārayati*: . . . *prativādinō jayapanūcāt† prāyaścittatvam*; to 25, *veda-vākyavicāranḥ‡ kathayīṣyān pratyarthinā saha prativādinō japanūcāt prāyaścittatvam*.

The text, supplemented by the comment, may be paraphrased as follows: 'When the teacher is about to begin the reading of the Veda, he lets the pupils recite the hymn AV. iv. 1. When about to present to them a disputed question, he lets them recite the same hymn. Or when discussing with an opponent the meaning of Vedic sentences, he lets them recite the same hymn.'

After the presentation of communications was finished, a vote of thanks to the American Academy for the use of its Library was passed, and the Society adjourned, to meet in New York in October.

* Read *parihāsa*? † Read *japanūcāt*. ‡ See PW. under *mahāvāya*.

Proceedings at New York, October 28th and 29th, 1885.

THE Society met at 3 o'clock P. M. in Professor Short's lecture-room (no. 23), at Columbia College. The President, Professor Whitney, of Yale College, called the Society to order. As the Recording Secretary, Professor Toy, was absent, it was voted that the Corresponding Secretary, Professor Lanman, serve in his stead *pro tempore*.

The minutes of the May meeting having been read, and, after correction, approved, Professor Short announced the order of the present meeting. The Thursday morning session would begin at 10 o'clock in the Chapel; and for Wednesday evening, the members were invited to meet socially at the house of Mr. Cotheal. His invitation was accepted, with thanks.

On the part of the Directors, it was announced that the next meeting would be held at Boston, Mass., on the second Wednesday (the 12th day) of May, 1886, the Corresponding and Recording Secretaries to serve as Committee of Arrangements.

On recommendation of the Directors, the following gentlemen were elected Corporate Members :

- Mr. Bernard Drachman, of New York ;
- Prof. William R. Harper, of Morgan Park, Ill. ;
- Rev. Charles E. Mohldehnke, of New York ;
- Mr. Samuel B. Platner, of Cleveland, Ohio ;
- Mr. Herbert D. Ward, of Newark, N. J. ;
- Mr. Benjamin I. Wheeler, of Cambridge, Mass.

In a letter dated August 28, 1885, and received the day after the meeting, Mr. W. W. Rockhill writes from Peking as follows :

"I was fortunate enough last winter to make the acquaintance of two Tibetan Lamas, men tolerably well instructed for their class, and with them I studied for about three months, after which they left for Dolon-nor* in Mongolia. They were what Prejevalsky would call Tangtans, for they came from among the Tibetan tribes near the Koko-nor. They did not use or in fact know this name, and called themselves Tibetans or Amdoans, and their type is distinctly Tibetan, and similar to that of a number of Lhasa men whom I have also met here. The Tsaidam of Prejevalsky they say is a great salt-marsh waste; hence the name *Tsai*

* Dolon-nor is about 150 miles due north of Peking. Koko-nor is in the extreme NE. of Tibet, 36° N., 100° E. of Greenwich. Urga is in Mongolia, some 700 miles NW. of Peking, across the desert of Gobi.

'salty,' *hdam* 'plain.' The elder Lama had made the pilgrimage to Lhasa by the road followed by Huc and Gabet, which, notwithstanding the contrary statements of many writers, is continually used by Mongols and other northerners, who attach quite as much importance to a pilgrimage to Lhasa as Mohammedans do to one to Mecca.

"Talking to my Lamas about the Bon-pa (the supposed pre-Buddhist sect in Tibet), I showed them a Bon-pa sūtra—the one translated by Schiefner—and was told that it was perfectly received by Buddhists, who read it with as much edification and devotion as they do one of their own books; and so with all Bon-pa books, which, the Lama said, only contain an inferior system of doctrine. In fact, so far as I am aware, Lamas are in a general muddle about the tenets of their creed. They read *dharanis* and *mantras* of which they do not understand a word; and when the spirit moves them to anything else, it will be *Milaraspa*—they have listened to my reading of this work by the hour—or else some work on astrology.

"Tibetan and Mongol books on religion are very easily obtained here and at Urga, and are generally very cheap. A few months ago, however, I was asked by the Berlin Library to purchase a copy of the *Bkah-hgyur* and *Bstan-hgyur* (the Tripitaka). In a few days I found a Tibetan Lama who had been sent to Mongolia and here by the Tali Lama with books, etc. to sell (a very common practice of the Lhasa authorities, I believe), who had a copy in 326 volumes; but I could not get it for less than 2,000 taels, some \$2,600.

"One word about the Peking Oriental Society. It aims to get as correspondents all the missionaries scattered about in Mongolia and the Tibetan borders, as well as those nearer, to contribute some kind of notes on philology, zoology, geography, etc., and to bring to light much information on little-known countries which would otherwise be lost. Moreover, since Peking is the literary centre of China, and the most advantageous place for study in the Empire, it is hoped—and I think reasonably—that we may not only find recreation in the Society for ourselves, but may also help persons not residing in China who may desire information or books which they could not otherwise procure.

"In the coming spring, I expect to go with my wife to visit the site of Karakorum, west of Urga. It has only been visited by one European, and his report is unsatisfactory."

With reference to the American Arabic Bible, Prof. Hall reported further (see the Proceedings for May, 1885) as follows:

About the middle of June last, I received a letter from Dr. C. V. A. Van Dyck, dated May 17, 1885, in answer to inquiries respecting Dr. Eli Smith's manuscript translation of the New Testament into Arabic. I give a few extracts:

"All the manuscripts of the translation of the Arabic Bible were always carefully preserved, and not one of them has been lost or mislaid. As long as I had charge of the Mission Library, all were there, and kept in one of the book-cases. When the Library was removed to the Theological Seminary, under Mr. Dennis's care, the manuscripts

went with it. How any one could say at any time that any of them were lost, I cannot conceive, except it was from sheer ignorance. When the new building for the Theological Seminary was completed, the Library was removed thither.

“Some time last winter or early spring, Dennis told me that he had deposited all the manuscripts in tin cases, and that it would be desirable to have a statement drawn up, giving a history of the translation, to be deposited with them, etc. . . . I took the Mission records, and from them, and from my own knowledge of and connection with the work, I made out a history of the whole, from beginning to end, and had the tin cases and the manuscripts sent to my house, and examined them, and put my statement into one of them, together with other documents, such as proof-sheets and letters from Fleischer, Rödiger, and others, and also a history of the translations of the Bible into Arabic, in Arabic, which I made years ago for Mr. Calhoun’s *Murshid et-Talibin*, *مرشيد الطالبين*, ‘Scripture Helps.’ I repeat, not a line, not a word of what Dr. Smith did on the translation has been lost. All is carefully preserved, and always has been since I had anything to do with it.”

With reference to an expression (with others) repeated to Dr. Van Dyck that “Dr. Smith should have his full share in the honors of the noble service to God and man,” Dr. Van Dyck breaks out: “Who—who—who, in the name of all that is sacred, ever had the remotest thought or desire for anything else? . . . The expressions about Dr. Smith’s being in advance of the Mission on textual criticism are taken from my statement, and are quite true. The statement that the manuscripts left by Dr. Smith were found ‘invaluable’ is underlined in my statement, and so also that ‘but for this basis, the work would have been protracted much beyond what it was.’ . . . Also I say, ‘In those parts of the Old Testament where Dr. Smith had left a basis, Dr. Van Dyck [I writing in the third person] made use of it just as he had done in the New Testament.’ This is my statement of the fact in the document I drew up.”

Dr. Van Dyck adds other information, stating that it is substantially deposited with his statement in the Mission Library, but saying also that it is not sent for publication, and I therefore withhold it. It has, I may add, no interest for the general public, nor for any one outside of the Mission, or of those who have been more or less familiar with local matters in Beirut.

Comment is unnecessary: at least, further than to say that I am exceedingly glad to have my erroneous information corrected. Did I deem it called for as a proof of good faith, I might proceed to disclose the authority for each and every statement I made. But I presume that this is needless; and certainly those who were made the innocent channels of the error, before it reached me, need not be dragged before the public and forced to exonerate themselves.

Rev. W. Hayes Ward exhibited and described two seals with Phœnician inscriptions, of unknown locality, brought by him this year from Western Asia.

One is a small carnelian seal cylinder, with the inscription, in Phœnician letters, כנרת, in the field, with the representation of an officer receiving captives. The other is a conical carnelian seal, with elliptical section. The two sides are finely engraved with representations of a man worshipping before columnar altars, or the lion-headed god Nergal behind a man. The end represents the divine winged triad, with the worshiper kneeling beneath it, two columns one side, and the Phœnician inscription לשתער, the last letter being doubtful.

Professor Whitney made a brief statement respecting a recent edition of the Atharva-Veda, published in India (Bombay, 1884):

Professor Whitney said that, seeing a new Hindu edition of the Atharva-Veda advertised in Europe, he had sent for it; but he was rather amused, as well as disappointed, to find it simply a lithographed copy, page by page, line by line, note by note (except that the German words contained in the latter are left out), of the edition published by Professor Roth and himself in Germany, now nearly thirty years ago. Of course, the misprints and errors of the original are faithfully reproduced with the rest; probably there are no more new ones than were reasonably to be expected, the transcription seeming to be made in general with care (though there are, to be sure, two accent-signs omitted in the very first verse). There is nowhere in the work any intimation of its source, or of credit due to any one but the Hindu editor, Sewaklāl Karsandās. It is desirable by such a notice as this to put other possibly intending buyers on their guard.

Professor Hall also made a statement with reference to Prof. B. B. Warfield's translation of a section from the Abbé Martin's *Introduction à la Critique Textuelle du Nouveau Testament*, in the October "Hebraica;" showing how the Abbé Martin—and that translation, of course—had ignored certain arguments in favor of the existence, past if not present, of a Karkaphensian Syriac version of the Scriptures, or a portion thereof, and justifying Rosen and Forshall, J. S. Assemani, and others, in rendering a certain Syriac term as 'version.' As the substance of that oral statement has been sent to "Hebraica," in which it will doubtless soon appear, no abstract is here necessary.

Professor Hall then presented a communication on several newly acquired Syriac manuscripts, in the custody of the Union Theological Seminary in New York City. Circumstances of ownership forbid any public statement or description for the present, but the restriction will perhaps be removed in time for the next issue of the Proceedings.

Communications were then presented as follows:

1. Further Inscriptions from the Cesnola Collection in New York, by Prof. Isaac H. Hall, of New York.

When in Cyprus in October, 1875, I saw, amongst the Curium treasure, a pile of corroded silver bowls at least a foot and a half high. Most of them crumbled at the touch, and only a small portion could be

preserved by the means then at hand in Cyprus. Of the masses brought to New York, some portions, and some entire bowls, have been separated and cleaned; and all of them are of the highest interest. One, nearly entire, presents, in *repoussé*, the same myth or legend as the famous Palæstrina bowl, described first, I believe, by Ganneau, and last by Perrot and Chipiez. The myth is differently rendered in this Curium bowl, but the incidents represented in the successive scenes are the same, and as easily recognized as different pictorial representations of Adam and Eve, or Jonah and the whale.

Another, of which fragments only remain, has a Cypriote inscription, in characters nearly $\frac{1}{8}$ inch high, sharply cut, but much injured by corrosion. The inscription is on the concave surface of the bowl, and reads from right to left; and what remains of it is about three inches long. The characters are

ti. we. i. te. mi. to. se. | e. mi. | to. pa. si. le. wo. se. | to. . . .

Traces of other characters are there, but not so legible that I can venture to supply a reading of them. What is plain, as above, reads as follows: *Διθεθέμιδος ἡμί τῷ βασιλέφω τῷ . . .* 'I am of Diweithemis, the king of . . .' Other inscriptions of the same king were found at Gologoi and in its vicinity, which seem to show that he was a king of the region. I have sometimes thought that the name Tremithus was to be read in the obscured portion, but I am not yet satisfied. The inscription is important as giving the name of a second extra-territorial king who paid homage at the Curium shrine; Etevander, the king of Paphos, being the other. The latter's inscriptions, on the gold armlets, read from left to right, like most of the inscriptions from the western part of the island. These, like others from the East, read from right to left. The style of the characters is old.

Another bowl, practically entire, is of the Phœnico-Egyptian Cypriote art, and contains a most beautiful and unique engraved decoration, which deserves a complete pictorial illustration and description. One of the decorated zones consists of figures of deities and other objects, and bears a Cypriote inscription in two lines, sharply cut. This bowl is 6 inches in diameter, and $1\frac{1}{4}$ inches deep. The inscription is perhaps the smallest, in space and size of character, yet discovered. The whole space occupied is only $\frac{1}{2} \times \frac{3}{16}$ inch in dimension, and the characters are rather under $\frac{1}{16}$ inch high. The shape of the characters is archaic, and that of some of them unique. It seems to read from right to left. At the end of the second line there seems to me to be a nearly obliterated *mi.*, which I bracket. The inscription is as follows:

*e. pi. o. ro. si. e.
a. pi. a. la. e. [mi.]*

The first line is probably a proper name in the genitive, and that of the offerer. The second line seems to be *ἄ φιάλα ἡ[μι]*. That is, 'I am the bowl of'—the person represented by the proper name.

Other small Cypriote inscriptions keep turning up in the Metropolitan Museum from time to time, of which I cannot now give a full account. One is incised on the bottom of a vase of red pottery, marked with some

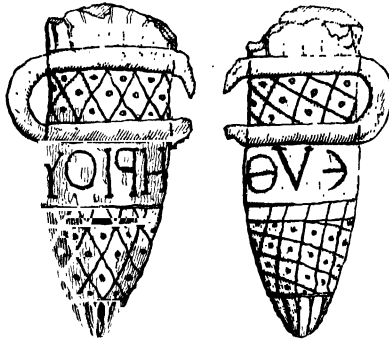
blunt tool before baking. It is merely one character, *ti.*, $\frac{3}{16}$ inch high : doubtless the maker's mark. The vase is 6 inches high, 3 inches of it being neck, which is about 1 inch in diameter ; and it has a handle on one side of the neck, reaching nearly from the body to the top. The body spreads out rather flattish from the neck, to a diameter of $4\frac{1}{4}$ inches, and curves around to the base, which last is formed by a ring $2\frac{1}{8}$ inches in diameter. Around the body, on the flattish part below the neck, is a rude wreath, incised, or scratched, after baking.

Another object contains a Greek inscription, cast, with the rest of the pattern, on a little red ointment bottle, shaped like an amphora. The object was found in a tomb at Citium. The bottle is $1\frac{1}{2}$ inch high ; its section is that of an ellipse pointed at the extremities of the major axis (the seam made by the sides of the mould is sharp on each side), which last is $\frac{1}{4}$ inch long at its greatest extent, exclusive of the handles. Below the handles, in relief, on the two sides, are the letters, about $\frac{1}{4}$ inch high. In the mould they read right, but on the bottle they are reversed. They are

ΕΥΘ | ΗΠΙΟΥ

or,

'Of Eutherius.'



The above engravings, supplied by the courtesy of Rufus C. Hartman, Esq., of Philadelphia, show the two sides of the bottle, with its decoration, in the exact size of the original. The decoration, as well as the inscription, is in relief.

2. On a Syriac Table for finding Easter in years of the Seleucid Era, by Prof. Hall.

The Williams MS. of the Syriac Acts and Epistles, noticed briefly in the "Proceedings" of October, 1884 (Journal, vol. xi., p. ccxx etc.), contains, on the first and second leaves now present, some tables for finding Easter, adapted to the Seleucid era and mode of reckoning. With a key, they are very easy to use ; but, though I could easily test the correctness of many of the numbers, I could not find the key to make the tables available. It is probable that the first leaf of the MS., now missing, contained such a key ; since only in that case would the tables have been of use to an ordinary Syrian ecclesiastic. Dr. C. H. F. Peters, director of the Litchfield Observatory of Hamilton College, who

is likewise a classical and Oriental scholar of high attainments, very kindly complied with my request to discover the key; and the solution here given is to be credited to him, though put in my own language. The supplying of a few obliterated words, and the correction of sundry errors of the scribe, are to be attributed partly to him and partly to myself. He worked from a copy of the tables furnished by me, turned into our ordinary numbers. The tables have the numbers in numerals expressed by Syriac letters, sometimes obscurely written, but generally legible. Several numbers on the edges are either obliterated or worn away with the edge of the paper, but were easily supplied. The errors in the body of the first table were not very difficult to correct. A list of the obscured and obliterated and erroneous numbers will be given further on. The original order of the tables, with the Golden Numbers running from right to left in the first tables, and the months running from right to left in the second and third tables, is here kept. The order arises, of course, from the Syriac mode of writing from right to left.

TABLE NO. 1.

| | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | | | |
|---|----|-------|----|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|----|
| 1 | 33 | 61 | 19 | 47 | 5 | 33 | 47 | 19 | 33 | 61 | 19 | 47 | 61 | 19 | 47 | 5 | 33 | 47 | 19 | 1 | | |
| 2 | 45 | 59 | 17 | 45 | 3 | 31 | 45 | 17 | 31 | 59 | 17 | 45 | 59 | 31 | 45 | 3 | 31 | 59 | 17 | 2 | | |
| 3 | 42 | 56 | 28 | 42 | 14 | 28 | 56 | 14 | 42 | 56 | 14 | 42 | 70 | 28 | 42 | 14 | 28 | 56 | 14 | 3 | | |
| 5 | 39 | 67 | 25 | 39 | 11 | 25 | 53 | 11 | 39 | 53 | 25 | 39 | 67 | 25 | 53 | 11 | 25 | 53 | 11 | 4 | | |
| 6 | 37 | 65 | 23 | 51 | 9 | 23 | 51 | 9 | 37 | 51 | 23 | 37 | 65 | 23 | 51 | 9 | 37 | 51 | 9 | 5 | | |
| 7 | 35 | 63 | 21 | 49 | 7 | 35 | 49 | 7 | 35 | 63 | 21 | 35 | 63 | 21 | 49 | 7 | 35 | 49 | 21 | 6 | | |
| 1 | 46 | 60 | 18 | 46 | 4 | 32 | 46 | 18 | 32 | 60 | 18 | 46 | 60 | 32 | 46 | 4 | 32 | 60 | 18 | 7 | | |
| 3 | 43 | 57 | 29 | 43 | 1 | 29 | 57 | 15 | 29 | 57 | 15 | 43 | 57 | 29 | 43 | 15 | 29 | 57 | 15 | 8 | | |
| 4 | 41 | 55 | 27 | 41 | 13 | 27 | 55 | 13 | 41 | 55 | 13 | 41 | 69 | 27 | 41 | 13 | 27 | 55 | 13 | 9 | | |
| 5 | 39 | 67 | 25 | 39 | 11 | 25 | 53 | 11 | 39 | 53 | 25 | 39 | 67 | 25 | 53 | 11 | 25 | 53 | 11 | 10 | | |
| 6 | 36 | 64 | 22 | 50 | 8 | 36 | 50 | 8 | 36 | 64 | 22 | 36 | 64 | 22 | 50 | 8 | 36 | 50 | 22 | 11 | | |
| 1 | 33 | 61 | 19 | 47 | 5 | 33 | 47 | 19 | 33 | 61 | 19 | 47 | 61 | 19 | 47 | 5 | 33 | 47 | 19 | 12 | | |
| 2 | 45 | 59 | 17 | 45 | 3 | 31 | 45 | 17 | 31 | 59 | 17 | 45 | 59 | 31 | 45 | 3 | 31 | 59 | 17 | 13 | | |
| 3 | 43 | 57 | 29 | 43 | 1 | 29 | 57 | 15 | 29 | 57 | 15 | 43 | 57 | 29 | 43 | 15 | 29 | 57 | 15 | 14 | | |
| 4 | 40 | 68 | 26 | 40 | 12 | 26 | 54 | 12 | 40 | 54 | 26 | 40 | 68 | 26 | 54 | 12 | 26 | 54 | 12 | 15 | | |
| 6 | 37 | 65 | 23 | 51 | 9 | 23 | 51 | 9 | 37 | 51 | 23 | 37 | 65 | 23 | 51 | 9 | 37 | 51 | 9 | 16 | | |
| 7 | 35 | 63 | 21 | 49 | 7 | 35 | 49 | 7 | 35 | 63 | 21 | 35 | 63 | 21 | 49 | 7 | 35 | 49 | 21 | 17 | | |
| 1 | 33 | 61 | 19 | 47 | 5 | 33 | 47 | 19 | 33 | 61 | 19 | 47 | 61 | 19 | 47 | 5 | 33 | 47 | 19 | 18 | | |
| 2 | 44 | 58 | 30 | 44 | 2 | 30 | 58 | 16 | 30 | 58 | 16 | 44 | 58 | 30 | 44 | 16 | 30 | 58 | 16 | 19 | | |
| 4 | 41 | 55 | 27 | 41 | 13 | 27 | 55 | 13 | 41 | 55 | 13 | 41 | 69 | 27 | 41 | 13 | 27 | 55 | 13 | 20 | | |
| 5 | 39 | 67 | 25 | 39 | 11 | 25 | 53 | 11 | 39 | 53 | 25 | 39 | 67 | 25 | 53 | 11 | 25 | 53 | 11 | 21 | | |
| 6 | 37 | 65 | 23 | 51 | 9 | 23 | 51 | 9 | 37 | 51 | 23 | 37 | 65 | 23 | 51 | 9 | 37 | 51 | 9 | 22 | | |
| 7 | 34 | 62 | 20 | 48 | 6 | 34 | 48 | 20 | 34 | 62 | 20 | 48 | 62 | 20 | 48 | 6 | 34 | 48 | 20 | 23 | | |
| 2 | 45 | 59 | 17 | 45 | 3 | 31 | 45 | 17 | 31 | 59 | 17 | 45 | 59 | 31 | 45 | 3 | 31 | 59 | 17 | 24 | | |
| 3 | 43 | 57 | 29 | 43 | 1 | 29 | 57 | 15 | 29 | 57 | 15 | 43 | 57 | 29 | 43 | 15 | 29 | 57 | 15 | 25 | | |
| 4 | 41 | 55 | 27 | 41 | 13 | 27 | 55 | 13 | 41 | 55 | 13 | 41 | 69 | 27 | 41 | 13 | 27 | 55 | 13 | 26 | | |
| 5 | 38 | 66 | 24 | 52 | 10 | 24 | 52 | 10 | 38 | 52 | 24 | 38 | 66 | 24 | 52 | 10 | 38 | 52 | 10 | 27 | | |
| 7 | 35 | 63 | 21 | 49 | 7 | 35 | 49 | 7 | 35 | 63 | 21 | 35 | 63 | 21 | 49 | 7 | 35 | 49 | 21 | 28 | | |
| | 6 | Nisan | 17 | 29 | 9 | 21 | 1 | 12 | 4 | Nisan | 15 | 27 | 7 | Nisan | 18 | 30 | 10 | 22 | 2 | Nisan | 13 | 25 |
| | 3 | Nisan | 17 | 29 | 9 | 21 | 1 | 12 | 4 | Nisan | 15 | 27 | 7 | Nisan | 18 | 30 | 10 | 22 | 2 | Nisan | 13 | 25 |
| | 5 | Adar | 29 | 9 | 21 | 1 | 12 | 4 | Nisan | 15 | 27 | 7 | Nisan | 18 | 30 | 10 | 22 | 2 | Nisan | 13 | 25 | |
| | 2 | Nisan | 9 | 21 | 1 | 12 | 4 | Nisan | 15 | 27 | 7 | Nisan | 18 | 30 | 10 | 22 | 2 | Nisan | 13 | 25 | | |
| | 4 | Adar | 21 | 1 | 12 | 4 | Nisan | 15 | 27 | 7 | Nisan | 18 | 30 | 10 | 22 | 2 | Nisan | 13 | 25 | | | |
| | 1 | Nisan | 1 | 12 | 4 | Nisan | 15 | 27 | 7 | Nisan | 18 | 30 | 10 | 22 | 2 | Nisan | 13 | 25 | | | | |
| | 5 | Nisan | 12 | 4 | Nisan | 15 | 27 | 7 | Nisan | 18 | 30 | 10 | 22 | 2 | Nisan | 13 | 25 | | | | | |
| | 7 | Adar | 24 | 4 | Nisan | 15 | 27 | 7 | Nisan | 18 | 30 | 10 | 22 | 2 | Nisan | 13 | 25 | | | | | |
| | 4 | Nisan | 4 | 1 | Nisan | 15 | 27 | 7 | Nisan | 18 | 30 | 10 | 22 | 2 | Nisan | 13 | 25 | | | | | |
| | 1 | Nisan | 15 | 27 | 7 | Nisan | 18 | 30 | 10 | 22 | 2 | Nisan | 13 | 25 | | | | | | | | |
| | 3 | Adar | 27 | 7 | Nisan | 18 | 30 | 10 | 22 | 2 | Nisan | 13 | 25 | | | | | | | | | |
| | 7 | Nisan | 7 | 4 | Nisan | 18 | 30 | 10 | 22 | 2 | Nisan | 13 | 25 | | | | | | | | | |
| | 4 | Nisan | 18 | 30 | 10 | 22 | 2 | Nisan | 13 | 25 | | | | | | | | | | | | |
| | 6 | Adar | 30 | 10 | 22 | 2 | Nisan | 13 | 25 | | | | | | | | | | | | | |
| | 3 | Nisan | 10 | 22 | 2 | Nisan | 13 | 25 | | | | | | | | | | | | | | |
| | 5 | Adar | 22 | 2 | Nisan | 13 | 25 | | | | | | | | | | | | | | | |
| | 2 | Nisan | 2 | 2 | Nisan | 13 | 25 | | | | | | | | | | | | | | | |
| | 6 | Nisan | 13 | 25 | | | | | | | | | | | | | | | | | | |
| | 1 | Adar | 25 | | | | | | | | | | | | | | | | | | | |

TABLE NO. 2.*

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|---|---|---|---|---|---|---|
| Number of the | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Foundation of | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | | | | | | |
| Trishrin I. | 4 | 3 | 2 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | | | | | | | | |
| Trishrin II. | 1 | 2 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | | | | | | | | | |
| Canûn I. | 2 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | | | | | | | | |
| Canûn II. | 3 | 2 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | | | | | | | |
| Shobâat. | 5 | 2 | 2 | 6 | 4 | 1 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | | | | | | | |
| Leap Years. | 1 | 7 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | | | | | | |
| Amâr. | 7 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | | | | | | |
| Nisan. | 3 | 7 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | | | | | | |
| Iyyar. | 6 | 4 | 1 | 5 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | | | | | | |
| Hezirân. | 2 | 6 | 3 | 1 | 5 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | | | | | |
| Tammuz. | 4 | 2 | 6 | 3 | 1 | 5 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | | | | |
| Ab. | 7 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | | | |
| Ibl. | 3 | 7 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | | |
| Fast of Nineven month in which
brated. | 13 | 3 | 7 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | |
| Great Fast, i
in which cel
ned | 2 | 3 | 7 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | |
| Easter and m. n
th
which celebrated. | 22 | 3 | 7 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | |
| Ascens on, and its month. | 80 | 22 | 3 | 7 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 |
| Pentecost, and month in
which celebrated. | 30 | 22 | 3 | 7 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 |
| Feast of the Nativity. | 10 | 22 | 3 | 7 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 |
| Feast of Epiphany. | 5 | 22 | 3 | 7 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 |
| Of the Cross. | 3 | 22 | 3 | 7 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 | 1 | 4 | 3 | 2 |

* In tables Nos. 2 and 3, c in the Leap year column (which is auxiliary to the Shobât column) is the initial for the Syriac word for 'Leap year.' In the column for the movable feasts and fasts, C. stands for Canûn II., or January; Sh. for Shosbat, or February; A. for Adar, or March; N. for Nisan, or April; I. for Iyyar, or May; H. for Hezirân, or June. In the MS. the whole name is written out at each number. Here, the initial is given only at the first number (and the last when the month changes), and is to be understood with the others.

TABLE No. 3.

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----|---|----|----|----|----|----|-----|----|-----|----|----|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Number of the Years..... | 6 | 6 | 1 | I. | 27 | I. | 17 | N. | 8 | Sh. | 20 | C. | 30 | 7 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 1 | 5 | 2 | 7 | 4 | 7 | C | 4 | 1 | 5 | 3 | 7 | 6 | 3 | 7 | 6 | 3 | 8 | | | | | | |
| Foundation of the Years..... | 5 | 5 | 6 | 7 | 28 | 18 | 9 | 20 | 30 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | | | |
| Tishrin I..... | 4 | 5 | 7 | 29 | 19 | 10 | 21 | 31 | 6 | 3 | 7 | 5 | 2 | 6 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 6 | 3 | 5 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 5 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 5 | 2 | 6 | 3 | 7 |
| Tishrin II..... | 4 | 4 | 6 | 29 | 19 | 10 | 22 | C. | 31 | 5 | 2 | 6 | 4 | 1 | 6 | 3 | 5 | 6 | 3 | 7 | 5 | 2 | 4 | 1 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 5 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 5 | 2 | 6 | 3 | 7 |
| Gandh I..... | 3 | 3 | 5 | 30 | 20 | 11 | 22 | Sh. | 1 | 4 | 1 | 5 | 3 | 7 | 5 | 2 | 4 | 1 | 5 | 3 | 7 | 5 | 2 | 4 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 5 | 2 | 4 | 1 | 5 | 3 | 7 | 5 | 2 | 4 | 1 | 5 | 3 | 7 |
| Gandh II..... | 3 | 3 | 5 | 30 | 20 | 11 | 23 | 2 | 4 | 1 | 5 | 3 | 7 | 5 | 2 | 4 | 1 | 5 | 3 | 7 | 5 | 2 | 4 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 5 | 2 | 4 | 1 | 5 | 3 | 7 | 5 | 2 | 4 | 1 | 5 | 3 | 7 | |
| Shobat..... | 2 | 2 | 4 | I. | 31 | 21 | 12 | 3 | 2 | 6 | 3 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 |
| Leap Years..... | 1 | 2 | 4 | I. | 31 | 21 | 12 | 24 | 3 | 3 | 7 | 4 | 2 | 6 | 3 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | |
| Adar..... | 1 | 1 | 3 | H. | 1 | 22 | 13 | 24 | 3 | 2 | 6 | 3 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 |
| Nisan..... | 7 | 7 | 2 | 2 | 23 | 14 | 25 | 4 | 2 | 6 | 3 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | |
| Iyyar..... | 6 | 6 | 1 | 3 | 24 | 15 | 26 | 5 | 7 | 4 | 1 | 6 | 3 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | |
| Hoziwan..... | 5 | 5 | 7 | 2 | 25 | 16 | 27 | 6 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 2 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | |
| Tammuz..... | 7 | 7 | 2 | 3 | 26 | 17 | 28 | 7 | 5 | 2 | 6 | 4 | 1 | 6 | 3 | 5 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | | |
| Ab..... | 8 | 8 | 4 | 6 | 27 | 18 | 29 | 8 | 5 | 2 | 6 | 4 | 1 | 6 | 3 | 5 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | | |
| Hil..... | 8 | 4 | 6 | 6 | 27 | 18 | 1 | 9 | 4 | 1 | 5 | 3 | 7 | 5 | 2 | 4 | 1 | 5 | 3 | 7 | 5 | 2 | 4 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | | |
| Fast of Nineveh, and month in which celebrated..... | 9 | 3 | 5 | 7 | 28 | 19 | 2 | 9 | 3 | 7 | 4 | 2 | 6 | 4 | 1 | 6 | 3 | 7 | 5 | 2 | 4 | 1 | 3 | 7 | 4 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | | | |
| Great Fast, and month in which celebrated..... | 10 | 3 | 7 | 4 | 28 | 19 | 2 | 10 | 3 | 7 | 4 | 2 | 6 | 4 | 1 | 3 | 7 | 4 | 1 | 3 | 7 | 4 | 1 | 3 | 7 | 4 | 1 | 3 | 7 | 4 | 1 | 3 | 7 | 4 | 1 | 3 | 7 | 4 | 1 | 3 | 7 | 4 | 1 | 3 | 7 | | |
| Easter, and month in which celebrated..... | 10 | 2 | 6 | 3 | 29 | 20 | 3 | 10 | 2 | 6 | 3 | 1 | 5 | 3 | 7 | 2 | 6 | 3 | 7 | 2 | 6 | 3 | 7 | 2 | 6 | 3 | 7 | 2 | 6 | 3 | 7 | 2 | 6 | 3 | 7 | 2 | 6 | 3 | 7 | 2 | 6 | 3 | 7 | 2 | 6 | | |
| Ascension, and its month..... | 11 | 1 | 5 | 2 | 30 | 21 | 4 | 11 | 1 | 5 | 2 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | | |
| Pentecost, and month in which celebrated..... | 12 | 7 | 9 | 30 | 21 | 4 | 5 | 12 | 1 | 5 | 2 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | | |
| Feast of the Nativity..... | 12 | 7 | 9 | 30 | 21 | 4 | 5 | 12 | 7 | 4 | 1 | 6 | 3 | 1 | 5 | 7 | 4 | 1 | 5 | 3 | 7 | 4 | 1 | 5 | 7 | 4 | 1 | 5 | 3 | 7 | 4 | 1 | 5 | 3 | 7 | 4 | 1 | 5 | 3 | 7 | 4 | 1 | 5 | 3 | | | |
| Feast of Epiphany..... | 13 | 2 | 24 | 2 | 24 | 7 | 14 | 13 | 6 | 3 | 7 | 5 | 2 | 7 | 4 | 6 | 3 | 7 | 4 | 6 | 3 | 7 | 4 | 6 | 3 | 7 | 4 | 6 | 3 | 7 | 4 | 6 | 3 | 7 | 4 | 6 | 3 | 7 | 4 | 6 | 3 | 7 | 4 | 6 | | | |
| Of the Cross..... | 13 | 3 | 25 | 8 | 15 | 4 | 1 | 15 | 4 | 1 | 5 | 3 | 7 | 5 | 2 | 4 | 1 | 5 | 3 | 7 | 5 | 2 | 4 | 1 | 5 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | 6 | 3 | 7 | 4 | 2 | | | |

At the top of the first table is written, in Carshun, "And this is the cycle of the Moon;" also, in Arabic, "And this is called the cycle of the Moon, and this is the computation written from both of them." At the right hand side is written, in Carshun, "This other column (or, series) is that called the cycle of the Sun." Below the little auxiliary table are remnants of a Carshun title, but they are too far gone to allow anything to be read. Where, in the last column but one to the left, the letter C occurs, the Syriac has a *kaf*, the initial letter for the word for leap year. The same remark applies to the C in one column of the second and third tables. The second and third tables, it may be remarked in advance, are only the first and second parts of one and the same table, which was too extensive to be put on a single page of the MS.

In these tables the following are the corrections: First table, the left hand column is partly obliterated, so as to require more or less absolute restoration for the twelve lower squares. In the third column from the left, 7th square from bottom, the 37 was obliterated. In the fourth column, 2d square from bottom, the 66 was obliterated. In the same column, next to top, the 61 was 47 in the MS., doubtless an easy error in copying an older table. In the fifth column from the left, 11th number from bottom, the 19 replaces the erroneous 17 of the MS. In 13th column from the left, 6th number from bottom, the 20 replaces the erroneous 55 of the MS. In the horizontal line twelfth from bottom, the scribe committed at least eleven errors, but corrected them himself. There are traces of corrected errors in nearly all the squares of this horizontal line, but the eleven are the only ones where it is still possible to read the erased number. The errors all consisted in writing the numbers one square too far to the right. In the small auxiliary table, the top 6 in the first row to the left was wholly obliterated, and was supplied by Dr. Peters. Besides these matters, the writing was just so hasty in spots that it was doubtful whether the reading was 3 or 80, 11 or 17, 3 or 30 or 70, 2 or 20, and so on: as any one can imagine by turning these figures into Jacobite numerals, with a little Estrangela mixed. In the second table, the right hand column has lost nearly all the numbers below 11, though a few are legible. In the third table, in the left hand column, from the upper 6 near the middle of the column to the first 1 below it, the numbers are about two thirds obliterated; below that portion, all is obliterated, with nearly as much in the next column. In columns 4-9 from the left, the name of the month is repeated with each number. In column 7 from the left, the scribe had kept on repeating "Shobat" by mistake, up to 31, but he corrected it himself.

The tables are diversified with red ink so as to make them easier to use, but it is not worth while to specify the details of the rubrication.

The following are, in substance, Dr. Peters's notes on the tables (the phraseology being changed only as required by the rest of the matter of this communication):

The three tables serve to find the day of Easter (and hence of the other feasts depending upon Easter) for any year of the Seleucidian era; and, as is seen from the small table at the bottom of No. 1, they follow strictly the rules of the Alexandrian Easter canon, putting the vernal equinox invariably on the 21 Adar (March), and employing the cycles of 19 and 28 years. These form the arguments for the first table, in which the first line (on top) indicates the year of the lunar cycle; the first column (to the right), that of the solar cycle. The numbers of this latter, however, are different from those of the Julian period. In fact, the beginning of the solar cycle can be put arbitrarily; and we find that here it is made to begin with the 1st year of the era. But the years of the lunar cycle (in the Latin church called the Golden Numbers), upon which the full moon of Easter depends, are of course the same, as the day for celebrating Easter was established by the same rule. Only, when we reduce a year of the Christian era, *A*, by the usual addition of 312 to the year *S* of the Seleucidian era, we ought not to forget that the year *S* begins

on the 1st October of the year A . Easter of the year A , therefore, coincides with Easter of the year $S-1$ in the other era; and the Golden Number and the solar cycle are to be computed for the year $S-1$, in order to find, by means of these tables, the date of Easter identical with that derived by the common prescriptions.

The computation, then, is as follows: 1. Divide the Seleucidian year a by 28; the remainder will be the solar cycle as here understood. In algebraical form, $a=28n+r$; and with r we are to enter the right hand column. 2. Add 12 to the Seleucidian year, and divide the sum by 19; the remainder will be the Golden Number. In algebraical form, $a+12=19m+g$; and with g we are to enter the top line.

What the numbers, from 1 to 70, that are placed in the body of the table, signify, we see from the tables No. 2 and No. 3. They are nothing but ordinal numbers for the 35 days upon which it is possible for Easter to fall; beginning to count from the earliest date, 22 Adar, and ending with the latest, 25 Nisan. The numbers are counted in one continuous series for common and leap years, and in such a way that the odd numbers correspond to the common, the even numbers to the leap years. Thus there are twice 35, or 70 numbers. The heading "Number of the Years" of column 1, in tables 2 and 3, is not quite proper. These 70 numbers now are distributed in the $19 \times 28 = 532$ squares, perhaps from an actually computed Easter canon for 532 years (similar to those of Beda and Victorius). Since there are 3 times as many common years as there are leap years in this cycle of 532 years, it follows that the odd numbers appear 3 times as often in the table as the even numbers. But more, as can be shown mathematically, in the 28 years ("Solar Cycle"), of the lines for the odd numbers, there must always be found three and three identical: This remark gives a good check as to their correctness. Thus:

| | |
|---------------|---------------|
| Line 1=12=18; | Line 6=17=28; |
| " 2=13=24; | " 8=14=25; |
| " 4=10=21; | " 9=20=26. |
| " 5=16=22; | |

The lines containing even numbers appear only once; they are those for the leap years: 3, 7, 11, 15, 19, 23, 27.

The last column (to the left) is the "Character" of the year in the Solar Cycle ("Foundation of the years" in column 2 of tables 2 and 3), upon which depend the days of the week. In leap years the Character is increased by a unit after Shobat; and between it and the Dominical Letter exists this relation: that the sum of the Dominical Letter for the year A of the Christian era (counting A, B, C, . . . G as 1, 2, 3, . . . 7) and the Character of the Seleucidian year $S-1$ (using A and S in the meaning as above explained) is always = 7.

In the table No. 2 (of which No. 3 is the continuation), the third column gives the week day for the 1st of Tishrîn I. (October), or the *medchal* (مدخل) of the year,—denoting Sunday by 1, Monday by 2, . . . Saturday, 7. Since the *medchal* is by one unit greater than the character, it appears that the first day of the era was a Monday. To find

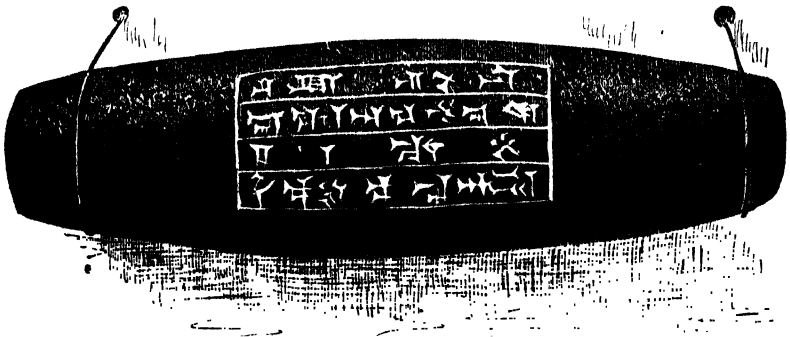
directly the *medchal* for any year *S*, Ulugh Beg gives the following rule: Divide *S* by 28, and to what remains add one quarter (not minding the remainder of this last division) and 1; from this sum take away as many times 7 as can be done; and what remains is the *medchal*. For example, divide 1782 (the Seleucid year in which the MS. is dated) by 28; it goes 63 times, and there remains 18. Divide 18 by 4, which goes 4 times; add therefore $18 + 4 + 1 = 23$; take therefrom $3 \times 7 = 21$, and the *medchal* is 2—the Seleucid year 1782 began with a Monday.

The following columns in tables 2 and 3 show the week days for the 1st of each month—the *medāchyl* for the months; the computing of which from the *medchal* of the year needs no explanation. At last follow the dates of the feasts in the corresponding year.

The small table below the first one gives the Easter Limits (*terminos paschales*) for the various years of the lunar cycle, with their "concurrent numbers" in the column to the left. Beginning with the 25 Adar, for the 1st year of the cycle, are counted forwards either 354 or 384 days (6 months of 30 and 6 of 29 days, with sometimes an additional month of 30 days) until the 6 Nisan, for the 19th year. Then comes the *saltus lunæ*: i. e. only 353 days are counted, in order to return again to the 25 Adar. The obliterated date must be Nisan 6 (not 5), in accordance with the custom of the Alexandrians in placing the *saltus lunæ*. Dionysius has April 5, since he begins the count (of 354 etc.) from that date, not from the 25 March.

3. On an inscribed Babylonian Weight, by Rev. William Hayes Ward, of New York City.

Among the objects brought by the Wolfe Expedition from Babylonia was an elongated barrel-shaped weight (see figure) of green basalt, 10.7 centimeters long, 2.7 centimeters thick in the middle, and 1.4 centi-



meters thick at the ends. It weighs 164.8 grams (2535.7 grains). On it is the following four-line inscription:

- (1) $\frac{1}{2}$ *tu gi-na*
- (2) *E-gal* D. P. *Nabu-sum-esir*
- (3) *habal* D. P. *Da-lat* (*Da-mat* etc.)
- (4) D. P. *Pa-te-is-si Marduk*

which must be translated :

- (1) One third of a standard *tu* (shekel).
- (2) Palace of Nabu-sum-esir.
- (3) Son of Dalat (Damat etc.).
- (4) Patesi of Marduk.

This being one third of a *tu*, or shekel, we have 492.9 grams as the weight of the unit shekel. But the shekel has a much smaller weight. The mina, however, according to the data given by the bronze lions and stone ducks found mostly by Mr. Layard, varies from 458 to 505 grams for the smaller mina—the large mina being twice as much. The shekel, being the sixtieth part of a mina, would weigh 8.4 grams. Our weight, then, is a third of a mina, although the inscription makes it the third of a shekel, through a blunder of the scribe. Indeed, it contains very nearly twenty shekels. The reading “one third of a shekel” is vouched for to me by Mr. Pinches.

I will mention that I saw in the possession of a gentleman in Babylonia another weight of precisely the same sort as this, having on it an inscription in two lines of which the first line reads :

- (1) $\frac{1}{2}$ *ma-na gi-na*

which must be translated :

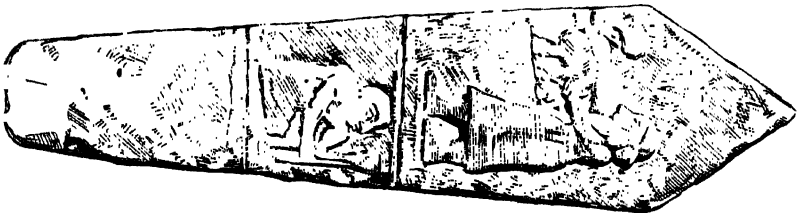
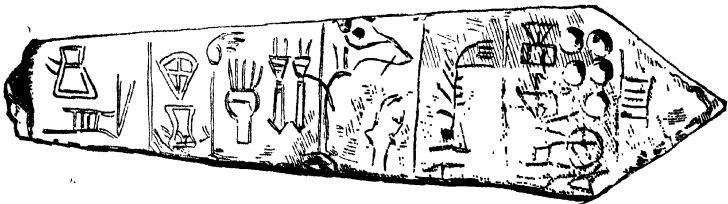
- (1) One half of a standard mina.

The weight, unfortunately, I have not obtained. It appears to be in perfect preservation.

The expression “patesi of Marduk” must indicate some office of high rank in the temple service of the god, corresponding to the same office in cities, in connection with which the title generally occurs.

4. On two stone objects with Archaic Cuneiform Hieroglyphic writing, by Rev. Dr. Ward.

Among the objects seen by me in Babylonia were two of a thin greenish stone, belonging to a European gentleman, Dr. A. Blau, of which I was allowed to take photographs. Their shape and the figures on them are given in the photographs, which are not much reduced. They are said to have been obtained near Warka. It will be seen that the figures are of the most archaic style of art, resembling much those found by M. de Sarzec in Tello. Most remarkable, however, is the writing, which it will be seen has not yet passed out of the stage of hieroglyphics, and which is much more archaic than that on the back of the Tello statues. The wider of the two, which seems to be a sort of stone knife, contains on one side fourteen vertical lines in two horizontal registers, and on the other side two lines separated by the line dividing the registers. The other object contains writing only on one side, in six (or seven) vertical lines. Among the hieroglyphic figures delineated may be recognized the human head and neck, the bird, the serpent, the fish, and the hand. The figures always turn to the right, indicating that we do not have to do with a *boustrophedon* writing. The writing is probably vertical, as in Chinese, a fact to be commended to those who, like M. Terrien de Lacouperie, are looking for evidence that the Chinese and the old



Babylonian languages were connected. There seems to be evidence indicating that in passing from the vertical to the horizontal writing the characters were turned over on their side.

5. On some Avestan superstitions and their parallels elsewhere, by Mr. A. V. Williams Jackson, of Columbia College, New York City.

This paper discussed 1. the superstition of the ancient Iranians concerning the cock, 2. the belief that the abode of the evil spirits was in the north, and 3. the usages with reference to the cuttings of the hair and the parings of the nails, and noted a few parallels among other peoples.

1. There are several passages in the Avesta relating to the cock. One, which we will call "passage *a*," is in the eighteenth Fargard of the Vendidad, and includes the last two pādas of § 15 and all of § 16. Passage *b* is in the same Fargard, is precisely identical with *a*, and includes the last two pādas of § 23 and all of § 24. Passage *c* includes §§ 41 and 42 of Yasht xxii.

Passage *a* I give, following the metrical reconstruction of Professor Geldner, *Studien zum Avesta*, i. p. 140, except at § 16 c. Passage *c* I give with my own metrical reconstruction, and for convenience by the side of *a*.

Passage *a*. Vd. xviii. 15, 16=23, 24.

Passage *c*. Yt. xxii. 41, 42.

[āaṭ] hō mareghō vācim baraiti
 upa ushāoñhem yām sūrām :
 16. usehištata mashyāka
 staota ashem yaṭ vahištem
 nista daēva. dvaraitē vō
 būshyāsta dareghōgava
 hā vīspem ahūm astvantem
 hakaṭ raocāñhām fraghrātō
 [nī] qabdayēiti qafsa dareghō
 mashyāka nōiṭ tē sacaiti

41. āaṭ ushāñhām para fréretōiṭ
 aēshō mereghō yō parōdarš
 aēshō mereghō [yō] karetō-dāsuš
 āthrō vācem surunaoitī
 42. āaṭ mairē fradvaraitī
 būshyāsta dareghōgava
 apākhtaraṭ haca naēmāṭ [. . .]
 uiti _ajemna uiti daomna
 qafsata mashyākāoñhō
 qafsata merezu-jvāoñhō
 qafsata merezu-jītayō

Passage *b* (= *a*) and the following I render thus: 'The bird (Parodarsh) lifts up his voice, at the dawn, the victorious, (saying) 24. "Arise, ye men; praise the established-order, the most excellent; curse the demons. To you is hastening Būshyansta, the long-armed." She the whole embodied world, straightway at the waking of the (morning-) light, lulls to sleep, (saying) "Sleep long, O man; it matters not for thee." 25. (The cock, however, remonstrates) "Of the three best things be ye not neglectful, of the well-thought thought, the well-spoken word, and the well-done deed; (but) be ye neglectful of the three worst things, the evil thought, word, and deed." 26. Then comrade speaks to comrade among those lying on the couches, "Get up, (the cock) arouses me." Whichever then first rises, comes to paradise.'

With day-break comes cock-crow, and—as in the well-known Hamlet-passage, i. 1. 150—the flight of the spirits of darkness. Not unnaturally, then, the "bird of dawning" got a share in the victory of the "victorious (*sūrām*) dawn," and was believed also to rouse men from sleep and send them to their devotions and daily work. Indeed, the Bundeshesh, xix. 38, says expressly that the cock was created to war against demons.

The view of passage *a* taken by Geldner, l. c., makes Būshyansta the demon who comes in the evening to put men to sleep. He renders : 'The bird . . . demons. Away ran that Būshyansta, the long-armed.' She, at the awakening (i. e. lighting up) of the stars, puts to sleep . . . ' In arriving at this interpretation, Geldner takes *fraghrātō* as loc. s. f., and adopts the variant *raocānhām* and refers it to the stars at evening. This leads him, in §16^c, where Westergaard has *aēsha vō dvaraitē*, to substitute the dissyllabic 3d s. aor. mid. *dvarēta* of K¹ and Cod. Mon. 3. He then rejects *vō*.

This view, however, is out of harmony with passage *c*, which I render as follows : 41. 'Then towards the coming on of dawn, the bird . . . hears the voice of the fire. 42. Then hastens on the deadly Būshyansta, the long-armed, from the northern region, speaking thus, deceiving thus, "Sleep on, ye men, sleep on . . ."' Here the demon is conceived as 'hastening on' or 'rushing forth' (*fradvaraiti*) upon men, at the first gleam of light—so that §41^a and §16^f accord perfectly—and as 'lulling them back to sleep' (*qabdayēiti*), just as the cock is on the point of rousing them.

In attributing the broader meaning of 'light,' instead of 'star,' to *raocānh*, I think I am justified by Yasna xlv. 5, *kē hvāpāo raocāoscā dāṭ temāoscā*, by Yasht xxii. 15-27, and perhaps also by Yasna xxx. 1, to say nothing of the concinnity thus established between §41^a and §16^f; further also by the usage of the corresponding Vedic *rocānī*; and still more by the fact that, just before the repetition of passage *a* in Vd. xviii., namely at §22, it is expressly stated that it is 'at the third third of the night' (*thrityāi thrishvāi khshafnē*—the first and second thirds have just been mentioned) that the fire calls on Sraosha and Sraosha wakes Parodarsh, who finally in turn 'raises his voice.'

With this interpretation, Westergaard's reading *dvaraitē* reasserts its claim to restoration. As a trisyllable it forces out *aēsha*. This can be dropped as easily as *vō*; but the latter as an enclitic will have to follow the verb.

As an interesting parallel may be adduced the belief of Mohammed, Anquetil Du Perron, *Z. Av.* ii. p. 602. See also the citations of Darmesteter, *Z. Av.* i. p. 193. Compare further the Latin hymn of Prudentius, *Ad Gallinimum*; Milton's *L'Allegro*, 114; Drake's *Culprit Fay*, xxxvi. 56; Spenser's *Faery Queen*, v. 6. 27; and the familiar place in Hamlet.

2. That the evil spirits had their abode in the quarter called *apākh tara naēma* appears from several texts. As soon as the soul leaves the body, the Eruj springs upon the latter from this quarter, Vd. vii. 2; thence rushes forth Ahriman, Vd. xix. 1, and Būshyansta, Yt. xxii. 42^c, cited above; thither the demon departs when duly exorcised, Vd. viii. 21. or driven, Yt. iv. 9—see Geldner, *Studien*, i. 113.

The *apākh tara naēma* is taken by de Harlez, *Av.* p. 73, as the 'west.' It can, however, only mean 'north.' The 'west' is designated by *daoshatara*, Vd. i. 19, where it is opposed to *ushastara*, 'east,' about whose meaning there is not the smallest doubt. The same antithesis is presented at Yasna lvii. 29, and at Yt. x. 104—see Geldner, *K. Z.* xxv. 505, and the note, p. 526.

The word *rapithwara* occurs only in a couple of Avestan places; but that it means 'southern' or 'mittäglich' is clear from its relation to *rapithwina*, 'midday'—cf. Yasna ix. 11. *ā rapithwinen zrvānem*, 'at time of midday.' It occurs at Yt. xxii. 7, which describes the fate of the soul of the just; § 25, which describes the fate of the soul of the wicked, is the exact opposite of § 7, and has *apākhtara* in place of *rapithwara* of § 7, from which we must conclude that *apākhtara naēma* is 'the northern quarter.'

Similarly the Bundeshesh puts hell in the north—see Darmesteter, *Z. Av.* i. p. 75, note 2. There the rebel angels assemble, according to Milton, *P. L.* v. 689. Cf. I. Henry VI., v. 3. 6. For other parallels, see Anderson's *Norse Mythology*, pp. 282, 62, 289, 387; Thorpe's *Northern Mythology*, i. 286; Caedmon, *Satan's Rebellion*, 15; and especially St. Augustine's *Confessions*, x. 59.

3. Fargard xvii. of the Vd. is entirely devoted to ceremonial prescriptions respecting the cuttings of the hair and nails. According to Avestan belief, these, as dead and unclean matter, would naturally increase the power of evil, and give the demons power over the former owner. To avert this, it is directed that they be taken away and buried within certain magical circles while spells are said over them. If this be done, the nails become weapons used by the good bird Ash5-zušta in fighting the Devs; if not, they become 'spears, swords, bows, arrows, and sling-stones in the hands of the fiends.'

The notes to Darmesteter's translation of this chapter give many interesting parallels: compare especially the Bundeshesh, xix. 19; Anquetil, *Z. Av.*, ii. p. 117; further, Kleuker, *Z. Av.*, ii. p. 167; Spiegel, *Av. Uebersetzung*, i. p. 224; *Shāyast Lā-shāyast*, xii. 6, Sacred Books of the East, v. 342. The *Comedy of Errors*, iv. 2, involves the Avestan superstition. Other parallels may be sought in Thorpe's *Northern Mythology*, iii. p. 333 (at ii. p. 272, note, he gives a Swabian superstition the reverse of the Avestan); in Lubbock's *Origin of Civilization*, pp. 166-170; and in Tyler's *Early History of Mankind*, pp. 129, 130, 141.

6. On Professor Ludwig's views respecting Total Eclipses of the Sun as noticed in the Rig-Veda, by Professor W. D. Whitney, of New Haven, Conn.

In May of this year, a paper entitled "On the mention of solar eclipses in the Rig-Veda" was brought before the Bohemian Academy of Sciences by Professor A. Ludwig of Prague, the well-known author of a complete German translation of the Rig-Veda with elaborate commentary; the paper has since been printed in the *Sitzungsberichte* of the Academy (15 pages, octavo). Its author recognizes four different eclipses as referred to in the Vedīc hymns, with sufficient individuality of detail to make their identification seem a not altogether hopeless task; and two of them he thinks himself actually able to identify, with eclipses that took place during the eleventh century before our era. The interest of the inquiry, and of its result if satisfactorily established, is apparent; and the matter is well worthy of a serious examination.

We may pass over without notice the well-considered introduction, in

which the author explains the state of ancient Hindu chronology, accepting provisionally the birth-date of Buddha, and seeking to show that an interval of at least 250 years must have elapsed between that date and some part of the Rig-Veda, putting the period of the latter back to 800 B. C. or earlier; since, whether we accept or reject the reasoning on which the last deduction is founded, no one will be likely to question that an antiquity at least as great as this must be conceded to the Vedic hymns. We may take up, then, at once the argument in regard to the eclipses.

Evidently enough, the question as to the validity of this argument falls into three divisions: 1. Is there unmistakable mention in the hymns of solar eclipses? 2. Is the mention of a character to afford plausible ground for identification? 3. Has the identification, in any case or cases, been made out in a fairly satisfactory manner, so that the result may be at least provisionally accepted?

It is to be pointed out in advance that Ludwig is more ready than is consistent with due caution to assume or infer true knowledge on the part of the Hindus as to the movements of the heavenly bodies. Thus, on the strength of RV. x. 37. 2, *viçvam anyân ni viçate yád éjati viçvâhâ* "po viçvâhó 'd eti sîryah; 'everything else rests that stirs; always [flow] the waters, always rises the sun,' he (p. 5) regards it as known to them that the sun goes around the earth—which is far too venturesome a conclusion, especially as in *viçvâhâ* may be recognized the probable etymological meaning of 'every day' (= *viçvâ ahâ*: cf. Fr. *toujours*). So he takes for granted throughout that a solar eclipse is well understood to be an attack of the moon on the sun; but that the Vedic Hindus had science enough for that cannot, it is believed, be maintained with the smallest degree of plausibility. Possibly, indeed, if one might speak of "the red color of the moon at a solar eclipse," as Ludwig does (p. 10); but this is a very serious error on his part, arising apparently out of the confusion of a solar with a lunar eclipse: at a solar eclipse, even a total one (as the writer is assured by the highest authority), there is no vision of the moon, nor, without a telescope, even the impression of a dark object passing over the face of the sun; the impression is of obscuration only. Ludwig even deems the occultation of the sun by the moon so familiar a conception that it can be made the subject of an illustrative comparison; rendering, in RV. x. 138. 4, *mâsé 'va sîryo vâsû pûryam â dade* by "as by the moon the sun, so was the wealth of the strongholds taken." This seems wholly inadmissible (grammatically, also; because *â dade* would be no verb to use of the seizing of the sun by the moon); better regard *mâsé 'va* (pada *mâsâ-iva*) as really for *mâsâ-iva* (i. e. *mâsâs*, gen.), by a contraction such as is very frequent in AV. and occasional in RV. also, and here, as sometimes elsewhere, misinterpreted in the pada-text; and translate 'as of the moon, the sun hath taken away the wealth of the strongholds'—that is, as the glory of the moon is obscured by the sun: which admits of a double explanation, either one involving phenomena obvious enough to suggest a comparison. As to Ludwig's constant interpretation of *soma* as 'moon' in the verses claimed to refer to eclipses, see further on.

Coming now to consider the first of the three divisions of the subject laid down above, it is to be conceded that for the first-mentioned of the four cases (but the latest, according to Ludwig, in point of time) the expressions used in the Rig-Veda hymn (v. 40. 5-9) may be very plausibly understood as referring to a total eclipse of the sun. More than this one cannot say: the terms used later in describing eclipses, *grah* 'seize' and *gras* 'devour,' are wanting; the description is mixed with confusing mythologic elements; and the introduction of Indra as rescuer suggests the possibility rather of an obscuration of the sun by clouds, since these it is Indra's special province to deal with. The expression twice used is *tamasā* 'vidhyat' 'pierced with darkness' (although the root *vyadh* does not need to be taken so literally), but also once *gūḍham tamasā* 'hidden by darkness.' That, if an eclipse, it was a total one, we infer from the line (5 c, d) 'the creatures appeared like one confounded, that had lost his way,' and from the epithet *apavrata* 'baffling' (litly 'preventing action'), applied to the *tamas* 'darkness.' But the obscuration is ascribed to the hostile power Svarbhānu, which oddly enough means 'sky-light,' and the rescue is credited to Atri (or to the Atris; v. 9), when he had 'hidden away the magic of Svarbhānu' (v. 8), or after Indra had 'struck down from the sky' (v. 6) that magic. That Atri found the sun again and restored him to the heaven is repeatedly alluded to in the Brāhmaṇas; but these allusions may be perhaps better explained as echoes of the Rig-Veda myth, than, as Ludwig understands them, as genuine reminiscences of the eclipse and Atri's exploit in connection with it; and the one ground is as good as the other for the right granted to a descendant of Atri to the first gift of gold at a sacrifice.

If even in this case the reference to an eclipse is beset with doubts and difficulties, those difficulties are greatly increased when we come to examine the other cases. In the next one treated by Ludwig, being the one that is connected with the name of Rijiçvan, the only descriptive clause is (RV. x. 138. 3a) 'the sun released (*vi amucat*) his chariot in the midst of heaven;' this is followed by praises of Indra's and the sun's prowess against the powers of evil. The concluding clause of the passage (4 d), to be sure, *çatrūir açṇād virukmatā*, is rendered by Ludwig "he crushed the enemies with the goldless (disk)," and is explained to mean that Indra destroyed his foes with the sun's disk when robbed of its brightness; but *virukmant* appears rather to mean 'bright-shining' here, as in all the other four places where it occurs, and where Ludwig himself so renders it in his translation (*golden, ausstrahlend*), without suggesting any change later in his commentary! While it is a question what is meant by the sun's letting go his chariot, and reference to an eclipse is perhaps not impossible, this can hardly be regarded as otherwise than extremely doubtful.

The next case, which is connected with the name of Kutsa, is a yet more puzzling one, and to set forth and discuss all its details would cost a great deal of space and time, without leading to any result of corresponding value. Indra appears as ally of Kutsa, and as taking violent possession in his behalf of the wheel, or one of the two wheels, of the sun, by which means Kutsa is enabled to vanquish his enemies. Uçanas

is also sometimes mixed up in the affair; and in one passage (RV. iv. 26. 2, 8; quoted first by Ludwig) neither sage appears, but Indra finds an ally in Soma (*indu*). In this and other passages now, Soma is interpreted by Ludwig as meaning 'the moon,' and it appears to be mainly from the fact of its assistance that he infers an eclipse: thus adding, it must be said, to one impossible supposition, that the Vedic Hindus recognized the moon as the agent in the sun's eclipse, another equally inadmissible one, namely that 'moon' in the Rig-Veda can be freely substituted for Soma. Most scholars, surely, will deem this an anachronism, and recognize in the Soma here only the god's usual ally, the divinity of the drink which he loved, and which lent him vigor and fury for the performance of his heroic deeds. It adds to the complication of the Kutsa incident, that Indra is repeatedly addressed in the imperative in connection with it, as if the deed were a future, or a habitual one: e. g. (RV. i. 174. 5) 'carry (i. e. in thy chariot: *vaha*) Kutsa, O Indra—then hurl forth (*vṛhatāt*) the sun's wheel in the conflict; may the lightning-armed one fall upon (*abhi . . . yāsiṣat*) the foes.' This difficulty, to be sure, Ludwig gets rid of: he renders, namely, the imperative of immediate action (*vaha*), that of remoter action (*vṛhatāt*), and the subjunctive (*yāsiṣat*), supporting each other as they plainly do, all alike as imperfects: 'thou didst carry,' 'he hurled,' 'he fell'! For *vṛhatāt*—as if the form were not a frequent one, and its value perfectly established—he makes a little show of explanation, declaring the ending *tāt* as 3d sing. to correspond to *thās* as 2d sing., and referring us to three wholly unexplainable and probably false forms, *āitat* in AV., and "RV. *caniṣṭat janīṣṭat*"—by which he means *caniṣṭhat* RV., instead of which unintelligible reading the Sāma-Veda substitutes the equally unintelligible and evidently unintelligent *janīṣṭhat*. He adds that RV. i. 121. 15 teaches us that the apparent imperative forms are not to be regarded as really such; but this verse contains no imperative, only a gerund that might possibly admit of being mistaken for one; and the lesson must be pronounced quite too difficult for us to learn. On the whole, the eclipse of Kutsa is more doubtful than that of Rijiçvan; if such a phenomenon really lies at the heart of the story, it is too much covered up with mythologic detail to be recognized with any confidence.

The fourth eclipse has a yet weaker support. It is founded on only a single versè (RV. v. 33. 4), where it is said that Indra 'fashioned for the sun in his own home the name of a Dāsa'—and this, since the Dāsas are the dark-colored aborigines of the country, Ludwig interprets to mean that Indra reduced the sun to blackness: i. e. brought him to total eclipse. Here, again, appears to show itself in the mind of the interpreter the impression that, in the case of the sun as of the moon, the eclipsed body still appears, though with glory dimmed and of a strange color. Whatever may be the sense of the obscure expression used in the verse, it certainly cannot, except as a very doubtful conjecture, be explained as signifying an eclipse.

We come now to the second general division of the question: have these asserted eclipses such individual features as to encourage an attempt at their identification? As regards the eclipse of Svarbhānu,

we are told in the hymn (v. 6) that Atri found the hidden sun 'by the fourth prayer' (*tur⁴iyena brāhmaṇā*), and (v. 9) that the others could not do it. This Ludwig understands to mean that the others knew and used only three prayers appropriate to the occasion, and they had no effect; while Atri knew a fourth, and it brought the sun out again: and hence the eclipse must have been one of unusually long total phase. But here, too, it is impossible to follow his interpretation with assenting mind. If, indeed, a total eclipse of the sun occurred every few years in the same locality, so that there was a regular liturgy of three prayers established for it, which had always proved effectual, and then there occurred one of unusual length, for which the prayers did not hold out, and the Brahman who was sharp enough to add a fourth gained the credit of bringing the sun back, that would do very well; but that is impossible; for very few persons live long enough to see more than one such eclipse, unless they travel for it; and the immense majority die without the sight of even one. The difference between short and long totality is too insignificant an element to count for anything, unless we consider the rescuing ceremonial to be crowded into the time of totality only. But it is beyond question that, at least as soon as the growing obscuration became considerable, the priests would begin their remedial activity; and in the uncertainty of this longer period a trifle of three or four minutes—for the unusually long eclipse with which Ludwig tries finally to identify the phenomenon here in question is only of "over six minutes"—would totally disappear. The chronologic accuracy by which "over six minutes" is made out to be too long for three prayers, but not long enough for four, is quite too nice for us. According to verse 8 of the hymn, the saint had to harness his *soma*-pressing apparatus, and to praise the gods with song and offer to help them with reverence: rather a long process, one would think, to be carried on in sudden and utter darkness in the concluding part of less than seven minutes. It must be denied, then, and confidently so, that there is anything in the described circumstances of this phenomenon to suggest an unusually long duration of the total phase of a solar eclipse—or anything else that is characteristic enough to found an identification upon.

The other cases may be disposed of in much fewer words. The only one of them for which a date is found at the end of his article by Professor Ludwig is that described in RV. v. 33. 4 (the one last stated above); and its identification is based solely upon the interpretation of *okasi sve* 'in his own home' as meaning 'at the zenith,' that is "at the place where he gives most light and heat." Obviously, that is giving the words a much more pregnant meaning than can be relied on for such a use. So, in one of the other cases, the adverb *sadyas* 'at once' (etymologically, 'on the same day') is made to signify 'on its first appearing,' and to indicate that the sun rose in a condition of eclipse. When one comes to combine the exact data of science with such loosenesses of expression, one sees that they are incommensurable, and that the result must be *nil*.

Finally, how is it with the identifications attempted? Professor Ludwig has put himself in communication with a Viennese astronomer, von

Oppolzer, who has concerned himself especially with ancient eclipses, and has drawn up a complete table of them back to 1200 B. C. Among the eclipses in this table, he finds one that appears to him to fulfil the conditions, as defined by him, of the eclipse of Svarbhānu ; and another, those of the zenith or noon eclipse of RV. v. 33. 4 : the years are 1001 and 1029 B. C. respectively. As to these, it needs simply to be remarked, in addition to what has been said already, that, even assenting to all Ludwig's other conclusions, the identifications are of no value until, by carrying the table a thousand years further back, one should find that still earlier eclipses did not satisfy the stated conditions as well or better. By demonstrating the Vedas to be at least as old as eight or nine centuries before Christ, he has by no means proved them not to be a good deal older ; and, of course, no determination would hold good in which the possibility of a higher age was not duly taken into account.

There are many other versions and statements and inferences in Professor Ludwig's paper to which serious exception might be taken ; but it was best to limit the discussion to the main point had in view—namely, to show that no result possessing even presumptive and provisional value as bearing on ancient Hindu chronology has been reached by his investigation.

7. On the proceedings of the Wolfe Exploring Expedition to Mesopotamia, during 1884-5, by Rev. Dr. Ward.

In advance of his regular report to the American Archæological Institute, Dr. Ward gave an informal history of the Expedition, and a statement of its results, with some indication of the further steps by which it ought to be followed up.

8. On Marriage and Divorce in Ancient Egypt, by Rev. Ly-sander Dickerman, of Boston, Mass.

This was a chapter from a larger treatise on Domestic Life in Egypt, especially among the masses. It was a brief history of "Woman's rights" in Egypt. The author gave extracts from papyri, many of which have been published by M. Revillout in his *Chrestomathie Démotique* and in various numbers of the *Revue Egyptologique*. These papyri show, from the marriage contracts they contain, that from Ramses II. to the time of the Ptolemies a woman possessed the legal right to buy and sell without recourse to her husband ; that often his entire property, present and prospective, was pledged by nuptial mortgage for her support in case of divorce, and that gradually the wife herself obtained the power to divorce her husband at her will. The extent to which women's rights were enjoyed in Egypt became the subject of ridicule among the Greeks. Those rights were at length curtailed, by imperial decree, on the accession of Philopator, 181 B. C.

9. On the Work of the recent Revision of the New Testament as illustrated by the Gospel of St. Matthew, by Professor Charles Short, of Columbia College, New York City.

The author gave an account of some of the most interesting results of

a historical investigation of the work of the Revisers publishing in a series of papers in the *American Journal of Philology*. The general plan is to give an account of every change, however minute, both in the English and the Greek. Having under his eye the old Versions and the most important modern ones, whether English or foreign, public or private, Professor Short traces each change to the place where it first appears—or, if it be original with the Revisers, he indicates this fact; and when treating of a change, he indicates whether the word or phrase used in that case by the Revisers of the authorized version originated with them or was borrowed from some earlier version. And so also of the Greek text. Wherever a word or phrase has been changed by modern criticism, he indicates by what authority it was done.

Taking now a chapter at random, the fifth of St. Matthew, it appears that, of the fifty-nine changes in the English, fourteen are original with the Revisers of 1881, and in only five of these cases were the forms used by the Revisers of 1611 original with them; and of the six changes in the Greek of this chapter that affect the sense, five are supported by Lachmann, Tischendorf, and Tregelles, and one by Lachmann and Tregelles alone.

Taking, then, this chapter as a sample of their work, we see that, in the great majority of cases of change in the English, the Revisers of 1881, like the Revisers of 1611, have adopted words and phrases from the older versions, not making, as has been ignorantly alleged, the English out of their own heads; and in cases of change in the Greek text, they have followed in every instance the great modern masters in New Testament criticism, Lachmann, Tischendorf, and Tregelles, not making, as has been also ignorantly alleged, a Greek text for themselves.

10. On the latest Translation of the Upanishads, by Prof. Whitney.

Professor Whitney began with a brief exposition of the place of the older Upanishads in Hindu literature, and of their claims to attention. He then referred to the various versions of them that have appeared, and to the defects of these versions, arising especially from want of familiarity with the language in which they are written, and from the attempt, made chiefly under the guidance of the Hindu commentators, to import into the text meanings that are not really there. There are, he said, several ways in which such texts can be translated. One is, to put one's self confessedly under the guidance of a single native interpreter, or school of interpretation; in this case, one has at any rate a product of known and definable value, for later comparison with other similar products. Another would be, to give a digest of the interpretations of all the accessible commentators: this would be an extremely valuable work; and it could hardly fail to lead its author to take the higher position of comparing and criticizing the discordant views recorded by him. A third way would be, to approach the text simply as a Sanskrit scholar, bent only on giving as accurately as possible what the text appears to say; to reproduce the treatise in Western phrase, as a basis for further philosophic interpretation, or as a measure

by which could be tested anything that claimed to be an interpretation. The maker of such a version would not pretend to penetrate to and set forth the hidden sense, because the result would be correspondingly subjective and unauthoritative, requiring to be done over again. Working only as a linguist, he might hope to furnish something permanent, serving as help and as restraint to his successors. He would carefully preserve all identities and parallelisms of phraseology, by consistency of translation, or, where that was not possible, by liberal quotation of important terms in parenthesis, so that the sphere of use of the terms could be made out by comparison in the version, somewhat as in the original. Nothing that was not untranslatable would be left out, nor a word added without full and exact indication of its insertion. The notes would be mainly linguistic, references to parallel passages, and the like; along with pointing out and perhaps amending difficult or desperate passages. But it is unnecessary to specify in detail the methods in which a careful scholar, liberal of his time and labor to a task deemed by him worth undertaking, will set about its accomplishment.

One cannot doubt that this last way is the one best to follow at present in treating the Upanishads. Until a linguist's version is made, any other might almost be called premature. Every one knows the uncritical violence of a Hindu commentator, his ability to miss, his readiness to distort, the plain sense of a phrase, in part from sheer ignorance and carelessness, in part from the desire to bring out or to put in a meaning that suits his system. If laymen are to study such obscure matter at all, they ought to know what it says and what it does not say. No such translation has yet been made; the possibility of it has been but recently created, by the opening of the Brâhmanas to access, and the working up of their material in the great Petersburg Lexicon. Nor need the texts be handled with an exaggerated respect; a little wholesome severity, indeed, would be good for them. The Upanishads are from the same hands, in the main, that wrote the Brâhmanas, and are characterized by much of the same emptiness of verbiage, preposterousness of reasoning, and absurdity of etymology and explanation, that belong to the Brâhmanas; a large part of their content is, as even the last translator has to confess, "worse than childish nonsense"—just how large a part, is left to us to determine; and we are justified in taking toward any questionable passage an attitude of skeptical scrutiny, challenging proof that it contains a valuable kernel of thought, or helps us to understand something else that has such a content—while more than ready to welcome the thought if found, and to allow it every tittle of value that can fairly be claimed for it.

But there is yet one other way of making a translation of the Upanishads. It may be styled the free-and-easy way. It contains elements of all the other three, so mixed together that one can never tell which of them one has at a given moment under examination. It follows in part the text, where this is too plain to be mistaken. It also follows in great part the commentator, even when he is at his worst; difficult or apparently empty passages, especially, are thus best disposed of; the

commentator, with his principles of interpretation, makes easy work of them. It is also ambitious of a certain originality, and strikes out here and there on its own account. It inserts extraneous matter enough to make things run smoothly, and means to indicate this; only, to do so always and accurately is quite too much trouble. It renders, without assignable reason, the same expression variously and various expressions identically. Thus it gives to one who knows little or nothing about such texts a general idea of what they are and how they go on; but it is liable to deceive at any point one who trusts it, and for the specialist it has no authority whatever.

Of this character, the writer claimed, is the translation of the Upanishads last published;* and the rest of his paper was devoted to proving this thesis, by the citation and analysis of a sufficient number of passages selected from it: of them, only a few can, for lack of room, be presented here.†

It is impossible, as one examines this work, to resist the impression that it is the tardy publication of a version made a great many years ago, and now insufficiently revised. This is indicated, for example, by its treatment of the aorist. The value of this tense in the Brāhmaṇa language as that of an immediate past, since Delbrück demonstrated it about ten years ago (it had also been noted by Weber, and by Bhandarkar in India), has been fully recognized by every well-instructed scholar; but the author of this translation has evidently never heard of it; when he comes to an aorist, he treats it just as he would if he met it in the Mahābhārata, and in about two thirds of the cases renders it as if an imperfect, often to the marked detriment of his version, in style or even in sense. Another indication is the not infrequent discordance of the subdivisions of the version and their numbering with those of the original, as given in the published text: this would be more explainable if the version were made upon manuscripts, and not afterward carefully compared with the edition. Something of the same may be said of the frequent unmarked intrusions of foreign matter into the text (illustrated further on), and the occasional dropping out of words and clauses. Examples of all these defects could be quoted by tens or scores. Such trifles, too, as the rendering of *çaradas* by 'harvests' (KñU. i. 1. 23), which is neither English nor Sanskrit, point to a hasty version from the German. Then the translator appears to have known nothing of the Petersburg Lexicon. In numberless instances, when one comes to a halt over a word, asking himself with surprise "Is it possible that we have to understand it thus?" a reference to the Lexicon gives him a very different and always more acceptable meaning. Whether the impression is a true one or a false, it may well be kept in mind by one who studies the work, as a plausible explanation of some of the latter's peculiarities.

As the unacknowledged intrusion of extraneous matter is a point of

* In volumes I. and XV. of the first series of "Sacred Books of the East."

† It is expected that the whole paper will appear very soon in the American Journal of Philology (Baltimore).

capital importance, an example or two may well be given. On page 3 of vol. i. (ChU. i. 1. 9), we read : “[The threefold knowledge (the sacrifice) proceeds] by the greatness [of that syllable (the vital breaths), and] by its essence (the oblations).” Here the parentheses are the translator’s, showing his admitted intrusions ; the square brackets are what need to be added, to show the real ones ; for the text has simply *mahimnā rasena* ‘by greatness, by essence.’ Perhaps the filling-up is correct here, if duly acknowledged : but in the next paragraph it is used to bring about a complete distortion of the real sense. Namely, thus (the parentheses and square brackets being used as above) : “[Now] therefore [it would seem to follow that] both he who knows this (the true meaning of the syllable Om), and he who does not, perform [the same sacrifice]. But [this is not so, for] knowledge and ignorance are different. [The sacrifice] which [a man] performs with knowledge, faith, and the Upanishad is more powerful.” The true meaning is : ‘With it (*tena* : i. e. with the same syllable *om* ; the translator correctly rendered it so at the beginning of the preceding paragraph) both perform (sacred rites)—he who knoweth this thus and he who knoweth not. Diverse, however, are knowledge and non-knowledge : only what one performs with knowledge, faith, *upanishad*—that is more powerful.’ That is to say : while both use the same sacred utterance in the ceremonial, he who understands the full import of it obtains the better result.

This mistranslation is made in the teeth of the commentator’s exposition ; in other cases, the translator has the commentator with him, only in the teeth of grammar or good sense, or both. A few notable examples may be given. In a passage of the *Āitareya-Āraṇyaka* ring-ing changes on the forms and derivatives of *śam dhā* ‘put together,’ occurs (iii. 1. 4⁴ ; vol. i. p. 252) the phrase *prāyañ vaiṣaṃ sam adhiṣṭi-ṣaṃ tam nā śakaḥ saṃdhātum*, which means verbally (never mind the hidden sense) : ‘Breath as beam have I wished (i. e. tried) to put together : that thou hast not been able to put together.’ The first part of it is parallel with the phrase in the preceding paragraph : *prāyañ vai-ṣaṃ sam adhām* ‘breath as beam have I put together.’ But the com-mentator, and the translator at his heels, “put together” the 1st sing. aor. desid. *adhīṣṭam* with its prefix and the object *tam* of another verb, and make of them a desiderative participle *samadhīṣṭantam*, rendering it “him who wishes to grasp” ! Another quite similar exam-ple occurs a little later (iii. 1. 6¹⁰ ; p. 255), where *abhivyāhārṣaṃ ne ’ty eva vidyāt* is understood as if it were *abhivyāhārṣaṃ ity eva vidyāt*, and then, the *iti* being omitted, and the preceding word taken as if *abhivyāhariṣyan*, it is rendered “let him know when he is going to recite :” one more aorist 1st sing. turned into a participle ! The trans-lator needs to write a new Sanskrit grammar to help us parse such forms as these.

A case of a different kind is found on p. 64 (ChU. iv. 10). A certain student has tended the sacrificial fires faithfully for many years, but his teacher still puts off communicating to him the sacred knowledge. The teacher’s wife remonstrates : *mā tvā ’gnayaḥ paripravocan pra brūhy asmāi* ‘let not the fires get the start of thee (more litly ‘circum-

vent thee') in teaching him; teach him (thyself).' But he goes off without doing so; and no sooner is his back turned than what his wife had threatened happens: the fires, one after another, give the pupil instruction. The commentator, now, wholly missing the sense, explains *tvā paripravac* as 'blame thee;' and the translator does the same.*

These examples, to which numberless others might be added, show the truth of what was claimed above: that if one wants to know what these treatises really say, he must translate them in entire independence of the native commentators. There is no blunder and no oversight so gross that these may not be guilty of it.

Most Sanskrit scholars are well aware that, as between the two demonstratives, *asāu* etc. and *ayām* etc., the latter points to the nearer object, and means 'this,' while the former points further off, and corresponds in sense to our 'yon' or 'yonder.' So, in the pictorial phraseology of the Brāhmaṇas and Upanishads, we read generally *asāu dyāus* 'yon heaven' and *iyām pṛthivī* 'this earth;' *yō 'sāu tēpati* 'he who burns yonder' (the sun) and *yō 'yām pāvate* 'he who cleanses here' (the wind)—in the present translation, to be sure, these pronouns, with all else that should give any impression of the peculiar style of the text, are uniformly left out. *Asāu*, then, comes to be regularly used as meaning one of the other party, an antagonist or foe, opposed to the speaker. Beginning with the Atharva-Veda, and continuing through the whole older language, it stands in the vocative (in the accented texts, plainly marked as such, *āsāu* or *asāu*) in place of the name of some person hostilely addressed, often with added *āmuṣyāyaṇā 'muṣyāḥ putra*, meaning 'O So-and-so, of such-and-such lineage, son of such-and-such a mother!'—the names, of course, being substituted in practical use. Wherever this vocative *asāu* occurs in the Upanishads, now, the present translator renders it by "I here :—" e. g. BAU. vi. 4. 12 (vol. xv., p. 218), "thou hast sacrificed in my fire, I take away thy sons and cattle, I here." Another text says expressly *asāv iti nāma gṛhṇāti* 'at *asāu*, he uses the name.' But two commentators, betraying thereby their ignorance of the usages of the older language, allow this expression to be understood either of one's own name or of one's enemy's; and the translator so reports, adding (ib. note 4, end) "though *asāu* can really refer to the speaker only"! Such a note must have been written either before the writer had well learned his Sanskrit, or after he had pretty well forgotten it.

In BAU. iii. 8. 4 (vol. xv., p. 137), we have the expression *yad ūrdhvaṁ divo yad avāk pṛthivyā yad antarā dyāvāpṛthivī ime* 'what is above the sky, what beneath the earth, what between these two, sky and earth'—which is a fairly good expression for all there is; at any rate, it is precisely what the words mean, and what alone they can mean: *antarā* is as unmistakably 'between' as is German *zwischen* or French *entre*.

* It is only fair to say that the Petersburg Lexicon is also this time misled by the commentator; but Deussen, in his "Vedānta" (p. 176), does not fail to give the right sense.

The translator, however, renders the last three words "embracing heaven and earth;" and he adds the marginal note "Deussen translates, 'between heaven and earth,' but that would be the antariksha." This note, now, in the first place, can only puzzle, and not edify, the general reader. Why should he have been left to wonder what this awful "antariksha" is, the mere mention of which is enough to convict Deussen (and all the other translators) of a blunder? It would not, to be sure, have helped him much to have instead the word 'sky,' with which in the present translation it is consistently and totally misrendered throughout. If he knew that *antarikṣa* really meant 'the atmosphere or intermediate space, all that lies between the sky or heaven and the earth,' he would certainly find the translator's scruple wholly gratuitous: sky and earth, in this description, are viewed as surfaces, and all that is between them and all that is beyond them is the whole universe. We too say "beneath the earth" when we mean beneath its surface. The point, petty enough in itself, is important as a characteristic: the translator is ready to twist the simplest Sanskrit phrase into a sense the words cannot possibly bear, in order to force out of it what without reason seems to him a more acceptable meaning.

We ought not, perhaps, to be hard upon such renderings as "rested" for *açrāmyat* 'toiled' (BAU. i. 2. 2: mistaken for *açāmyat*: but the whole connection speaks plainly against the error); or "closed" for *āvṛtta* 'turned inward' (KṛhU. ii. 4. 1: mistaken for *āvṛta*), because such mishaps may befall any one; only their degree of frequency shows the grade of care used. Worse is rendering *grñihī* (AA. ii. 1. 4^d) by "grasp," as if *grñihī*, since it is against the connection, the commentator, and everything else; or *labdhā* (KṛhU. i. 2. 7), nom. of *labdhṛ*, as if it were the participle *labdhas*, or *ājahāra* (ChU. iv. 2. 5) and *prāirata* (AA. i. 3. 3^d) as if they were 2d pers. plural, because these involve serious grammatical blunders. Yet more serious is the pervading neglect of the consistencies of expression. Thus, in the participial-aorist passage first quoted above, we have the key-word *sam̐ dhā* 'put together' rendered without warning by "grasp:" and "conceive" is also in places given for it. Such vacillation is wholly misleading. So we have the much-used *upa ās* rendered indifferently by "meditate on" and "worship;" the frequent forms and derivatives of *prati sthā*, in a dozen different ways, from "abide" and "support" up to "get on, concentrate, enter, cause," and "exalt;" *sam̐kalpa* by "desire, will, thought," and "conceiving;" *prasṛṣṭa*, in two successive sentences (KṛhU. i. 1. 10, 11), by "shall have been dismissed" and "through the favor of;" *spñka*, by "chain" and "road;" *kṣema* and *yoga*, by "possession and acquisition," and by "greed and avarice"—and so on indefinitely.

If these points were painfully culled out from the midst of two volumes of matter of a generally different character, it would be unfair to array them thus together. But that is not the case; they are simply representative specimens of the work, which has no other quality than such as these would lead us to expect. Not half the amount of labor needed in order to a good result was spent upon it. It is no help either

to Sanskrit scholarship or to the comparative study of religions to print such a product. A new translation of the Upanishads is still just as much called for as before the publication of these volumes.

11. On the location of Sippara, by Rev. Dr. Ward.

The Sepharvaim of Scripture is known as Sippara, Siphara, Pantabibla, and perhaps Hipparenum, in Greek and Latin historians and geographers. The later names, from the time of Julian to that of Benjamin of Tudela, which may indicate either the same locality, or a large city in the immediate vicinity, are Nehardaa, Persebora or Firuz-sabor, Shabor, and Anbar or Ambar. Zosimus calls Persebora the largest city in Assyria except Ctesiphon, which latter city had 600,000 inhabitants. It was on the Royal Canal, or Nahar-malka, and the Euphrates. The cuneiform record of Sippara makes it one of the very oldest cities, as Berosus made it the seat of five of the ten antediluvian kings. It was here that Xisuthrus buried the records of the antediluvian world. We learn from collating the passages where Sippara is mentioned that it is in Upper Chaldea, or Akkad. With it are mentioned Babylon and Nipur as chief seats of worship. It was on the Euphrates, which was called the River of Sippara. Yet there were two well-known cities, or parts of cities, of the name, one called Sippara of Anunit, or Agane (Agade), the older and more important of the two, and the other Sippara of Shamash, the sun-god. These had their separate famous temples. It has been supposed that the two were faubourgs of the same city, separated by a canal, probably the Nahar-malka. The story of the capture of Sippara by Cyrus, and other references, lead us to place Sippara in the northern part of Akkad, and on the Euphrates river.

Up to the discovery of the ruins in Abu Habba by Mr. Rassam, the general opinion of Assyriologists, as Oppert, Ménant, Delitzsch, and Pinches, as late as 1880, agreed that Sippara was to be sought at Sufeira, just north of the effluence of the Sakhlawieh canal from the Euphrates. The discovery, however, at Abu Habba, of numerous tablets dated at Sippara of Shamash, compelled the belief that this was Sippara. It was generally assumed that Sippara of Anunit must be here also, in a part of the ruins hitherto unexplored, or near by. When conducting the Wolfe Expedition to Babylonia, I visited Abu Habba twice, last winter, paying especial attention to the question whether it might also contain the Sippara of Anunit. There is about it nothing suggesting a double city. It is a large and important ruin, though hardly of the first class. The walls are nearly square, perhaps seven hundred yards long, and the enclosure is divided into three parts by two interior cross walls, which are not parallel, but enclose a V-shaped space. In this central space are the ruins. There is absolutely no sign of two sections of the city. It has been suggested that the Sippara of Anunit may be the ruin of Deir, about five miles distant; but there is no good reason to suppose so. I did not visit Deir, but was informed that it was an unimportant ruin, in which digging had failed to make any discoveries. Abu Habba is not on the Euphrates, but some seven miles distant, and it is very unlikely, owing to a ridge of conglomerate which lines the Euphrates,

that the river ever flowed so far to the east. I left Abu Habba quite at a loss where to put Sippara of Anunit.

I then determined to visit Sufeira on my way home from Baghdad by way of the Euphrates and the Syrian desert. I found it a very unimportant mound, with no salient elevations, containing no such place as Sippara must be. But I was informed by the Mudir of the village of Sakhlawieh that there was a large mound, called Anbar, an hour's distance. Not expecting anything of importance, as the name of Anbar was not on any of the late maps I had with me, I was surprised to find it a mound of the first importance, rivaling Niffer and Warka in size, and considerably larger than Abu Habba. It is not more than a mile from the bed of the Euphrates, and is divided into two marked divisions, one on a higher level, and apparently an older city than the other. It has never been visited by travelers, nor have any diggings ever been made there, except as the natives have carried off bricks for building. It is covered thick with fragments of bricks, slag, etc. The depressions of the courts of old palaces or temples are plainly to be seen, as they are occupied as wheat fields. This occupying the position indicated by cuneiform or other records, and being the largest ruin by far along the Euphrates, or anywhere in Babylonia north of Babylon, larger than Tel Ibrahim or Akerkuf, and bearing the name of Anbar, which had been lost from modern maps, can hardly be anything else than the old Sippara, or Agane, of Anunit.

Among the inscriptions which I have brought home with me is a small bit of a tablet, for a knowledge of whose importancé I am indebted to Mr. T. G. Pinches of the British Museum, who reads four lines on it :

- (1) *Sipar D. S.*
- (2) *Sipar edina D. S.*
- (3) *Sipar uldua D. S.*
- (4) *Sipar utu D. S.*

Here we seem to have three or four places designated as Sippara. The first would be the chief Sippar, of Anunit, and the last is Sippara of Shamash. The third is unknown, although *Sippar ulla* is mentioned in a geographical text. But the second, *Sipar edina*, would seem to require the translation of Sippara of Eden. This would be, I believe, the first time that Eden has been found as the designation of a region. Very possibly the first line gives the general name Sippara, while the second and third designate the two parts of Anbar, or Sippara of Anunit, and the fourth is Abu Habba. This would seem to give considerable weight to Delitzsch's theory of the location of the Babylonian Eden. It is much to be desired that this old mound of Anbar, representing, as I believe, one of the most ancient and important cities of Babylonia, should be thoroughly explored.

12. On the ancient name of Old Cairo, by Prof. J. A. Paine, of Tarrytown, N. Y.

The publication of the results obtained in this paper is, by the desire of the author, deferred to a later issue of the Proceedings.

13. The imperfect of **יָשַׁב** (*yēshēb*), and kindred forms, in Hebrew; by Professor Francis Brown, of Union Theological Seminary, New York City.

The origin of the unchangeable *ē* is the point here discussed—no new question, but one decided differently by the two latest authorities. König (*Lehrgeb.*, 1881) gives a brief history of opinions, and decides that *ē* here = *ay* (or *aw*): i. e. is diphthongal. Kautzsch (*Ges. Heb. Gram.*, 24th ed., 1885) rejects this view, and inclines, cautiously, to that of Stade (*Lehrbuch*, 1879), who explains thus: *yā(w)shūb*, *yāshūb*, *yāshūb* (*ī* inserted after *ā* through reflex influence of *i* in last syll.), *yēshēb*.

Before examining these views, a few words supplementary to König's historical sketch of opinions may be allowed. He cites *Ges. Lehrgeb.* (1817) as giving the facts without explanation, omitting Gesenius' explanation in his smaller grammar (e. g. *Heb. Gram.*, 13th ed., 1842), that *yēshēb* = *yeyshēb* from *yayshēb*—a very unfortunate oversight. Rödiger's view should also be given (*Ges. Heb. Gram.*, edd. 14-21, 1845-1874): Röd. speaks of "tone-long *ē* in the 2d syll.," and "somewhat firmer *ē* (in later edd. *e*) in the first syll.," "das gewissermassen noch etwas von **dom** ausgefallenen ersten Radical in sich trägt." Some other defects in König's historical statement may be passed over. It is interesting, in this connection, to notice that most of the grammars published in England and America, and most of the elementary grammars generally, speak of the 1st rad. as dropped in this form. So Lee, Kalisch, A. B. Davidson, Ballin, Stuart, Nordheimer, Green, Harper, Seffer, etc. Exceptions are Tregelles, Geo. Bush, and H. G. Mitchell, who recognize the 1st rad. as entering into the long *ē*. Strack (*Heb. Gram.* 1883) is not explicit.

Our inquiry must at once emphasize the fact that the first vowel of *yēshēb* (and the kindred forms, *yēlēd*, *yēda'*, etc.) is unchangeable. It is retained in 2d syll. before the tone, not only with the secondary accent (Ex. iii. 21, Jud. xix. 22, Ps. lxxviii. 3, lxxxix. 31, Is. lii. 12, Jer. xvii. 9—where *Metheg* is not written—Hos. ix. 16, xiv. 10, Joel ii. 7, 8), but also without it (Ex. xxxiii. 13, 17). Hence it cannot result from a mere compensative lengthening, after the omission of the 1st rad. (so even Ges.-Kautzsch²³). Stade's view (see above) recognizes this, but itself lacks analogy. He cites *hēkīm*, for *haikīm*, from *hakīm*; *kaspēk* for *kaspai'ki*, from *kaspaki*. But *..* is here not unchangeable (cf. *h'kīmōthi*, *k'tālāthēk*).

In spite of the failure of analogies, Kautzsch (*Ges. Heb. Gr.*²⁴) inclines to Stade's view, because *a*. Arabic *yālidū* (from *wālidā*) and *b*. the defective writing (**יָשַׁב**, not **יָשַׁב**) are opposed to that represented by König. But—

a. Arab. *yālidū* would not forbid *yāvōid*, *yāy'lid*, *yēlēd* in Heb., unless either Hebrew were a daughter of Arabic, or the parent Semitic knew only *yālidū* when Hebrew left it. The former will not be argued. • The latter may receive some light from an examination of the kindred forms in the Semitic languages known to us. The 1st radical is doubtless omitted in these forms in literary Arabic (Wright, § 142), and apparently

in Sabean (Halévy, *Journ. As.* 1873, i. pp. 464, 480). It is, however, sometimes retained (as *w*) in Arabic dialects : cf. G. A., Wallin, *Z. D. M. G.* v., 1851, pp. 12, 22; Wahrmund, *Practisches Handb. d. neuarab. Spr.* (1861), Erster Theil, § 179; Böttcher, *Lehrb.* ii. p. 440 (he compares the Æolic retention of *F*); and particularly Spitta, *Gram. d. Arab. Vulgärdial. von Ägypten* (1880), pp. 223 sq. The *w* remains in the Ethiopic imperfect and (rarely) subjunctive (cf. Dillmann, *Æth. Gram.* 1857, p. 146), in the Amharic subjunctive (cf. Prätorius, *Amhar. Sprache*, 1879, p. 281). The evidence from Aramaic dialects is obscured by the secondary character of some forms. We find in Biblical Aramaic *yittib*, 'inda'; the Targums have like forms, and also *yéylēd*, *t'lūd*; Syr. *nedda'*, *nettēb*, and *nēlad*, etc. (cf. Nöldeke, *Syr. Gram.* 1880, p. 109); Mandaic הירור etc., length of vowel uncertain (cf. Nöldeke, *Mand. Gramm.*, 1875, p. 246); Samaritan *tiylādi* (= *tiyladi*), *tiyladen* (cf. Petermann, *Brev. Ling. Sam. Gram.*, 1873, p. 41)—see also *yishshab* (ישב), Peterm., *Heb. Formenlehre n. d. Aussprache der heutigen Sam.*, in *Abh. f. d. Kunde des Morgenlandes*, v., 1876, p. 45). The Assyrian is fruitful in testimony : thus, *abālu* (= Heb. אבל, which occurs only in Hiph. and Hoph.) gives 3 s. m. *ubil* (I R. 46, 19) *ubillu* (III R. 14, 49) *ubla* (Flood Tab., i. 13, Del. A. L.³ p. 102); 1 s. *ubla* (II R. 11, 25, 63; III R. 8, 81) 3 pl. *ubiluni* (III R. 12, 20), etc. etc. *arādu* (= ארד) gives 3 s. *urid* (IV R. 31, H. I. Rev. 5), *uridu* (*Ib.* H. I. Obv. 63); 3 pl. *urūni* (I R. 9, 69; 11, 71); 3 pl. Pres. *urradani* (IV R. 57, 33a) etc. etc. *alādu* (= אלד) gives 3 s. *ulidanni* (III R. 4, 57); 2 s. *tulidi* (cf. Strassm. 347); 1 s. Pres. *ullada* (Flood iii. 14, Del. A. L.³ p. 104, l. 116), etc. etc. *ashābu* (= אשב) gives 3 s. *ushshib* (I R. 7, I, 2, etc.) ; 3 s. Pres. *ushshab* (Hpt. ASKT. 45. 9), etc. etc. *ašā* (= אשא) gives 3 s. *uši* (Flood iv. 9, Del. A. L.³ p. 106, l. 163) etc. etc. These examples may serve to show that radical *w* has entered into the vowel of the first syllable.

With such testimony to the presence of the 1st radical in these forms, in various Semitic languages, it cannot be surprising if the Hebrew, too, shows its presence.

b. The defective writing in these forms is no doubt a perplexity. Out of more than 1600 cases in the Old Testament, *scriptio plena* occurs in only 4 (Ps. lxxii. 14, cxxxviii. 6, Ezek. xxxv. 9 kt., Mi. i. 8)—too few to have weight in the argument. The following is more to the purpose : While the oldest witnesses (Mesha-stone and Siloam Inscription), like the Old Testament text, show a preference for the writing of ו and י which have become quiescent in the body of a word, there are exceptions in both (cf. Chwolson, *Die Quiescentes וי in der althebr. Orthographie*, Leiden, 1878[†]; Stade, *Gram.*, p. 34 sq.; Kautzsch, *Gram.*²⁴ p. 31 sq. etc.). The Mesha-stone has ורשעני בנה (בית); the Sil. Inscr. ים (ים). If אש comes from an עני stem (Friedr. Delitzsch, *Heb. Lang.* 1883, p. 9, cf. Ges. *Thes.*, and Kautzsch, *Gram.*²⁴ p. 254), this is another illustration, for it appears as אש, in Sil. Inscr. as in Phœnician.

The weak radical would tend to fall out soonest in words of frequent use, because in these the contraction would take place earliest. Cf. Stade (§ 28^c), who explains on this ground the Phœn. constr. pl. (פנ for פני). The verbs here discussed must have been of very early and frequent use—going, going out, going down, sitting, bearing children,

etc. We might expect that the consonantal י or י would have vanished, before writing fixed the form, and their familiarity would make the insertion of vowel-letters seem to the scribes unnecessary; the need of distinguishing יִי from יִי might have made such insertion undesirable:

Neither Arabic analogy, nor defective writing, therefore, can be adduced against $\ell = ay = aw$.

The י in the tone-syllable might facilitate the change of w into y , so that the attempts of Böttcher and König to explain *yēshēb* directly from *yawshīb* are unnecessary.

The form *yēlēk* has not been particularly discussed. If it comes from קָי *, it agrees with *yēshēb*: if from קָי , it imitates *yēshēb* (cf. Kautzsch-Ges.²⁴ p. 177; Prätorius, in Stade's *Zeitschrift*, 1882, p. 310 sq.).

14. On Double Parallelisms in Hebrew Poetry, by Prof. A. Meyrowitz, of New York City.

Dr. Meyrowitz quoted and commented on certain instances of double parallelism in the Bible, which in his opinion had been insufficiently noticed by the commentators.

15. On the Language of the Lepchas, in Sikkim, by Prof. John Avery, of Brunswick, Me.

The Lepchas are a small mountain tribe in the Himālaya, so named by the Gürkhas of Nepāl: they call themselves Rong. The Tibetans call them and neighboring tribes Mon, a name having no proved connection with that of the Mons of Pegu. They are decidedly Mongolian in physiognomy. In the 16th century, the Tibetans deposed the native rulers, and introduced Buddhism.

The basis of the sketch here offered of their language is a Lepcha John's Gospel (1871), and Col. Mainwaring's Grammar (1875).

Unlike most of the hill tribes, the Lepchas have a system of writing of their own, doubtless coming from India, but through what channels and when is unknown. Their alphabet has 55 characters, only 35 of them fundamental. Consonantal combinations are very restricted. A word may end only in a vowel, or in *k, ug, t, n, b* or *p, m, r, or l*.

The Lepcha words are for the most part monosyllabic; but composition and derivation occur, and polysyllabic words, seldom of more than two syllables, are produced. The language stands above the level of pure isolation, having reached the initial stages, at least, of inflection. The added signs for 'male' and 'female' are different for man and for the lower animals. A dual number is recognized. The elements denoting relations of case are the same for all numbers, and are put after the dual and plural signs; and if an adjective follows the noun (its usual position), they are put after that. Thus, *ākup* 'a child,' *ākup-nyum* 'two children,' *ākup-sang* 'children:' then genitive *ākup-sa, ākup-nyum-sa, ākup-sang-sa*—and so on. There are native numerals up to a hundred; above that, they are borrowed from the Tibetan. Numeration is by scores: thus, 30 is 'score-one and ten,' 55 is 'score-two ten and five,' and so on. Of pronouns, there is the usual complement; and the interrogative is said to have sometimes a relative sense. There does

not seem to be a double form, inclusive and exclusive (of the speaker), for dual and plural of the 1st pers. pronoun, as there^o is in some other hill languages.

The Lepcha root is usually a monosyllable; and it may be, as in Tibetan and other isolating languages, verb, noun, or adjective, according to the connection. The principal notions of mode and tense are contrived to be signified in a rude way in connection with it. The primitive sense of the tense-signs is not wholly obliterated, and they are often omitted altogether when the time is made plain by the context. Some of the simpler combinations doing duty as conjugation may be thus instanced: *di* 'come,' *dī-wung* 'coming' (pple), *go dī-bām* 'I am coming' (*bām* signifying 'sit'), *go dī-bā* 'I was coming,' *go dī-sho* 'I shall come;' the addition to the last two of *fāt*, lit'ly 'lose,' makes *go dī-fāt-bā* 'I had come,' and *go dī-fāt-sho* 'I shall have come.' Large use is made of participial and gerundial forms. A passive sense is intimated by an impersonal construction, or by a verbal adjective of passive value with the copula.

The tendency of the Lepcha to agglutination appears in the formation of nouns, adjectives, and adverbs by the help of a variety of syllables having the aspect of true prefixes or suffixes. The structure of the sentence is of course very simple. The subject stands at or near the head of the sentence, and the verb at the end. An adjective usually follows the noun it qualifies; but a noun standing in a genitive relation to another noun precedes it, often with omission of the genitive-sign.

The vocabulary of the language, which shows more effect of Tibetan than of Hindu influence, is reserved for consideration at another time.

16. Review of Dr. Hirth's book on China and the Roman Orient, by President W. A. P. Martin, of Tungwen College, Peking, North China.

At the beginning of the Christian era the two chief empires of the world were at the opposite extremities of the Eastern continent. Each aimed at universal dominion; and both pushed their conquests towards the interior of Asia.

It is curious to speculate what might have been the effect on the course of history if they had met in hostile conflict—if as a result of the shock Chinese civilization had been transported to Europe, or Roman and Greek culture had at that early period been introduced into China. But Parthia was interposed as an obstacle too formidable for either to surmount. On the Roman side, the legions of Crassus were annihilated by the brave mountaineers, and more than one emperor perished in the vain attempt to effect their subjugation. On the Chinese side, we are not informed that the invasion of Parthian territory was ever undertaken; but we are led to believe that it was averted by the Parthian king sending an embassy and asking conditions of peace.

The Parthians not only acted as a barrier between the great empires of the West and East; they also served as an important link in the chain of communication. For centuries they monopolized the traffic in Chinese silks, which were paid for by gold and precious stones pro-

duced in the Asiatic dependencies of Rome. So jealously did they guard this source of emolument, that through a long period they denied to their powerful neighbors even the right of innocent passage. This is asserted in so many words by an ancient Chinese writer: "Their kings" (the kings of Rome), he says, "always desired to send embassies to China, but the people of *Ausi* (Parthia) wished to carry on trade with them in Chinese silks, and it is for this reason that they were cut off from communication."

The rival powers heard of each other notwithstanding: and so greatly were the Chinese impressed by the reports that reached them of the grandeur of Rome that they called it by a name which signified the 'China of the West.' The Romans on their part came to know China chiefly as *Serica* 'the land of silk;' though they also knew it as *Sinae*—probably the same as the "land of *Sinim*" of the prophet Isaiah.

It is not surprising that the Romans, after wearing for a long time the rich fabrics of Chinese looms, should seek to reach the source of supply by a route which would make them independent of an extortionate and oftentimes hostile intermediary. Accordingly we find in the author above quoted, who wrote in the early part of the third century A. D., the statement that "this (commercial obstruction) lasted until the reign of the emperor Huan-ti (A. D. 166), when Antun king of Tach'in (Rome) sent an embassy, who from the frontier of Jihnom (Annam) offered ivory, rhinoceros horns, and tortoise shell." He adds "from that time dates the (direct) intercourse with that country."

We here recognize the familiar name of Marcus Aurelius, who was at that time at war with the Parthians. The Chinese, contrary to their usual practice, have preserved it without distortion or disguise. To avoid the arrows of the Parthians, he sent his messengers by sea, by a route well known as far as India in Solomon's time. The way to China was no sudden discovery. Pliny the Elder, writing a century earlier, speaks of *Taprobane* (Ceylon) as a place where trade was carried on with China; and the extension of the voyage would be easy and natural.

Indeed, considering the facility of communication by a coasting voyage, however long and tedious, it is surprising that intercourse by sea was not opened at a much earlier epoch. Considering, too, that the mountains and deserts of the mainland interposed no such barriers as those which shut out the New World from the knowledge of the Old, it is surprising, not that they were aware of each other's existence, but that the two most cultivated peoples of the world should have known so little of each other.

The people whom Pliny in his *Natural History* calls *Seres*, and describes as having red hair and blue eyes, were evidently not Chinese. He speaks with no little obscurity of the culture of silk in China; refers to the excellent iron made by the Chinese; and gives an unintelligible outline of the geography of the country. Earlier writers limit themselves to bare allusions to China as the *Ultima Thule* of the East, or the home of the silkworm; but even to a much later period it remained to the Romans a *terra incognita*.

The earliest notice of any part of the Roman Empire to be found in

Chinese books is under date of 91 B. C. Not long before that time the king of Parthia had sent an embassy to China, who offered to the emperor, besides other articles of tribute, "jugglers from Li-kan." This Dr. Hirth thinks was Petra or Rekem, taken by synecdoche for the whole of Syria; but to me it appears more probable that Li-kan was Greece, however the name be explained; as the jugglers themselves spoke of their country as lying to the "west of the sea." Rome was not yet an Asiatic power; and in China Greece was known, if at all, not by the conquests of her Alexanders, but by her cunning jugglers. That class of people, so celebrated for their sleight of hand, were not unlikely to make their way to the Celestial court: "*Græculus esuriens in cælum, jusseris, ibit.*"

A century later, the Chinese general Panch'ao reduced to subjection a large part of Central Asia. By this time Rome had some title to be regarded as mistress of the world; and the general heard with astonishment of a country which was described to him as the "Great China" of the West. He sent an ambassador named Konying to open communication.

This envoy, it has been supposed hitherto, proceeded as far as the Caspian or Black Sea, where he was turned back by the dangers of a long sea voyage. Dr. Hirth, however, makes it apparent that the sea at which he arrived was the Persian Gulf. After this date the name Tach'in, which we have rendered the 'China of the West,' is of frequent occurrence in Chinese historical works. It appears, too, on the monument that records the history of the Nestorian missions. It is, however, always associated with something of legendary and marvelous; and so wanting in precision are the accounts that are given of it, that it is a question whether the country referred to is Rome or Syria.

This appears to be the leading question discussed in Dr. Hirth's book. He decides in favor of Syria; but I am disposed to agree with Edkins and Bretschneider in regarding the name Tach'in as intended for the Roman empire as a whole; though the eastern dependencies were best known to the Chinese, and by them most fully described. Antioch in fact is styled by Chinese writers the capital of Tach'in: and they might easily take it for the chief seat of empire, as it was the third city of the world in importance. They describe its situation on the Orontes, preserve a reminiscence of its name in the abbreviated form Antu, and give even the four divisions of the city, which caused it to be styled Tetrapolis by the Greeks. We may readily admit that the Chinese knew more of Antioch than of the city of the seven hills, without conceding that they employed the term Tach'in for Syria alone.

Another term which they employ as equivalent to Tach'in is Fulin. In this Dr. Hirth curiously enough discovers the name of Bethlehem. If his identification were correct, it would throw additional lustre on the village that gave birth to Jesus Christ—making its name synonymous with that of the empire. Here again I feel bound to dissent from the conclusions of our learned author, and, with Bretschneider, to recognize in Fulin the Greek word *polin*, the city of Constantine; the accusative with its final *n* being better adapted to Chinese lips than the nominative with final *s*.

This dispute as to the earliest recorded intercourse between the extremities of the Old World reminds us of the similar discussions on the subject of early intercourse between the Old World and the New ; and especially of the conflict as to the application of the name Fusang to America or Japan.

The want of any well-defined phonetic element in the Chinese written language is a source of immense perplexity to those who attempt to reconcile the statements of Chinese historians and geographers with those of Western writers. Dr. Hirth has brought great acumen and much patience to the solution of the numerous enigmas arising from this source. That under the Chinese form Sipin he is right in discovering Ctesiphon ; under Amon, Ecbatana ; and under Szelo, Hira, may be fairly admitted, without granting that he has found Bethlehem in Fulin. He has collected his documents with great labor and collated them with much skill. The result is a book full of interest to students of oriental geography and history.

Professor C. A. Briggs, of the Union Theological Seminary, offered the following resolution, which was passed without dissent :

Resolved, That this Society expresses its gratification at the valuable discoveries made by the Wolfe Expedition ; that we regard it as highly important that the ruins discovered by Dr. Ward in ancient Babylonia be thoroughly explored as soon as possible ; and that we recommend to the American public this object as one worthy of liberal contributions, in order that a second expedition may be sent out at an early date to make the excavations, and that the Assyrian and Babylonian antiquities may be acquired by American museums.

After a vote of thanks to the authorities of Columbia College, the Society adjourned to meet in Boston, May 12th, 1886.

Proceedings at Boston, May 12th, 1886.

THE Society was called to order in the hall of the American Academy on Wednesday morning, the President, Professor W. D. Whitney, of Yale College, in the chair.

The Recording Secretary, Professor Toy, read the minutes of the foregoing meeting, and they were approved. The general order of proceedings and the titles of papers were announced. The reports of the retiring officers were then presented.

The accounts of the Treasurer, Mr. Van Name, were referred to Rev. Mr. Winslow and Professor Elwell as a Committee of Audit. After examination of book and vouchers, they reported that they found the accounts correct. The report was approved. In brief summary, the accounts are as follows :

RECEIPTS.

| | | |
|--|-----------|-------------------|
| Balance on hand, May 6th, 1885, | - - - - - | \$1,212.97 |
| Assessments (98) paid in for year 1885-86, | - - - - - | \$490.00 |
| Assessments (36) for other years, | - - - - - | 180.00 |
| Sale of the Journal, | - - - - - | 56.06 |
| Interest on deposit in Bank, | - - - - - | 38.32 |
| Total receipts for the year, | - - - - - | 764.88 |
| | | <u>\$1,977.85</u> |

EXPENDITURES.

| | | |
|---|-----------|-------------------|
| Printing of Proceedings and Journal, | - - - - - | \$857.01 |
| Engraving, | - - - - - | 22.00 |
| Binding, | - - - - - | 99.95 |
| Expenses of Correspondence (postage, etc.), | - - - - - | 45.25 |
| Total expenditures for the year, | - - - - - | \$1,024.21 |
| Balance on hand, May 12th, 1886, | - - - - - | 953.14 |
| | | <u>\$1,977.35</u> |

The Bradley type-fund now amounts to \$1,084.28.

The report of the Librarian, Mr. Van Name, showed that forty-two complete volumes, one hundred and forty-three parts of volumes, and sixty pamphlets, had been added to the library during the year. Most of these accessions are continuations of the regular exchanges. The number of titles of printed books and pamphlets is now four thousand three hundred and thirty-one, and of manuscripts, one hundred and sixty-two.

For the Committee of Publication, Professor Whitney reported that the eleventh volume had been completed and distributed, and

that the printing had begun on the thirteenth volume, which would be taken up in great part by the text of the *Kāuṅika-sūtra*, edited, with extracts from the commentaries and with critical apparatus, by Professor Bloomfield of Baltimore.

The Corresponding Secretary, Professor Lanman, announced in the name of the Directors, that the next meeting would be held at New Haven, on Wednesday, October 27, 1886, and that the President and Treasurer had been authorized to act as a Committee of Arrangements. The Committee of Publication of the preceding year had been reappointed. It consists of Messrs. Salisbury, Toy, Van Name, W. H. Ward, and W. D. Whitney. The Directors proposed and recommended to the Society for election the following persons :

As Corporate Members—

Mr. Charles J. Deghuée, of Columbia College, New York ;

Dr. Gabriel Engelsman, of New York :

Mr. Henry Preble, of Harvard College, Cambridge.

The gentlemen thus proposed were duly elected.

Mr. Charles Theodore Russell, Sr., reported for the Committee appointed in May, 1885, that the lot of valuable books given by the Imperial Government of China to the United States had been duly transferred to Washington ; also, that it did not appear to be a favorable time at present for moving in the matter of the appointment of Consuls in the East. The report was accepted, and the Committee discharged.

The President named as a committee to nominate officers for the ensuing year Mr. Charles Theodore Russell, and Professors Toy and Hopkins. The Committee reported later on, proposing the reelection of the retiring board of officers, with only one change, the substitution of Professor Lyon of Cambridge, as Recording Secretary, in place of Professor Toy, who desired to be relieved of the duties of that position. The proposals of the Committee were ratified by the meeting without dissent. The board of officers is accordingly constituted as follows :

President, Professor W. D. Whitney, of New Haven ;—*Vice-Presidents*, Rev. A. P. Peabody, of Cambridge ; Professor E. E. Salisbury, of New Haven ; Rev. W. H. Ward, of New York ;—*Recording Secretary*, Professor D. G. Lyon, of Cambridge ;—*Corresponding Secretary*, Professor C. R. Lanman, of Cambridge ;—*Secretary of the Classical Section*, Professor W. W. Goodwin, of Cambridge ;—*Treasurer and Librarian*, Mr. Addison Van Name, of New Haven ;—*Directors*, Professor John Avery, of Brunswick, Maine ; Professor Joseph Henry Thayer, of Cambridge, Mass. ; Mr. Alexander I. Cothel, Professor Charles Short, and Professor Isaac H. Hall, of New York ; and President Daniel C. Gilman and Professor Maurice Bloomfield, of Baltimore.

The Corresponding Secretary read the names of those who had died during the year. They were as follows :

the Corresponding Member,

Mr. Henry Stevens, of London ;

and the Corporate Members,

Rev. George R. Entler, of Franklin, N. Y. ;

Rev. Nicholas Hoppin, of Cambridge, Mass. ;

Prof. Gustav Seyffarth, of New York ;

Rev. Lyman Stilson, of Jefferson, Iowa ;

Prof. Thomas A. Thacher, of New Haven, Conn.

Mr. Stevens, born August 24, 1819, in Vermont—whence his favorite title, “Green Mountain Boy”—went in 1845 to London. Here he found a place admirably suited to his abilities and attainments, as a bibliographer and agent in the British Museum. He furnished the Museum with one hundred thousand books or pamphlets on American subjects, and may justly be called the most eminent literary and historical intermediary between the Old World and the New. Mr. Hoppin was, with one exception, the oldest Episcopalian clergyman in Massachusetts, and had been rector of Christ Church in Cambridge for thirty-five years. He wrote many articles, especially on ecclesiastical history ; and these are to be found in the *Church Monthly* and in the *Church Review*. Dr. Seyffarth was born in 1796 in Prussia. He studied in Leipsic, and then in Paris under Champollion, and distinguished himself in the field of Egyptian antiquities. In 1825 he was made professor extraordinary at Leipsic. He made extensive travels, and collected a great amount of material for investigation in his chosen studies. In 1857 he came to New York, and, after a period of service as professor at Concordia College, St. Louis, he returned to the metropolis, where he dwelt until his death in November last. The Rev. Lyman Stilson was born in New York State in 1805 and went out to Burmah as a missionary of the American Baptist Missionary Union in 1837. He worked chiefly at Arrakan and Maulmain and prepared books on arithmetic, geography, and other useful subjects, and overcame great difficulties in their manufacture and publication. He returned to this country in 1851. During his residence in Arrakan, he learned the *Kemī* language ; and he contributed a brief notice of it to the *Journal of this Society*, where it may be found, volume viii., p. 213, 1862, along with an interesting extract from a letter which accompanied the article. Professor Thacher graduated at Yale College in 1835, and was for nearly fifty years an instructor in the College, and a kind and faithful friend to those who needed counsel and help. Although he made no contributions to the *Journal*, he was a member whose constant and sympathetic interest in the aims and achievements of our Society was greatly valued.

Reports were given of letters from Mr. Rockhill in Peking. He has sent some interesting rubbings of inscriptions from Pan Shan, east of Peking. The inscriptions are incised on a pillar of stone, and date from the Ming dynasty (1368-1644 A. D.). A

considerable part of the characters are nāgarī Sanskrit, and promise to be of interest palæographically. Mr. Rockhill mentions a recent find near Peking of about sixteen Roman coins dating from Nero down. Dr. Bushell will give a report upon them in the *Journal of the Peking Oriental Society*.

Professor Isaac H. Hall read extracts from a letter received by him from Professor Th. Nöldeke of Strassburg, in reference to a projected English translation of the latter's Syriac Grammar, from which he had been obliged to withdraw his sanction, not being satisfied with the way in which the work was done.

Professor Hall also presented a note concerning the proposed Syriac-Arabic Lexicon in preparation by the Jesuit establishment at Beirut. He had understood that this was the lexicon of "Kerem Sedd," of which only two manuscript copies are known; and he had hoped therefore to obtain the sheets as they came through the press. He learns however from Dr. Van Dyck that it is not that lexicon at all, but a new affair by a Maronite priest, and of no great value. "The Syriac patriarch, Yusuf Daūd, declares it is full of mistakes, to say nothing of typographical errors."

The following resolution was offered by Rev. W. C. Winslow, and passed:

Resolved, That the American Oriental Society, recognizing the important explorations of the Egypt Exploration Fund and the valuable results already obtained thereby, cordially commends its cause as worthy of liberal support from the public.

After finishing the miscellaneous business, the Society proceeded to the hearing of communications, which were continued until evening, with a recess between 1 and 2 p. m.

1. On Hebrew military history in the light of modern military science; by General Henry B. Carrington, of the United States Army.

General Carrington, in illustration of the fact that military methods have remained substantially the same through a long period, referred to some of the details of Hebrew warfare which are mentioned in the Old Testament. Such procedures as night-attack, division of attacking force into several parts, feigned retreat, setting an ambush, bringing up reserves, are by no means the invention of modern times; and we can even trace among the early Hebrews the beginning of organization by corps, divisions, regiments, etc.

2. On a Greek Hagiologic Manuscript in the Philadelphia Library; by Prof. I. H. Hall, of New York City.

This manuscript is one of three that were presented to the Library Company of Philadelphia, more than a century ago, by Henry Coxe, Esquire. It is kept in the Ridgway Branch of the Library, and numbered 1141. It is bound in half-leather, and lettered on the back "MSS. Greek Commentary." It consists at present of 180 paper leaves, $10\frac{1}{2} \times 7\frac{1}{4}$ inches

in dimension, leaf 39 being torn away except a little piece of the inner upper corner. It contained three more leaves originally, two at the beginning and the other at the end. Wax droppings indicate that it was probably read in service on saints' days. A bit of later script on the top of the first page shows it to have been formerly the property of some monastery, whose name I cannot make out. In binding the manuscript (the binding is not very recent), a number of the leaves had to be mounted on a slip. On this slip some scribe supplied some of the ornamental initials that had been torn or worn away; but the numbers of sections or titles thus removed have not been replaced. The outer edges of the leaves have also been so much worn away as to remove many of the section-numbers; but the edges appear never to have been cut. The writing occupies regularly 30 lines, in a space about 8×6 inches in dimension, on each page. It is a pretty plain and easy cursive, apparently of the 14th or 15th century. Ornamental initials frequently occur, in red: with also a few other ornaments. The writing is full of iotacisms, perpetually exchanging *ι* and *η*, though not in a way to give trouble. Sometimes *υ*, as well as sundry of the diphthongs, is replaced by *ι*. Not infrequently *ο* and *ω*, *β* and *υ*, and *μ* and *β*, replace each other (the last of these cases is real, and not due to confusion of similar characters). Iota subscript does not occur, except in a few places where it has been supplied by a much later hand. The breathings and accents are not always correctly applied.

The lettering on the back is not descriptive of the manuscript. Its contents are as follows:

Fol. 1a to 3a.] Part of the last sentence of the Proëmium to the *Historia Lausiaca* of Palladius, bishop of Helenopolis in Cappadocia (A. D. 420), beginning with the word *ἐξαρπαθῆντων*; Table of Contents of the *Historia*.

Fol. 3a to 66b.] The two introductory letters; the *Historia Lausiaca* proper, insensibly passing into matter identical with the *Paradisus Patrum*; the whole ending with the words, in red, *ὡς ὧδε ἡ κατ' Αἰγυπτὸν μοναχῶν ἱστορία* (these are elsewhere an alternative title of the "Paradise").

Fol. 66b to 72a.] "Life of the Abbot Paul of the Thebaid;" [fol. 70a] "Concerning Taxeotes;" [fol. 71b] "Concerning Philentolus [son] of Olympias."

Fol. 72b to 94a.] "Narratives and Admonitions of the Holy Fathers *περὶ κατανύξεως*," answering generally to the *Apophthegmata* or *Gerontika*, which occur in many manuscripts.

Fol. 94a to 106b.] "Concerning the Abbot Macarius Politicus," with more *apophthegmata*.

Fol. 106b to 109a.] "Writing (*σύγγραμμα*) of Athanasius, patriarch of Alexandria, who is among our Holy Fathers, of instruction to all who live a monastic life, and to every devout Christian."

Fol. 109a to 113b.] "The names of the holy Prophets, whence they were, and where they lie buried."

Fol. 113b to 115b.] "Ecclesiastical *σύγγραμμα* concerning the 70 disciples of the Lord, of Dorotheus, bishop of Tyre, an ancient spirit-bearing (*πνευματοφόρον*) man, who became a martyr in the time of the emperors Lycinius and Constantine."

Fol. 115b to 119a.] An account of various persecutions and martyrs, and of the twelve Apostles; which "the thrice blessed and all-happy Dorotheos left for remembrance, in the Roman dialect," and the writer interpreted into Greek.

Fol. 119a to end.] "Life and conduct of the holy Mary of Egypt, who lived holily an ascetic life in the desert; written by Sophronius, who is among the holy [Fathers], archbishop of Jerusalem. Read in the 5th of the great calendar (τοῦ μεγάλου κανόνος). Lord, bless!" The manuscript breaks off at ἐυλό[ησον], just so far before the end of the treatise as to show that one leaf more would have finished it.

The manuscript thus appears to be one of those hagiologic compilations which are not infrequent, but of which scarcely any two have the same contents. As to character, so far as I have been able to compare its contents with the printed texts, it appears to be as good as any other manuscript. In certain portions it has manifestly better readings than the printed texts, as well as many worse. Several portions appear to be quite different from anything ever published, and some quite unknown. From all that I can learn, or have seen in print, I feel pretty sure that the manuscript has never been used by any editor of a printed hagiologic work or patristic collection. It is not likely that its contents will have an opportunity very soon to get into print; and I have no time to make a careful collation. But it seems worth while to put on record the general results of an examination, so that it may contribute its mite in the fulness of time. Meanwhile, it may help those who wish for all the available light on sundry curious texts; and it will be of especial service to those who may wish, for the sake of practice with Greek manuscripts (which are none too abundant in this country), to study or collate it. It would be hopeless for a beginner to attempt to identify the passages for himself. It goes without saying that the manuscript has abundant variations from the printed texts.

I. The *Historia Lausiaca* [fol. 1-66]. The matter of this treatise varies not only in the manuscripts, but in the printed editions; so that it is impossible now to say just how many of the sections or chapters assigned to it really belong there. Reference may be had to Migne's *Patrologia Græca*, vol. 34, where, in the *Hist. Laus.*, the *Acta Macaria*, the *Paradisus*, etc., will be found much of the matter of this manuscript, with references to other manuscripts and editions of parts. More will be found in vol. 65 of Migne, under *Appendix ad Palladium*, etc. Some will also be found in vol. 87, part 3, in the *Pratum Spirituale* of John Moschus; not to mention other scraps and repetitions in other places. I give below a detailed list of places where the passages of this manuscript correspond with those in Migne's edition.

The table of contents, however (fol. 1-3a), deserves special mention. It does not tally exactly with the contents of the text of the *Historia*, and could not have been compiled from the contents of the manuscript, but must have been copied from some other table of contents, which represented a copy of the *Historia* of average extent. Since the table thus has an independent value, I give it in translation, adding the numbers of the titles where they are present. Many of the numbers

are cut away, as already explained ; but there are some slips in the numbering. It is as follows :

' 1. And I encountered, in the first entrances of the journey, by the grace of spiritual succor, the great and inspired teacher Isidorus the presbyter, [and] the host of the great church of Alexandria, the admirable man Dorotheus the Thebaid ascetic. 2. I heard concerning Potamiaine, a most beautiful girl. 3. I met Didymus the author, who is blind in his eyes. I heard concerning Alexandria the faithful damsel. 5. Concerning the virgin that loved riches, [I heard] by name only. Macarius the superintendent of the poor-house. I met two thousand men adorned with every virtue. In the Mount of Nitria I met other holy ones. Six hundred other anchorites in the utter desert. Arsisius the great, and Putubastus, and Hagion the aged, and Serapion a most celebrated anchorite. A *cænobium* in the Mount of Nitria ; church with three palms. The *Xenodocheion* into which we are received. Benefit of accomplishing the evening prayers. Eight presbyters leading the van, and the throng of the church ; and of the entertainer, and of the sojourners. The great Arsisius, and many others of the holy Fathers. 14. He narrated concerning the great Pachomius. Concerning the holy Amun and his partner. The blessed Amun and his disciples. Concerning the river Lycus. The author himself [says that] he crossed this river with timidity. The matters concerning Or, the admirable man who is an anchorite. The matters concerning the holy Pambo, the great teacher and bishop. Of Dioscorus and Ammonius, and of the brethren Eusebius and Euthymius. The matters concerning Melania, the admirable Roman woman. Melanion relates how the blessed Pambo met his end. To Origenes and Ammonius, the holy ones, the blessed Pambo says certain things when he is about to die. Origenes the presbyter and Ammonius narrated wonderful things concerning the blessed Pambo. How the blessed Pior takes the cell of the holy Pambo. How again the great Pambo comes to the cell of Pior. The matters concerning the holy Ammonius ; and of the three brethren. Timotheus the holy bishop. 28. How the blessed Ammonius exercised his body. 29. The blessed Evagrius votes for the servant of God Ammonius. 30. How Ammonius received Rufinus the eparch. 31. The matters concerning the admirable monk Benjamin. 32. How the bishop Dioscorus received the blessed Evagrius. 33. The matters concerning Apolonius, who finished his business. 34. The matters concerning the five thousand monks in the mount. 35. The matters concerning the holy ones, the brethren Paisius and Esaias. 36. How these observers disposed of vanities. 37. The matters concerning Macarius the younger. 38. The matters concerning the most estimable Nathanael. 39. The matters concerning the great athlete of Christ, Macarius the Egyptian. 40. The matters concerning the blessed Macarius the Alexandrian. 41. The matters concerning the great Pachomius, the spirit-bearing man ; and again concerning the death of Macarius. 42. The matters concerning the most gentle Mark ; and of Paphnutius his disciple. 43. The matters concerning the most noble Moses, the one [who became monk] from the robbers. 44. How the four robbers became monks. 45. How this one came to Macarius ; [how] to Isidorus of Scetis. 46. The five hundred anchorites in the Mount of Pherme. 47. The matters concerning the noble Paul, who made six hundred prayers. 48. This one meets with the holy Macarius Politicus. 49. Concerning the virgin who made seven hundred prayers. 50. Of Cronius narrating his own adventures. 51. The matters concerning the great Antonius. 52. The matters concerning Eulogius. 53. He who was injured in body. 54. Eulogius the long-suffering. 55. Antonius questions Theodorus. 56. The holy Antonius prays that the place of the righteous may be revealed to him. 57. Where blessed Hierax and Cronius and many others relate the matters concerning Paul. 58. The matters concerning the blessed Paul the Simple. 59. Where the author himself is tempted by the demon of fornication. 60. Where the

author meets the great Pachomius. The matters concerning the noble athlete Stephen. The matters respecting Valens, who fell away through vanity. The matters respecting Heron, who exalted himself in haughtiness. Concerning Ptolemæus, who, after many labors and noble sweatings, fell away of his own accord. 65. Concerning the virgin that fell away. Concerning the blessed Elias the virgin-lover. 67. Concerning Dorotheus. Concerning the blessed virgin Piammun. 68. The matters concerning Pachomius. Monasteries of about two hundred [in text, 300], and of three hundred men. At the city Spanos, monasteries of three hundred souls. Monastery of four hundred women. 73. Concerning the holy virgin. How revelation was made to the holy Pityrum concerning herself. Concerning the blessed John among the propiets, where this blessed one challenges Theodorus the interpreter. This same one foretells the future to Poimen. Lionisius [*sic*] the bishop was dipped into the river. The matters respecting Poseidonius. 80. The matters concerning Hieronymus. How the blessed Poseidonius foretells the death of the blessed Paulus. How Hieronymus makes Oxyperentius a fugitive by his own enchantment. Respecting the most holy Peter and Symeon. 85. The matters concerning Serapion. How the blessed Serapion met Domneus who was in Rome. Concerning the virgin who lived in retirement in the desert. 88. The matters concerning Evagrius. How he was led from the palace of Isangelus. How the holy Gregorius made him deacon. How Gregorius abandons Evagrius for Nectarius. Melanion questions the blessed Evagrius. 93. The matters concerning the holy Pior. The matters concerning Moses Lybinnus. 95. The matters concerning Ephraim. The matters concerning Paula of Rome. 97. The matters concerning Eustochia the daughter of Paula. The matters concerning Veneria. 99. Concerning Theodora. 100. The matters concerning Hosia [*al.*, Usia]. 101. Concerning Adolia. 103. Concerning Basianila. 104. Concerning Asela [Asella] in Rome. Concerning Abetas [Avita]. 106. Concerning Julianus. 107. Concerning the virgin Photine. 108. Concerning Adolius of Tarsus. 109. The matters concerning Idnocentius [Innocentius]. 110. The matters concerning Philoromus. 111. The matters concerning Melane Spane. 112. Concerning the holy ones that were exalted, Isidorus and Posimus (or, Posinus) and Adelphius and Paphnutius and Pambo and Ammonius, and certain others. 113. How the reckoning came to be concerning Rufinus. 114. Concerning Cronius the priest, chief of two hundred monks. 115. Concerning James. 116. Concerning Paphnutius. 117. How Evagrius and Albinus servant of Christ met with him. 118. How the blessed Chere-mon met his end. 119. Another monk, having dug a pit, was buried in it. 120. How another died of thirst. Concerning Stephen who fell away. 121. He cites Job for testimony. 122. Concerning Elpidius of Cappadocia. 123. Concerning Aimesius. 124. And Eustathius of the brethren. Concerning the immortal Sisinnus [*al.*, Sisinnus]. 125. Concerning Gadana [*al.*, Gaddana]. 116. Concerning Elias the [son] of Philoxenus. 127. Concerning Sabbaticus [son] of Nicus. 128. Abramius the Egyptian. 129. Concerning Melanion again. 130. Concerning Profanus. 132. Concerning Silvius. 133. Concerning Jubinus [Jovinus], deacon and bishop. 134. Memorabilia of Prigienes, Gregorius, Stephanus, and concerning Pierius and Basilus. 135. The matters concerning Olympiades. 136. The matters concerning Candida. 137. Concerning the virgin Gelasia. 138. Concerning the monastery in the desert of Antinous, of a thousand two hundred men. 139. Concerning those in caves. 140. Concerning Solomon. 141. The matters concerning Dorotheus. 142. The matters concerning Diocles, and the matters concerning Cappito from the robbers. 143. Concerning him who was led astray. 144. Concerning the holy Amua Talis. 145. Concerning the holy Taor. 146. Concerning the virgin. 147. Concerning Melanion the child (or, [the son] of Paidias). 148. Concerning Pini-anus. 149. Concerning Paulus Dalmatisius. 150. Albina and Melania. 151. Concerning Pammachias. 152. Concerning Macarius and Constan-

tinus. 153. Concerning her who received the bishop Athanasius. 154. Concerning bishop Athanasius. 155. Concerning bishop Origenes. 155 [sic]. Concerning the virgin of Corinth. 156. In behalf of the most prudent Pri (?); he fought with wild beasts. 157. Concerning Verinus and Bosphoria in Ancyra. 158. Concerning the virgins of Christ in Ancyra. 159. Concerning Magna and the rest. 160. Concerning the humble-spirited partner of the bishop. Concerning her who fell away and repented. Concerning the daughter of the presbyter, who fell away. Concerning the reader in Cesarea. How from another person the same author has his own adventures narrated. The author thanks God. 166. How he narrates also the blessed life of the Bragmani, and makes mention concerning the bishop Moses. Of the Adulini. 167. And this same author attempted to enter into the island. 168. And hears concerning a certain scholastic. Concerning Alexander. 170. The matters concerning Dandanis and concerning Calarus and Onesicrates.'

It will be noticed that such numbers as are present in the above table of contents show mistakes in the sequence. Thus between 5 and 14 are nine items; so that 14 is really 16. Number 102 is omitted, 155 is repeated, and so on. However, taking the items as they are, the titles of the table of contents are descriptive of the matter of the several sections of the text, as far as the former's title No. 76. But the numbers of the table do not correspond exactly with those of the sections in the text. No. 1 of the table includes 1 and 2 of the text; Nos. 76 and 77 of the contents belong to 79 of the text. There are, likewise, a few slips in the numbering of the sections of the text. In both text and table the divisions are smaller than the usually printed chapters.

The matter of the text corresponds pretty well with that in Migne's *Patrologia Græca*, vol. 34, *Historia Lausiaca*, as far as Migne's cap. lxxvi.; that matter will be more fully treated further on. But the table of contents, after its title No. 76, goes on with titles which appear pretty clearly to correspond with chapters of the *Historia* in Migne, as follows (bracketing the numbers not actually written with the titles in the table):

| MS. | | Migne. | | MS. | | Migne. |
|----------|---|--------|--|----------------|---|----------|
| No. [79] | = | No. 77 | | No. 110 | = | No. 118 |
| 80 | " | 78 | | 111, 112 | " | 117 |
| [81] | " | 79 | | 113 | " | 118 |
| [82] | " | 80 | | 114 | " | 89 |
| [83, 84] | " | 81 | | 115 | " | 90 |
| 85 | " | 82 | | 116, 117 | " | 91 |
| 87 | " | 85 | | 118 | " | 92 |
| 88-[92] | " | 86 | | 119 | " | 93 |
| 93 | " | 87 | | 120 | " | 94 |
| 94 | " | 88. | | [120, 3d], 121 | " | 95 |
| 95 | " | 101 | | 122 | " | 106 |
| [96] | " | 125 | | 123 | " | 107 |
| 97 | " | 126 | | 124 | " | 108, 109 |
| [98] | " | 127 | | 125 | " | 110 |
| 99 | " | 128 | | 126 | " | 111 |
| 100 | " | 129 | | 127 | " | 112 |
| 101 | " | 130 | | 128 | " | 105 |
| 103 | " | 131 | | 129 | " | 119 |
| 104, 107 | " | 132 | | 132 | " | 142 |
| [105] | " | 133 | | 133, 134 | " | 143 |
| 106 | " | 102 | | 135 | " | 144 |
| 108 | " | 104 | | 136 | " | 145 |
| 109 | " | 103 | | 137 | " | 146 |

| MS. | | Migne. | | MS. | | Migne. |
|-------------|---|--------|--|---------------------|---|------------|
| No. 138-140 | = | No. 96 | | No. 152 | = | No. 123 |
| 141 | " | 97 | | 153, 154 | " | 136 |
| 142 | " | 98, 99 | | 155 | " | 148 |
| 143 | " | 100 | | 158, 159 | " | 135 |
| 144 | " | 137 | | [161] | " | 140 |
| 145 | " | 138 | | [162] | " | 141 |
| 146 | " | 139 | | [163] | " | 142 |
| 148 | " | 121 | | [165] | " | 150 (part) |
| 150 | " | 120 | | [166] (latter part) | " | 130 (?) |
| 151 | " | 122 | | | | |

It thus more clearly appears, as above stated, that the table of contents was copied from some other MS., which pretty well represented the ordinary, reputed contents of the *Historia Lausiaca*. As respects the titles in the table which do not correspond to any chapters in the edition in Migne, some of them correspond to other matters in the life of Macarius, or in other kindred works or fragments in Migne. Others again demonstrably, and yet others probably, are titles to subdivisions of chapters in Migne's edition of the *Historia Lausiaca*. The titles in the table that are thus to be accounted for are Nos. 130, 147, 149, one of the two numbered 155 (which, on examination, seems to be inserted erroneously, and to be a repetition of another title), 156, 157, 158, 160, 164, the first portion of 166, 167, 168, 169, 170. It is hardly worth while to take up space with their further consideration.

After the table of contents come the two letters to Lausus, of which the first is given without title, and the second with the title which in Migne is given to the first: viz. "Copy of the letter written to Lausus Præpositus from Bishop Palladius." The history proper begins at fol. 6a. The following is a tabular statement of the coincidences of the numbered sections of the MS. with the chapters of the *Historia* in Migne, not noticing slight differences, such as when a chapter in the MS. begins or ends a sentence or so earlier or later than that in Migne, and keeping the actual written numbers of the sections in the manuscript, disregarding the slips:

| MS. Sections. | | Migne's Chapters. | | MS. Sections. | | Migne's Chapters. |
|---|---|-------------------|--|---------------|---|--|
| 1 | = | 1 | | 46 [sic] | = | Migne, vol. 34, col. 197, 3d paragraph, to end in col. 200 (<i>Acta Macar. Ægypt. et Alexandr.</i>). |
| 2 | " | 2 | | 47-50 | " | 22 |
| 3 | " | 3 | | 51, 52 | " | 23 |
| 4 | " | 4 | | 53 | " | 24 |
| 5 | " | 5 | | 54, 55 | " | 25 |
| 6, 7 | " | 6 | | 56-59 | " | 26 |
| 8-18 | " | 7 | | 60 | " | 27 |
| 19 21 | " | 8 | | 61, 62 | " | 28 |
| 22 | " | 9 | | 63, 64 | " | 29 |
| 23-27 | " | 10 | | 65 | " | 30 |
| 28 | " | 11 | | 66 | " | 31 |
| 29-34 | " | 12 | | 67 | " | 32 |
| 35, 36 | " | 13 | | 68 | " | 33 |
| 37, 38 | " | 14 | | 69 | " | 34 |
| 39, 40 = 15, 16 (some transposition). | | | | 70 | " | 35 |
| 41 | = | 17 | | 71 | " | 36 |
| 42 | " | 18 | | 72 | " | 37 |
| 43-45 = 19, 20 (in part. Some disorder in MS. or in Migne). | | | | | | |
| 46 | — | 21 | | | | |

| MS. Sections. | | Migne's Chapters. | MS. Sections. | | Migne's Chapters. |
|---------------|---|--------------------|---------------|---|--|
| 73 | = | 38, 39 (part). | 78 | = | 42 |
| 74, 75 | " | 39 (part). | 79 | = | 43-46 (with differences and transpositions). |
| 76 | " | 39 (last part), 40 | | | |
| 77 | " | 41 | | | |

Here the sections in the manuscript cease to be numbered, except just at the end of the *Historia*; and I give the folio number of the manuscript where the section begins, with the title to the latter. The numbers in Migne are still those of chapters in the *Historia Lausiaca*, except when otherwise stated:

| | MS. Sections. | | Chapters in Migne. |
|------------|---|---|--|
| Fol. 43b.] | Of the abbot Ammonius, | = | 48 |
| 43b.] | Of the abbot Bes, | " | 49 |
| 44a.] | Of the city Oxyrhynchus, | " | vol. 65, col. 445, 448 (<i>Appendix ad Palladium</i>). |
| 44b.] | Of the abbot Theon, | " | 50 |
| 45a.] | Of the abbot Elias, | " | 51 |
| 45a.] | Of the abbot Apollon. | " | 52 |
| 50b.] | Of the abbot Anun, | " | 53 |
| 51b.] | Of the abbot Kopres, presbyter, | " | 54 (1st part). |
| 52a.] | Of the abbot Evagrius, | " | vol. 65, col. 448 (<i>App. ad Pallad.</i>). |
| 52a.] | Of the abbot Paternuthius, | " | vol. 65, col. 448, sq. (<i>App. ad Pallad.</i>). |
| 54a.] | Of the abbot Kopres, presbyter, | " | 54 (latter part). |
| 55a.] | Of the abbot Suros, and the abbot Esaias, and abbot Paul [and abbot Anub] (but text omits Esaias, which is Migne 56). | " | 55, 57, 58 |
| 55b.] | Of the abbot Hellen, | " | 59 |
| 56b.] | Of the abbot Apelles, | " | 60 |
| 57a.] | Of the abbot John, | " | 61 |
| 57b.] | Of the abbot Paphnutius, | " | 62-65 |
| 59b.] | Of the abbot Pytyrion, | " | 74 |
| 60a.] | Of the abbot Eulogius, presbyter, | " | 75 |
| 60a.] | Of the abbot Isidorus, | " | 71 |
| 60b.] | Of the abbot Serapion, presbyter, | " | 76 |
| 60b.] | Of the abbot Apollonius, martyr, | " | 66, 67 |
| 61b.] | Of the abbot Dioscorus, presbyter, | " | 68 |
| 61b.] | Of the [monks] in Nitria, | " | 69 |
| 62a.] | Of the abbot Ammonius, | " | 70 |
| 62b.] | Of the abbot Didymus, | " | vol. 65, col. 456 (<i>App. ad Pallad.</i>). |
| 62b.] | Of the abbot Macarius, disciple of Antonius. (Contains several paragraphs from 19, 20, in Migne's <i>Hist. Laus.</i> , the first of which is an introduction of 4½ lines, and the rest relate the wonders, signs, etc., wrought by Macarius. Some are identical with passages in Migne, some substantially the same in matter, but not quite the same in language. The paragraphs are as follows: 62b.] Migne, 19, 20, col. 1050, 2d and 3d paragraphs; 63a.] Story of Macarius's visit to the paradise made by Jannes and Jambres, different from the accounts in Migne, and apparently unpublished; 63b, line 8.] Migne, 19, 20, col. 1050, last paragraph; 63b, line 19.] not identified; 63b, line 20.] Story of the hyena, somewhat different from Migne, 19, 20, col. 1060, 1044. These, with the following three sections, are probably to be found in the Paris MSS. mentioned in Migne, vol. 65, | | |

- col. 439-442, in the *Monitum* taken from Coteler, *Eccles. Gr. Mon.*, iii. 171, a work which I have not been able to consult, but which must contain many other matters in this manuscript. A portion of the following is to be found in the "Paradise" above mentioned.)
- Fol. 64a.] Of the abbot Amun. (Migne, *Hist. Laus.*, col. 1050, C. More like the old Latin translation of Gentianus Hervetus.)
- 64b.] Of the abbot Macarius Politicus. (Slightly altered from Migne, 19, 20.)
- 64b.] Of the abbot Paul the Simple, disciple of the holy Antonius. (Abridged from Migne, 28.)
- 65b.] Of Ammon, presbyter. = Migne, 72.
- 65b.] Of the abbot John [Diolci]. = Migne, 73.
- 65b.] (End of Palladius's journey). = Migne, 150, col. 1252, 2d paragraph.
- 66a.] (End of journey. The five paragraphs are numbered to correspond with the days numbered in the text.). = Migne, 150, col. 1257, except that the manuscript adds the doxology at the end.

Here ends the "History of the Monks of Egypt," as its colophon calls it, using the alternative name of the "Paradise;" but it is evident that the scribe intended his work to pass for a recension of the *Historia Lausiaca*.

II. The next division of the manuscript contains matter which is probably to be found in Coteler's *Ecc. Gr. Mon.* Its chapters are as follows:

- Fol. 66b. Life of the abbot Paul of the Thebaid.
 70a. Concerning Taxcoetes.
 71b.] Concerning Philentolus the [son] of Olympias.

III. The next division begins at fol. 72b, and is entitled *Διηγήματα καὶ νοηθείαι ἁγίων πατέρων περὶ κατανίξεως*, and is one of the many collections of *apophthegmata* called sometimes by this latter name, but sometimes also *Γιγρότων*, *Γιγρωτικών*, *Βιβλίον γιγρωτικών*, or *Βιβλίον γιγρωτικῆς*. Many of the paragraphs begin with the phrase *ἔπει γύρων*. I have not tried to hunt them all up in print, but many of them came in my way as I was searching for other matters. There are more than a hundred of them; extending to fol. 94a. Then follows another division of the manuscript, beginning with a narrative "Concerning the abbot Macarius Politicus, which is followed by another collection of *apophthegmata*, extending to fol. 106b, and nearly forty in number. I give a list of those I have identified, designating them merely by the page in the manuscript, and grouping together those on the same page:

- Fol. 81b.] Migne, vol. 65, col. 77, No. 7; col. 117, No. 30; col. 148, Nos. 8, 12.
- 82a.] Migne, vol. 65, col. 156, No. 4; col. 165, No. 7.
- 82b.] Migne, vol. 65, col. 165, Nos. 9, 11; col. 171, No. 5; col. 177, No. 8; col. 184, 185, No. 7; col. 189, No. 2.
- 83a.] Migne, vol. 65, col. 192, No. 21; col. 197; col. 201, No. 2; col. 204, No. 6; col. 229, No. 8; col. 232, No. 10.
- 83b.] Migne, vol. 65, col. 232, No. 11; col. 281, No. 41; col. 284, No. 6; col. 289, Nos. 1, 2; col. 293, No. 11; col. 300, No. 1.
- 84a.] Migne, vol. 65, col. 325, Nos. 12, 13; col. 329, No. 27; col. 333, No. 49; col. 336, No. 57; col. 345, No. 99; col. 353, No. 119; col. 361, No. 168; col. 368, No. 1; col. 372, No. 13.

- Fol. 84b.] Migne, vol. 65, col. 376, No. 2; col. 380, No. 5; col. 396, No. 13.
 85a.] Migne, vol. 65, col. 405, No. 43; col. 412, No. 11; col. 428, No. 7.
 90a. Migne, vol. 65, col. 440, No. 9; col. 313 (Xanthias).
 95b. Migne, vol. 34, col. 209, No. 3, to 216, end.
 101b. Migne, vol. 65, col. 400, 401, but not identical.
 104a. Migne, vol. 34, col. 208, 209.

IV. The next division of the manuscript begins at fol. 106b, and is entitled *Τὸ ἐν ἀγίοις πατράσι ἡμῶν Ἀθανασίου πατριάρχου Ἀλεξανδρείας σύγγραμμα διδασκαλίας εἰς πάντα τοὺς μοναζόντας καὶ εἰς πάντα εὐσεβῆ Χριστιανόν*. It is the same with that given in Migne, vol. 28, col. 834-846, and there called by nearly the same title as here, except that in Migne it is shorter, and the word *σύνταγμα* replaces the word *σύγγραμμα*. It is there placed among the *Dubia et Spuria* Athanasian writings, and copied from the edition of Andreas Arnoldus (1685), who edited it from a Vossian MS. some five or six centuries old, which contained the *Historia Lausiaca* and other ancient compositions.

V. At fol. 109a begins the division entitled *Τὰ των προφητῶν ὀνόματα, καὶ πόθεν ἦσαν, καὶ ποῦ κείμενα*. This is of a character intermediate between the two recensions printed in Migne, vol. 43, col. 415-418, and col. 393 ff., the latter of which was edited by Petavius from two Coislin MSS. of the tenth century, and the other by Tischendorf, in 1855, in his *Anecdota Sacra et Profana*. It belongs among the writings attributed to Epiphanius, bishop of Cyprus.

VI. On fol. 113b begins the *σύγγραμμα ἐκκλησιαστικόν* attributed by the manuscript originally to Dorotheus, bishop of Tyre, but otherwise to Procopius, bishop of Tyre, treating of the Seventy Disciples. It is the same with that in Migne, vol. 92, col. 1060-1065; but in several respects is much better. Two or three names are put in different places in the different copies. Doubtless the compiler, whom the manuscript does not name, is supposed to be Procopius, to whom the compilation is elsewhere attributed.

VII. On fol. 115b begins a treatise on certain persecutions and martyrs, especially of the Seventy, followed by one on the Twelve Apostles; attributed by the manuscript to Dorotheus who was in Rome, and afterwards bishop of Constantinople, but, like the last above, translated and edited by another author. It is the same with that in Migne, vol. 92, col. 1065-1073. This, as well as VI., above, are among the *addenda* to the *Chronicon Paschale* in Migne. For the apparent confusion about Dorotheus, and the supposition that these were translated from his Latin, Hebrew, and Greek literary remains, reference may be best had to the text in Migne. The two are evidently portions of the same remains. After mentioning the source of them, the manuscript goes on to say that among the other remains is the story of the death of Herodias's daughter, and the impalement of her head, in the lake Gennesaret, with other legends.

VIII. Fol. 119b, to end.] This, the last division of the manuscript, consists of the "Life and Conduct of the Holy Mary of Egypt, who lived a holy and ascetic life in the desert. Written by Sophronius, of the

holy [Fathers], archbishop of Jerusalem." This is the same with that in Migne, vol. 57, col. 3697 ff., but with many variant readings. It ends with *ἐπέλα[ρον]* (see Migne, vol. 87, col. 3724); lacking matter at the end nearly sufficient to fill another leaf, as stated above.

In case any of the matters which occur in this manuscript should be reëdited, it would not be prudent to neglect this copy. The "Lives of the Prophets" seems to be undoubtedly an otherwise unknown recension. And the same is true of sundry other sections.

3. On the identification of Avaris at Sān; by Rev. W. C. Winslow, of Boston.

Mr. Petrie, in his *Tanis*, Part I., plate xiii., no. 4, gives a photograph of a broken colossus of Amenemhat II., the third king of the twelfth dynasty, who may be placed between 2500 and 2300 B. C., or from six to eight centuries before the expulsion of the Hyksos, under Aahmes, head of the eighteenth dynasty. The picture shows a black granite piece of the king's throne and two incomplete figures. The figures represent Hapi or Apis, that is the river-god Nilus, who, according to Wilkinson, iii. 207, is often found binding the monarch's throne with the stalks of two water-plants, the one indicating the dominion of the Upper Country, and the other that of the Lower. In our photograph, the two figures face each other, and press with their feet and bind a large bunch of water-plants.

Brugsch gives the hieroglyphic form to be found as designating the place Avaris; and this form is the very one delineated on the monument unearched by Petrie at Sān. The sign of the town is that of Uar or Huar, 'the bended leg.' The inscription may be rendered 'Lord of the place Hu-ar, beloved of . . .' The gap may be filled by Amon or Ptah, the natural and proper sequence. The inscription on the colossus accordingly makes it clear that Amenemhat II. was 'Lord of the city of Avaris, beloved of Amon,' and appears to identify Sān, the place of its finding, with Avaris.

4. Rev. T. P. Hughes, for many years resident in the extreme northwest of India as a missionary to the Afghans, responding to the President's invitation, made some remarks on the religion of Islām. He spoke of its extreme persistency and of the difficulty of making a deep impression from without on the Mohammedan mind; of the stringency of the theology and of the purity of the doctrines as held in Afghanistan, by reason of the isolation of the district; and of the realness of their religious life, which was based on a thoughtful rational conception of the world, and was not, as is often supposed, the outcome of a mass of foolish superstition.

He also adverted to his recently published Dictionary of Islām. None such had existed before. For various articles where he had not been willing to trust himself he had called in the help of specialists. He hoped that the work would lead to a better acquaintance with the Mohammedan religion, and to more intelligent and sympathetic methods of dealing with Mohammedans.

5. On the Warrior Caste in India; by Prof. E. W. Hopkins, of Bryn Mawr College, Bryn Mawr, Penn.

This paper was given in abstract. Its object was to show the position of the warrior caste in the state, and particularly in relation to the other castes. The Mahābhārata, the writer pointed out, is in all respects a better guide for those investigating this subject than the law-books or any later literature. Both the story itself and the formal statements in regard to the Kṣatriyas contained in it make the epic the best field for such research. The relation with the priestly caste (for which caste the writer reserved another paper) was first shown at some length, incidents and quotations being given to prove the freer and less priest-ridden condition of the warrior at the time of the original epic. The law of succession to the throne was then explained, with the contradiction between theory and practice which is found in the epic. The subject of the *nīti* was next taken up, already well developed in the Mahābhārata, where again conflicting rules, of morality and of polity, were placed side by side. The king's duty toward his subjects passively and actively was explained at length.

The outer circumstances of royal life formed the second part of the paper. The earlier and the later, more grandiose, descriptions of the king's capital and palace, his wealth, slaves, etc., were contrasted. The argument of Fergusson in regard to the walls of ancient cities in India was reviewed, and the opinion expressed that no knower of Hindu literature could adopt the extreme view held by that antiquarian. Walled towns are familiar to all Hindu writers, and there would be as much reason for supposing that Troy had a picket barricade in lieu of walls as for assuming the primitive defense of Hindu towns upheld by Fergusson for the period anterior to Alexander. The royal ceremonies of marriage and consecration were explained and compared with earlier usage.

The third part of the paper was taken up with the life of the common warrior. The fact that other castes beside Kṣatriyas engaged in battle was dwelt upon. A Kṣatriya is always a warrior, but the word warrior is too comprehensive for Kṣatriya. This point was illustrated by numerous quotations. What we may assume antecedently as probable is proved by the epic to have been the custom till late in Hindu history. The battle-field held warrior, Pariah, merchant, priest, and even women. Some facts are here expressly stated, others we can know only by implication. The greater portion of this division of the essay was taken up with military descriptions from the epic. First, the partition and arrangement of the army, with the uncertain value of the technical terms given by the text; secondly, the laws of fighting as ideal rules and as realized by the history of the Great War; lastly, the arms, weapons, chariots employed by the combatants, with incidental notes on the prognostications of victory and defeat, the use of magical arms, and other minor points. The writer offered the paper as one of a series on the Mahābhārata. Due acknowledgment was made of the work already done in the same field by Wilson, Weber, Rājendralāla Mitra, and other writers.

6. The Correlation of *v* and *m* in Vedic and later Sanskrit; by Prof. M. Bloomfield, of Baltimore, Md.

This paper is meant to supplement Ascoli's discussion of Prakritic change of *m* to *v*, by further pointing out distinct traces of the interchange of these sounds in the classic and Vedic dialects, and showing that the change of *v* to *m* also occasionally takes place.

Ascoli's materials for the pre-Prakritic change are very meagre. In the German version of his *Studj Critici* (Weimar, 1878), ii. 222-4, he mentions *dhamana* and *dhamvana* (= *kṛmuka*), *kamandha* v. l. for *kavandha* or *kabandha*, *dramila* and *draviḍa*, root *hmal* and *hval*, *navāta* 'woolen blanket' and *namata* 'felt.' Of the change of *v* to *m* he presents very few cases, from various Pāli and Prākṛit sources. He thinks (ib. p. 221) that the normal development of *m* to *v* led to an erroneous reversal of the process. As examples of this, he presents *uvariva* and *-ma* (= Skt. *uparīma*), *Vesamana* (= Skt. *Vāiṣṭavaṇa*), *māhana* and *vā(ś)hana* (= Skt. *brāhmaṇa*), all from the Bhagavatī; *āmela*, *āvela*, *ābūa* (= Skt. *āpūḍa*), *kamandha* and *kavandha*, *tāma* and *yāma* (Aṇ-*bhraṇṇa*) for Skt. *tāvat* and *yāvat*, and a few others of even less importance.

On the basis of the following facts, it is claimed that the interchange of *v* and *m* goes back to the earliest Indian language, if not to Indo-European, and that it takes place in both directions.

Vedic *urvarā* 'field of grain' (*ūronpa*), joined with *sītā* 'furrow' among divinities of the field in Pār. Gṛh. S. ii. 17. 9, becomes *ūrmilā*, personified as sister of Sītā, in the Rāmāyaṇa; probably as diminutive derivative, with *u* lengthened by popular etymology (? *ūrmī* 'wave,' *ūrmilā* 'the wavy field'). Vedic is *srāma* 'mucus,' with *srāva* 'rheum;' the latter common, the former at Kāty. Ār. S. xx. 3. 13, glossed by two scholiasts with *ṣūhānaka*: cf. Ind. Stud. iv. 426. The Tūitt Ār. (vi. 7. 3, 4) has root *ṣmañc* for *ṣvañc* 'spread.' Yāska's treatment (Nir. v. 3) of *ṣmaçāna* 'cemetery' seems to me to imply a belief in the interchangeableness of *v* and *m*: *ṣmaçānaṃ ṣmaçayanam*; *ṣma çarīram*. He is himself puzzled by *ṣma*=*çarīram*; he regards it as a *n*-stem, *ṣman*, and uses it just afterward in explanation of *ṣmaçru* 'beard': *ṣmaçru loma ṣmani ṣritam*. This seems very interesting, as a case where Yāska, the oldest known etymologist, has inherited and misunderstood the material of one yet older, who had in mind a much more sensible explanation of *ṣma*, whether the true one or not. The accent of *ṣmaçānā* makes plausible a loss of *a* from the first syllable; if, then, we turn *ṣmaçāna* to *ṣvaçāna*, and restore such a lost *a*, we have *çava-çayanam* 'resting-place of a dead body'—an explanation very possible from a Hindu etymologist, but misreported by Yāska. Pāli *susāna*, as presupposing **svasāna*, can hardly be quoted in support of this **ṣvaçāna*, considering Sindhī *sūrti*=Skt. *smṛti*, and the like: cf. Ascoli, ib. p. 208, n. 22, and p. 222, n. 43. Further, for *vrandīn* 'making slack' (RV. i. 5. 4, 5), Yāska (Nir. v. 15) says *vrandī vrandater mṛdubhāvakarmanāḥ*. To this Roth remarks (Erläut. p. 60): "Root *vrad*, as indicated by Yāska himself, is without doubt a variant of root *mrad*, *mṛd*." Whether it be so or not, Yāska

must have had this in mind, and so have regarded the two sounds as interchangeable. The Tāitt. Samh. (iii. 1. 4³) has : *sa yamo devānām indriyāḥ vīryām ayuvata ; tad yamasya yamatvam*, as if *-yuv-* and *-yam-* were equivalent. In Kāuṣ. 128. 4 we find *ṣarva* and *ṣarman* in alliteration together : *somo rājā savitā ca rājā bhuvo rājā bhuvanam ca rājā : ṣarvo rājā ṣarma ca rājā ta u naḥ ṣarma yachantu devāḥ*.

The influence of this relation between the two sounds is seen to be active in the readings of Vedic and Sanskrit manuscripts. My own collection comes largely from Atharvan literature; doubtless the critical material of other Vedic texts would yield like instances. At Kāuṣ. 3. 8 and 137, 36, the MSS. read *ya ud udvataḥ* (v. l. *yad udvataḥ*) *un nimgtaḥ* (v. l. *unnamataḥ, unmbataḥ*) *ṣakeyam*. My text gives *yad ud udvata un nivataḥ ṣakeyam* (cf. TS. iii. 2. 4¹); and I express my belief that the MSS. imply a mixture with the reading *yad udvata unnamataḥ ṣakeyam*. At any rate, the readings are explainable only on the ground of the similarity of the sounds. At AV. xix. 42. 3 occurs *suṭrāmṇe* as variant of *suṭrāṇe*. The Gop. Brāh. (ii. 2. 3) and Vāit. Sū. (13. 16) have *ṣakmane*, while VS. (v. 5) reads *ṣakvane*. At Kāuṣ. 89. 1, four out of seven MSS. read *manvabhīḥ* for *manmabhīḥ*; 65. 15, four out of seven read *devātvā* for *devātmā*; 60. 19, two read *manthantām* for *-tāv* before *annamantrayate*; 71. 1, we have the half-verse *aiṣo rājā vibhajati mām* (so all MSS.) *agnī vidhāvayan*, where sense is made by amending *inām* to *imār*. At AV. iii. 10. 10, the MSS. are divided between *samṛdhe* and *savṛdhe*; at xii. 1. 2, some read *madhyatas* for *badyatas*; at xix. 31. 11, the editors consider *amṛtam* of the MSS. as meant for *avartim*, and again, at 35. 5, *vabhṛtenyas* for *martyebhyas*. At Pār. Gṛh. S. i. 16. 24, *ṣyāvaṣabalāu* occurs as variant for *ṣyāmaṣ-*; and Nilakaṇṭha (to MBh. iii. 16809) glosses *ṣyāva* with *ṣyāma*: it may be questioned whether the two are not results of the functional differentiation of one word. At Çāṅkh. Gṛh. S. iii. 10. 2, *ṣramo* is a variant to *ṣravo*. And I have noted *mīkṣate* for *vīkṣate* of some Vedic text.

From the later language can be added to Ascoli's cases the following : *ṣravaṇa* and *-ṇā* for *ṣramaṇa* and *-ṇā* 'begging monk'; *aṣvanta* in Hemacandra for *aṣmanta*; *aṣvaka* and *aṣmaka* for the same proper name; *aṣmala* beside *aṣvaka* in Vopadeva; *yamadvīpa* and *yavadvīpa* for the same island; *yamanikā* beside *yavanikā*: see the Petersburg lexicon for all. In inscriptions, *Gominda* is found for *Govinda* (Bühler, Vallabhī Grants, xvi. ; p. 4 of the reprint). The Atharvan is now called Atterman-Veda in Kashmīr (see Roth, der AV. in Kaschmir, p. 11). These last two examples are of special interest, as exhibiting unquestionable change from *v* to *m*, doubted by Ascoli. The root-form *hmal* for *hval* occurs in the Dhātupāṭha. Pāṇini, Vopadeva, and the scholiast of the AV. Prātiçākhyā. At Çiç. ix. 24, *samavabodhiṣata* is to be amended, according to the scholiast, to *samam abodhiṣata*.

These cases are the results of casual collection within the past few years. Careful search would doubtless bring much more to light. To them, two cautions need to be applied. First, the later the word, the greater the probability of Prakritic influence, or even transfer from Prakrit. Second, copyists are liable to introduce, sporadically, phonetic

tendencies of their own vernaculars—a variant to a Vedic text thus representing a fact in Prākṛit phonetics. Yet, with all due allowance made, there remains an important addition to Ascoli's material, carrying the correlation back even to the Veda, and showing the change to work in both directions.

That the correlation goes back to Indo-European times is indicated by the twin suffixes *mant* and *vant*, *man* and *van*, *min* and *vin*. The first pair seem differentiated according to a phonetic law, *mant* occurring only very rarely with *a*- or *ā*-stems (see Whitney's Gram., § 1235), and there seeming reason to believe that *vant* was originally restricted to such stems. The endings of the 1st persons dual and plural—*mas vas*, *ma va*, and so on—are usually regarded as couplets in which a difference originally phonetic has been utilized for functional purpose; if so, the forms in the various branches of the family show the primitiveness of the exchange. Of a similar character perhaps is the relation of Lat. *octāvus*, Gr. *ὄδορος*, Skt. *aṣṭama*, Zd. *aṣtema*, Erse *ochtúad*, O. Slav. *osmū*, Lith. *aszmas*. Possibly also roots *dram* and *drav* (Skt. *drámati*, Gr. *δέρομα*; Skt. *drávati*, Zd. *drāvayaŋ*). Ascoli (ib. p. 224) compares in this sense Pāli *bhū*=Skt. *bhrū*, and *bhama*, *bhamuka*, with the Germ. *bram* and *brāwe*. Compare also his article *Di un gruppo di desinenze Indo-Europee*, ib. p. 85 fg. (especially p. 97 fg.); and Benfey, *Ueber einige Pluralbildungen*, p. 5 fg.

It is of course possible, and even likely, that some of the facts brought together in this paper will ultimately be disposed of in a manner more or less different from that here suggested: but it appears very unlikely ever to be proved that either the Vedic period or that preceding it was exempt from this phonetic peculiarity.

7. On Negative Clauses in the Rigveda; by Miss Eva Channing, of Boston, Mass.

This paper discusses, first, a certain problematical construction after verbs of fearing; secondly, the question of possible double negatives in the Rigveda; and, thirdly, the clauses containing *canā*, unaccompanied by a negative.

I. Is a negative after a verb of fearing admissible as a construction with the same value as, for example, in the French *je crains qu'il ne vienne?* To answer this question I examined the fifty-one examples under the root *bhī*, as well as the few under the roots *cāy*, *tras*, *paj*, *rej*, and *vīp*, and the expressions of fearing cited under the derivative nouns *bhīyas*, *bhī*, *bhīs*, and *bhīyas*.

At all periods of the language, the expression of fearing is regularly used either absolutely or in combination with the ablative (sporadically the genitive) of the thing feared. To express the idea, "I fear lest a thing may (or may not) happen," a paratactic clause with *iti* is used, but not in the RV. *samhitā*. Thus, so 'gnir *abibhed ittham vāva sya ārtim āriṣyati iti*, 'Agni feared, [thinking] "in the very same way will this one get into trouble."' (TS. ii. 6. 6¹).

An examination of all the pertinent passages, however, revealed only one case, real or apparent, of the construction in question. This is RV.

x. 51. 4. Agni, weary of his perpetual service at the sacrifice, fled and hid ; and, on discovery, he explains his escapade by saying,

hotrād ahām varuṇa bibhyād āyañ
néd evá mā yunájann áttra devāñ.

Grassmann renders : 'Ich floh vom Opfer, Varuna, befürchtend, Dass wieder mich die Götter daran bänden.' Ludwig renders *pāda b* as if an *iti* were omitted at the end, which is in itself very improbable, to say nothing of *yunájan*, which should have no accent if *néd* means simply 'nót.' Kaegi's version is : 'Ich floh aus Furcht, o Varuna, vom Opfer, Dass [=damit] nicht die Götter mich dabei verwenden.' This I accept, with modifications suggested and supported by verse 6', and render : 'Dreading the discharge of my duties as *hotar*, I fled, in order that the gods might not employ me at them (*áttra*).'

Upon examination of the twenty-three occurrences of *bhī* in the Atharvan, I find no case of the construction in question. And unless the other *samhitās* contain something of the kind—which is not likely—we have for the *mantra* literature a result which, if negative, is none the less interesting and useful.

This search was suggested by the passage, *te devā mṛtyor bibhayāñ cakrur yad vāi no 'yam āyuso 'ntaṁ na gacched iti*, Çat. Br. x. 4. 3^b, where, if anywhere, the admission of this construction seems required or favored by the sense. But even here we may see the expression of a desire arising out of the fear, and (making *yad* = the frequent "recitative *br*" of the N. T.) render : 'The gods feared Death, [hoping] "May this one not get at the end of our life."'

II. Is a collocation of two negatives admissible in the sense of a single negative? At RV. i. 165. 9, we read,

ánuttam á te maghavan nákir ní
ná tvāvāñ asti devātā vidānañ.

Disregarding the common old view, Aufrecht (KZ. xxvi. 611) takes *anut-tam* from *dā + anu* (rather than from *nud*) and renders : 'Allerdings wird dir zugestanden, es gibt keinen unter den Göttern der mit dir sich messen darf.' To do this, he cuts out *ná* and pronounces *tuā-*. Adopting his interpretation without his surgery, we find, on examining all the RV. clauses with *nákiś*, no other that offers a more simple and unequivocal instance of a double negative in the sense of a single negative than this one does.

The following passages, however, contain what we cannot well explain otherwise than as downright duplications. The first is,

ná tám rājānāv adīte kútaç caná
ná 'ñho açuotī duritām nákir bhayám,

'Not him, . . . from anywhere doth sore (*duritām*) distress overtake, nor danger,' x. 89. 11. Similarly i. 81. 5. Another is viii. 24. 15 :

nahī añgá purá caná jajñé vīrataras tuát
nákī rāyá ná evāthā ná bhandānā.

'Néver indeed aforetime was born a mightier than thou—no one, nor in

wealth nor in glory.' That the double *ná* after *nákis* is not the general rule, appears from viii. 24. 17, vii. 32. 10, viii. 31. 17, etc.

But some of these duplications of the negative might be regarded rather as matters of style than of grammar. Thus, in viii. 67. 4, *ná sūśá ná súdā utá : ná 'nyag tváe chūra vāghātah,* 'Not a provider nor a giver of good—not other than thee—hath the pious man,' the apparently superfluous third *ná* may be due to the suspension of the sense in the prior *pāda*. So at x. 22. 5, Indra is represented as having harnessed the horses of the wind. *yáyor devó ná mártio, yantā nákir vidāyah,* 'of which a driver cannot be found, god nor man'—the god addressed being of course excepted. We may here assume a departure, perhaps for metrical considerations, from the natural order, *yáyor yantā nákir vidāygo devo ná mártiyah.*

The last instance of a possible double negative equivalent to a single negative which a long search has revealed is vi. 27. 3. But if, with Grassmann, we join *pāda c* with *a* and *b* (and not, as does Ludwig, with *d*), the assumption of a double negative becomes needless.

III. The negative clauses most difficult to explain and classify are those with *caná*. Grassmann, *Dictionary*, s. v. *cana*, and Müller, *Hymns to the Maruts*, p. 251 ff., have classified the meanings and occurrences with more or less completeness. The development would seem to be as follows.

1. [Gr's 4 and 3; M's II.] *cana* = 'not even, and not : ' e. g. viii. 1. 5, *mahé caná tvám párá śuklāya deyam,* 'Not even for a great price would I give thee up.'

2. [Gr's 1; M's Ia. c.] A negative with *caná* = 'not . . . (not) even : e. g. i. 18. 7. *yásmād r̥tē ná sídhyati yajñō—vipaścitaḥ caná* 'Without whom, the sacrifice does not turn out well—not even the wise man's.' Similarly, i. 81. 5, *ná tvāvāñ indra—káḥ caná,* 'There is not thy like, O Indra—not even any one,' i. e. 'Not even any one is thy like.' (We must suppose that the indefinite force lay originally, as here, in the *ka*.) The *cana*, as a mere rhetorical repetition of a preceding negative, easily lost its strict negative meaning in such collocations, and became a mere 'at all' or 'even.'

3. [Gr's 2; M's Ib, d.] It now becomes easy to see how *cana*—even when detached from these collocations which properly include a negative—could still be used without any negative meaning; e. g. vi. 26. 7, *ahám caná tát sūrībhir ānaḡyam,* 'Might even I attain it with the masters.' This use of *cana* by itself dies out in the Vedic period, but in combination with derivatives of *ka* is common in the classical language. •

In the great majority of cases (57), the *cana* occurs with a preceding negative and falls under head 2. To offset these are the cases (29) of *cana* without a preceding negative: viz. of simple *cana*, 21; of *kaḥ cana*, 5; and of *kadā cana*, 3. In some, the *cana* is unquestionably negative; in others, no less certainly positive. The problem is therefore to dispose these cases aright under 1 and 3.

Under 1 belong, of the twenty-one cases of simple *cana* as negative, the following: five, unquestionably, namely vi. 3. 2; viii. 1. 5; ii. 24. 12; v. 34. 7; Vāl. 7. 5; four very probably, namely i. 166. 12; 152. 2; iv. 30.

3; viii. 2. 14; and three, about which opinions may differ, vii. 18. 9; 32. 13; x. 56. 4. Of the five examples of *kaç cana*, ii. 16. 2 certainly belongs here. And the Petersburg Lexicon appears to be right in putting here all the three cases of *kadā cana*, i. 150. 2; Vāl. 3. 7; 4. 7.

Under 3 belong, of the cases of simple *cana* without negative meaning, most unquestionably iv. 18. 8, 9 (*mamac cana* with *mamac cid*); then follow vi. 26. 7; viii. 80. 3; x. 49. 5; and to these we may add i. 55. 5 and viii. 67. 10. Of the *kaç cana* examples, i. 113. 8 and iii. 30. 1 belong more naturally here.

Too doubtful for classification is vii. 83. 2. Respecting i. 139. 2 Ludwig has a full discussion at iv. 194. The greatest difference of opinion prevails respecting vii. 86. 6. Finally, the passages v. 41. 13 and i. 191. 7 are too obscure to throw much light on the subject; and v. 82. 2 belongs under 2, only—be it observed—the *na* follows the *kac cana*, instead of preceding it.

In the Atharva-Veda there are—disregarding the Rik-passages—thirty-nine *cana* clauses. It is interesting to observe that there is not a single instance without an accompanying negative, and that the negative precedes in every case but one. There are only four instances of simple *cana* without some form of *ka*, while the Rik has forty-seven such to thirty-nine with *ka*.

8. On the ancient Persians' abhorrence of falsehood, illustrated from the Avesta; by Mr. A. V. Williams Jackson, of Columbia College, New York City.

After citing the testimony of Herodotus i. 138, of Diodorus Siculus xvi. 43, and of the Old Persian Inscriptions [Bh. i. 10(34), iv. 4(34), 5(38), 6(43), 8(49), 13(63), 14(68), H. 17, 20—see Spiegel, *Alt-p. Keilinschriften*], in regard to the ancient Persians' abhorrence of falsehood, this paper reviewed the references to lying in the Avesta and showed that the same thought ran through the whole.

An examination of the following passages, Yasna xii. 4, Yasht iii. 9, 12, 13, 16, Ys. lxi. 2-3, xlix. 3, Yt. v. 92-93, proved, from the connection alone, how great an abomination falsehood was held to be.

It was noticed also that the very tenets of the Avestan belief naturally led to associating truth with light, and to regarding falsehood as the offspring of darkness; that in the oft-recurring fiend called Druj, the spirit of evil who harms especially by deceit, is found the personification of lying; but in the adoration paid to Mithra we have, in the broadest sense, the worship of the god of light and truth, Yt. x. 7, the witness of oaths, Vendidad iv. 55, and the preserver of good faith, Yt. x. 116-117.

The civil penalties for the violation of the promise or oath in Mithra's name, as given at Vd. iv. 11-16, 55, were next examined; and the punishments believed to be inflicted by the god himself upon those who had proved false to their pledge (*mithrōdruj*), together with the benefits received by the truthful, as described in Yt. x., were taken up in detail.

It was shown, besides, by mention of other passages, Ys. li. 10, xxxi. 12, xlix. 9, xxx. 8, etc., that although the evil of false-speaking was rife,

still there had been times when there was no lying, cf. Vd. ii. 37, Yt. xix. 33 ff., Vd. xix. 46; and after remarking on Vispered xx. 2, Ys. lx. 5, xlv. 14, in which a special appeal is made for deliverance from the sin of falsehood, the paper concluded by referring to the fact that in the description of the millennium looked for in the Avestan religion, Yt. xix. 92-96, lying is particularly mentioned as one of the great evils that is to be overcome by good.

9. Rev. William Hayes Ward, of New York City, exhibited a few photographs of Hittite sculptures recently uncovered on the site of some mounds near Aintab in Asiatic Turkey. They are large slabs of black trachyte in low relief, like the friezes in the Assyrian palaces, and represent human and animal forms somewhat like those uncovered by Consul Henderson at Jerablus, the ancient Carchemish.

He also exhibited a selection of cylinder seals representing various types, Phœnician, Syrian (perhaps Hittite), Assyrian, Babylonian and Persian.

10. Hindu Eschatology and the Kāṭha Upanishad; by Prof. W. D. Whitney, of New Haven.

The following is an abstract of Professor Whitney's paper:

The first recorded view held in Aryan India as to the condition of man after death is also the clearest and most consistent one; nor have its effects ever disappeared in Hindu faith and practice. It may be called the Vedic view, for it is the only one found in the Rig-Veda, though the evidence of it is chiefly confined to a group of hymns in the Xth book. It corresponds in general with that of many other primitive races, being simply the belief in a life beyond the grave, and a life of happiness. So far as depicted, this life seems much like the life on earth: like in employments, and hence the burying or burning of arms and utensils with the corpse; like in needs, especially as regards food; this is very naïvely expressed in many Vedic verses, where the offerings to the "Fathers" are accompanied with distinct statement of its necessity as means of their support. The resulting sacrifices continue conspicuously obligatory throughout the whole after history of India: it is one of the leading objects of a man's life to beget a son who shall pay him the ancestral offerings. This is sufficiently motivated only by the Vedic doctrine; but it has long survived that doctrine. Perhaps the whole history of religions, though rich in such features, presents no more striking example of practices faithfully, stubbornly maintained, when the faith that should still inform them has disappeared.

The orthodox doctrine in modern India is also pretty clear. It is the necessary continuance of life by a round of successive births, having a retributory character, each being reward or punishment for the deeds of its predecessor or predecessors. But this, which would be metempsychosis pure and simple, is not left thus; rather, it is mixed with another kind of retribution, by heavens and hells; retributory residence in these is followed by retributory re-birth. There is no concinnity in this; it seems to be a mechanical mixture, a grafting of one mode of retribution on another.

The element of retribution is altogether wanting in the Vedic doctrine; and its absence is characteristic of that stage of development of religious belief. Its introduction later is equally in accordance with the general course of religious history; it is a part of the prevailing shift from the basis of nature to that of morality. The word *naraka* 'hell' is found once, in no clearly-defined connection, in the Atharva-Veda, and a few times in the Brāhmaṇas; and Yama, in the Veda a beneficent ruler of the departed, becomes the dreadful judge and executioner of later times.

These two doctrines, then, of another world and of heaven and hell, are natural and easily explained phases of a continuous religious history; there is no reason to believe them other than truly popular in origin, products of the national religious consciousness. But such can hardly be the case with the doctrine of metempsychosis; this seems to stand apart from the others, as something fundamentally different, and of independent origin: its explanation, in fact, is most difficult, constituting the great problem of Hindu religion. It seems like a more individual product, a part of the philosophy of a limited school, though coming by degrees to be widely adopted. Of its wide adoption, its assumption in a measure into the national consciousness, the best evidence is the spread of Buddhism, which (so far as we at present understand Buddhism) reposes upon it as an indispensable foundation. Buddhism stands on one plane, not with Hindu religions in general, but with the systems of Hindu philosophy; all these postulate the round of births, and teach the method of escape from it: Buddhism having its own special way, one more human and more capable of being popularized than the rest. All alike imply pessimism; in the account of life's good and evil, the evil predominates, and the balance is a minus one. Otherwise, a succession of births would be welcomed; one would rejoice to live again, even if in part as a lower animal, for the chance of another happy human life; the risk would be estimated as worth running. This pessimistic view of life is utterly opposed to that which prevailed in Vedic time; nor does it appear possible to have arisen among the masses of a people which, on the whole, has continued through its whole history to fight and toil and acquire and enjoy and sing and dance, much like other peoples in the world, as well as like its own ancestors.

This problematic doctrine of metempsychosis first appears in that stage of religious thought in India which is chiefly represented by the oldest Upanishads—that is to say, in the later Brāhmaṇa period; since no fixed line of division can be drawn between Brāhmaṇa and Āraṇyaka and Upanishad. Hence, to study its aspects in the Upanishads is a matter of prime importance. And there is one of these works in particular, the so-called Kaṭha-Upanishad, which ought to teach us more than any other, because it expressly concerns itself with the question what death is, and what becomes of the departed. It is proposed to give here a brief summary of its teachings.

The treatise is introduced by a story. A certain man, Vājaçravasa, has a young son Nachiketās. The father, in religious zeal, gives away his whole property to the Brahmins—a frequent feature in stories of

pious chiefs. Then "faith enters" the boy also: that is, he enters into the full religious spirit of the occasion, and thinks that, to complete the work of renunciation he himself ought also to be given away; and he teases his father with the repeated question "To whom art thou going to give me?" till the latter angrily replies "I give thee to death"—one can easily imagine the equivalent answer of an impatient and profane father at the present day.

Nachiketas takes it seriously, and goes.

It will not do, however, for us to take the story too seriously, drawing inferences from it as to the beliefs of its narrators. It stands on something the same plane as, for example, the *Volksmärchen* of Grimm, in which people go to heaven and get in by tricking Saint Peter, or go to hell and are hidden in a bin by the devil's grandmother, and the like. Death (*mṛtyu*) is no deity to the Hindu, but only a personification, like our own wielder of the scythe and hour-glass.

Now the story plays a trick upon Death. He happens to be away from home when Nachiketas arrives, and does not return till three days later. So this boy, who has been made over to him as a gift, and ought therefore submissively to wait till his master should be ready to employ him, is all at once endowed with the character of a Brahman guest, whom Death has allowed to wait three days at his gate without receiving any hospitable attention. This puts Death so entirely in the wrong that he can only apologize with humility, and offer Nachiketas three boons: that is, the fulfilment of three requests, whatever the boy may choose to make them.

We expect as first boon liberty to return to the world of the living. That, however, is not asked by Nachiketas; it seems to be assumed that, as Brahman guest, he will of course return when it suits him; and the actual request is the very superfluous one that his father may have recovered from his anger when they meet again.

The second request is absolutely out of the line of an Upanishad, and akin only with the absurd ceremonial formality of the Brāhmaṇas. It is that Death will teach Nachiketas a certain sacrifice, which brings its performer to heaven, where there is no longer any fear of death; the secret of it consisting in the number and kind and arrangement of the bricks of which the fire-altar shall be built. Death grants his wish, and moreover promises that the ceremony shall be called *nāciketa* after him, and that one who performs it thrice shall assuredly reach heaven. Such a one is styled a *trīnāciketa* 'of three *nāciketa*'s.'

So far, the story might seem only one of those in which the Brāhmaṇas abound, fabricated, often at considerable length, merely to explain some sacrificial act or name—this time, the term *trīnāciketa*. And it must, in my opinion, be regarded as altogether probable that this was in fact originally the whole of the story, or the kernel of it; and that another and later re-working has added on what remains, only thus converting it from an ordinary Brāhmaṇa-legend into something fit to be called an Upanishad. Nachiketas, namely, goes on: "That question that there is respecting a man who is departed: 'he is,' say some; and 'this one is not,' say some; that let me know, instructed by thee: of the boons this

is the third boon." The discordance, and even direct contradiction, between the second and third boons is so palpable, that their subsistence side by side as parts of the same original story seems inadmissible. And it may be plausibly conjectured that room was made for this addition of a new third boon by leaving off the original first: namely, the return of Nachiketas to his home.

This matter of the development of the story, however, is of only minor interest. At any rate, we have Death himself placed in the teacher's seat, and pledged to answer the question, what becomes of a man when he dies? At first, indeed, he tries hard to beg off, pleading the difficulty of the subject, "about which even the gods of old have doubted;" he promises Nachiketas temporal gifts and blessings of every kind if only this question be withdrawn; but the boy spurns them all, and Death has to (apparently) yield; and he goes on discoursing in answer through nearly a hundred double verses. And yet he proves too sharp for his questioner; for it is wonderful how little he contrives to tell; and if the boy thought himself answered, he was more easily satisfied than we can be. Death does not address himself directly to the subject in hand; there is neither concinnity, nor progression, nor conclusion in what he says; he discourses up and down and around and about, on a variety of topics, only now and then dropping an allusion to his professed theme. Instead, therefore, of attempting to give an abstract of the treatise, we may best pick out these scattered allusions, arranging them under different heads.

First, there is a heavenly world, to which, at death, one goes as reward, enjoying there a happy immortality.

The first and leading passage for this is found in the introduction to Nachiketas's request to be taught the ceremony that takes one to heaven; and hence, if it conflicted with doctrines found elsewhere in the treatise, it would have no right to count for anything. It reads thus (addressed by the boy to Death):

i. 12. 'In the heavenly world is no [cause of] fear whatsoever; not there art thou; one fears not because of old age; having passed both hunger and thirst, getting beyond pain, one enjoys himself in the heaven-world.'

And the next verse (i. 13) adds: 'They that have heaven for their world partake of immortality.' Then (i. 14) Death, promising to teach the desired fire, says: 'Know thou the attainment of the endless world, and likewise firm standing' (*pratiṣṭhā*: i. e. undisturbed enjoyment of it). Further (i. 17), one possessing the necessary knowledge 'gets beyond old age and death' and 'goes to the endless:' and again (i. 18), 'pushing away before him the bonds of death, getting beyond pain, he enjoys himself in the heaven-world.'

But there are supporting expressions also in the Upanishad proper, and, on the other hand, none that militate against these. Thus (ii. 17), 'knowing that support (the sacred syllable *om*), one is exalted (*mahīyate*) in the *brahma*-world;' and it is promised (iii. 16, 17) to one who hears or repeats the Nachiketas story that he shall 'be exalted in the *brahma*-world,' and 'fitted for endlessness.' Further on (iv. 1) we hear of 'some

wise man seeking immortality,' and (2) 'the wise who know immortality.' Then, in the next section (v. 12, 13), we read 'the wise, who behold him existing within themselves—of them there is everlasting happiness (in verse 13. everlasting tranquility), not of others.' Again, in the final section (vi. 2. and again 9), 'whoever know this, they become immortal;' (vi. 8) 'knowing which, a being is liberated, and goes to immortality;' (vi. 14) 'when all desires are let go, . . . then a mortal becomes immortal;' (vi. 15) 'when all the knots of the heart here are severed, then a mortal becomes immortal: so far the teaching.' This last phrase appears to indicate the conclusion of the Upanishad proper; but a few verses are still added. One puts forward the physical theory (vi. 16) that, of the hundred and one arteries of the heart, one passes out to the crown of the head, and 'by that, going upward, one goes to immortality;' another (vi. 17) declares that one should know the inner self to be 'bright, immortal;' and the next teaches that Nachiketas, having received this doctrine from Death, 'became free from death.'

In all this is seen no hint of anything like a release from the bonds of individual existence, an absorption into the world-soul, or Brahma; immortality is as frankly coveted as in the olden time. Only it is, no longer a universal immortality, but one limited to those who can show title to it: that title being already, as later, sufficiency of knowledge. We have next to see what the alternative is, and against whom it is threatened.

In the second section (ii. 6), Death says of the 'careless youth (*bāla*), fooled with the folly of wealth, and thinking "this is the world; there is no other," that he 'again and again falls into my power'—which of course implies a being born again and again. Rather more clearly, in the next section (iii. 7): 'But he that is not possessed of discrimination, that is mindless, ever impure, doth not obtain that place, and entereth upon *samsāra*.' Here is the first occurrence of this word, later so important; but that it already means the 'round of births' is plainly indicated by the next verse (iii. 8), which says of the man who is the opposite in all points to the one just described, that 'He indeed obtaineth that place whence one is not born any more.' Further on, it is said (iv. 10) that 'he obtaineth death from death (i. e. one death after another) who here seeth [things] as it were in separateness' (i. e. does not recognize the identity or unity of all things); and the next verse (iv. 11) repeats the same statement, with the variation 'he goeth to death from death.' And once more, rather more distinctly, after announcing (v. 6) 'Come now, I will proclaim to thee the secret eternal *brahman*, and what becomes of the self after obtaining death, O Gautama,' Death goes on (v. 7): 'Some souls (*dehin*, lit'ly 'incorporate ones') come to the womb, in order to obtain a body (*garīvatcāya*, lit'ly 'in order to body-hood'); others go after immovable [matter]—according to their deeds, according to their instruction (*ṛuta*).' And then the teacher flies off again, to indefinite generalities.

It thus appears that the alternative fate, reserved for those who have not the desert that should bring them to heaven, is a return to earth in various and successive forms of being. To show that this, however

dimly conceived and uncertainly stated, is the only alternative contemplated in the treatise, we may go on to review all the other passages in which death or its consequences are mentioned. •

We have already noticed above that even the gods are declared to be, or to have been, doubtful as to the state of a man after death (i. 21): 'On this point it hath been variously argued (*vicikitsitam*) even by the gods of old (*purā*); for it is not easily to be decided (*suviññeyam*); subtle is that subject (*dharmā*; a very unusual sense of the word).' This is not a little naïve, especially as put into the mouth of Death himself; what we have to infer from it, doubtless, is the very unsettled state of opinion on the matter, even among advanced thinkers, at the time of our treatise. In the next section we have a couple of verses (ii. 18, 19) which are famous, and which moreover recur nearly intact in the Bhagavad-Gītā (ii. 19, 20): 'The seer (*vipaściti*) is not born nor does he die; he (*ayam*) is not from any source soever nor any one soever; unborn, constant, eternal (*śāśvata*), ancient, he (*ayam*) is not slain when the body is slain. If the slayer thinks himself to slay, if the slain thinks himself slain, both those understand not; he (*ayam*) slays not, is not slain.' Here the specification of the 'seer' as the one of whom this is true, with the repeated use of *ayam* 'this one' (i. e. apparently, 'such a one'), in referring to him, seems intended to restrict the statement made to one possessed of the requisite knowledge, as in the passages quoted under our first head above; the Bhagavad-Gītā makes no such restriction. In the third section, only an expression or two are worth quoting: thus (iii. 9), he who controls himself 'reaches the further end of the road: that is Vishnu's highest place:' another way of saying that he goes to the zenith, or straight upward—that is, to a local heaven; and again (iii. 15), one attaining certain cognitions 'then is freed from the mouth of death.' That the old doctrine of another world for all men is not extinct, is indicated by the mention in the last section (vi. 5) of the 'world of the Fathers' (or *manes*).

This is all that the Upanishad has to say respecting death and the life after death. Its important points are these: 1. the continuation of the old eternal heaven of happiness for those who are worthy to attain it, such worthiness consisting especially in true knowledge; 2. the absence of any hell for those not found worthy; but, 3. the condemnation of such to a return to earthly existence—which, of course, by contrast with the happiness of the blest, is a state of misery.

That the doctrine of the other Upanishads is essentially the same with this could easily be shown by quotations from their texts; it has been pointed out, too, by Barth, in his excellent work on the Religions of India (English translation, p. 78). •

11. Rev. John S. Chandler, a missionary among the Tamil people, gave some account of this important and ancient Dravidian language, and also of a curious discussion, begun by a Christian teacher and now vigorously carried on by the heathen, respecting the term *Çānār*, the name of one of the lowest *Çūdra* races. They are trying to establish themselves as "Dravidian Kshatriyas," and have assumed a sacred thread and adopted some Brahman customs.

Mr. Chandler also adverted to some attempts now making by educated Brahmans to reconcile their religion with modern science.

12. The Ao-Naga Language of Southern Assam ; by Prof. John Avery, of Brunswick, Maine.

The people speaking this language belong to the Central division of the Naga tribes, and their location may be roughly defined as on the hills forming the southern border of the Sibsagar District, between the western branch of the Dikho river on the east, and 26° 14' N. lat. on the west. They call themselves Ao, but are more commonly known by their Assamese names, Hatigonias, Dupdorias, Assiringias, etc. They number about one hundred thousand. Their language was first reduced to writing by the Rev. E. W. Clark, a missionary of the American Baptist Union, who has recently translated, in Roman character, the Gospels of Matthew and John, and the history of Joseph in Genesis.

Of Ao-Naga sounds, one misses not only the sonant aspirates, a feature of the Tibeto-Burman languages generally, but the surd aspirates as well. There appears to be no restriction as to initial letters ; and most occur as final, though the vowels, nasals, and *r* end syllables in a great majority of instances. The *ng*-sound, which is very frequent as a final, seldom occurs as an initial.

Gender, which is attributed only to living objects, is generally denoted by sexual names ; but a feminine suffix *la* and a masculine suffix *po* are occasionally used. Also the words for ' male ' or ' female ' may be placed after a word to mark gender. Plurality is not expressed when the context shows the number ; otherwise, a syllable *tüm* is affixed to the word, e. g. *nisung* ' man,' *nisungtüm* ' men.' A noun of multitude, as *rong*, *nungür*, *telok*, etc., often performs the same office. The language possesses no dual.

The case-relations of nouns are expressed by postpositions, except that of possessor, which is indicated solely by position before the governing noun. The following are some of the more usual combinations :

| | SING. | | PLU. |
|-------|----------------------------------|------------|---------------------------------|
| Nom. | <i>nisung(e)</i> ' man ' | Nom. | <i>nisungtüm(e)</i> ' men ' |
| Acc. | } <i>nisung dang</i> } | | |
| Dat. | | ' to man ' | |
| Inst. | <i>nisung age</i> ' by man ' | Inst. | <i>nisungtüm age</i> ' by men ' |
| Abl. | <i>nisung nunge</i> ' from man ' | | etc. etc. |
| Gen. | <i>nisung</i> ' of man ' | | |
| Loc. | <i>nisung nung</i> ' in man ' | | |
| Voc. | <i>ina nisung</i> ' O man ' | | |

The suffix *e* in the nominative is used only when the case would otherwise be ambiguous. So the accusative-sign is often omitted. Substantives take a variety of derivative suffixes, most of which are common to them with verbs and adjectives, since there is no complete formal distinction between these three parts of speech. A much-used suffix *ba* forms nouns of agency and passive adjectives : e. g. *zümbiba* ' a speaker ' or ' spoken.' The Lepcha has a suffix *bo*, which has like uses and form ;

and the Khasi uses *ba* as a relative pronoun and adjective-forming prefix.

Adjectives are distinguished by no formal sign, and are compared as in other languages of this family : thus, the object with which another is compared is placed first in an oblique case, followed by the second object, and lastly by the adjective without sign of comparison : thus, *ziungtsüdang taküm tuluba*, 'the life is more than meat'—lit. 'to meat life great [is].' The language has separate names for the digits and most of the tens. The compound terms from eleven to fifteen are formed by placing a digit after the ten : e. g. *teri-asüm*, 'ten-three.' From sixteen to twenty, twenty-six to thirty, and so on, a different principle is followed : thus, *metsü-maben-trok*, 'twenty-not-brought-six,' i. e. 'the six next below twenty.' 'Seventy' is *tenem ser metsü*, 'fifty and twenty ;' 'eighty' is *ür anasü*, 'two times forty.' The ordinals are formed by adding *puba* or *buba* to the cardinals : e. g. *anäpuba*, 'second ;' numeral adverbs use a suffix *ben* : e. g. *asümben*, 'thirdly.'

The language has the usual pronouns, except the possessive and perhaps the relative. The personal pronouns are :

| | SING. | | PLU. |
|-----|-----------|------------------------|--------------------------------|
| | nom. | oblique. | |
| 1st | <i>nī</i> | <i>kū</i> | <i>onok, ozo, asen, asenok</i> |
| 2d | <i>na</i> | <i>ne</i> | <i>nenok</i> |
| 3d | <i>pa</i> | <i>ba</i> or <i>pa</i> | <i>parenok</i> |

The demonstrative pronouns are *ya*, 'this,' and *iba, ibazi, or azi*, 'that' or 'it.' The interrogatives are *shir* or *shiba*, referring to persons, and *kechi*, relating to things. The same are also used as relatives. The indefinite pronouns are *shinga* and *kecha*, distinguished as above. A reflexive pronoun for all persons and numbers is *pei*.

The Ao-Naga verb makes no distinction of person or number, is poor in mode-forms, but fairly expresses the principal relations of time. Taking the root *ben* 'bring' as an example, the following are the forms in most common use : *nī bener*, 'I bring ;' *nī bendage* (or *daka*), 'I am bringing' (for the first time) ; *nī abener*, 'I am bringing' (and have been doing so) ; *nī aben*, 'I brought ;' *nī benogo*, 'I brought' (more remotely) ; *nī bendi*, 'I am about to bring ;' *nī bentsü*, 'I shall bring ;' *benang* (2d or 3d person), 'bring ;' *teben*, 'bring not ;' *nī benra* or *bendir*, 'if I shall bring ;' *benrang*, 'if I shall have brought ;' *bener*, 'bringing ;' *bena*, 'having brought.' There are various suffixes which singly or combined form derivative conjugations : thus, *bendaktsü*, 'cause to bring ;' *bentsü*, 'bring for another ;' *bennü*, 'desire to bring ;' *bentet*, 'able to bring ;' *bendaktsünü*, 'desire to cause to bring,' etc. The verb has no strictly passive form ; either the sentence is so constructed as to avoid it, or a quasi-passive is produced by a helping-verb and a verbal adjective in *ba* or a verbal root, e. g. *pa zümbiba* (or *zümbi*) *aka*, 'he was said.' The latter form may also mean 'he said.' Other periphrastic uses of the verb occur.

The construction of the Ao-Naga sentence is simple. The verb stands last, and the subject generally first. Interrogative words stand at the beginning less often than in English. Relative clauses, and all

expressions standing in place of them, precede antecedent clauses. A common construction is a clause, with subject nominative and verb in any tense, governed by a postposition, like a noun. The possessor precedes the thing possessed, and the adjective commonly follows its noun, in which case any governing postposition is placed after the adjective. Pronouns used adjectively have no invariable position relatively to their nouns.

13. On a sacrificial Tablet from Sippar ; by Prof. D. G. Lyon, of Harvard College, Cambridge, Mass.

Among the interesting objects brought by the Wolfe Expedition from Chaldea are several cuneiform tablets containing lists of sacrifices made to the gods. One of these is from the famous temple of the Sun-god in Sippar, and records the offerings made at that city in the third year of Nebuchadnezzar, king of Babylon. The month and perhaps also the day were originally given, but only a part of the sign for the month has been preserved. The tablet has suffered slight damage by friction at the upper right hand corner, resulting in the loss of a part of the date, a part of the name Babylon, and perhaps of the name of one of the six kinds of sacrifice mentioned. There is also a very small fracture at the lower left hand corner, which, however, in no wise interferes with the understanding of the whole. In the third line the names of the animals and other objects used in sacrifice are given, and include oxen, oil, and two varieties of birds (elsewhere occasionally mentioned in sacrificial lists in the royal annals). What kinds of birds these were I have not made out, nor what the fifth object of sacrifice was. Down the tablet, in a column on the right, are arranged the names of the gods to whom sacrifices were made. These include Shamash, Marduk, Zirpanit, Ramān, Shala, Nanā, Anunit, Anu, Bēl, and several others. In six columns down the tablet are arranged numerals corresponding to the six kinds of sacrifice, and showing how many of each kind were offered to the various gods. Thus, Shamash received of the first five kinds one, and of the sixth kind two. Ramān and Shala together received of the first none, of the second and third two, of the fourth and fifth one, and of the sixth none. On the back of the tablet are the names of four men, but whether they belonged to the priests or to those who made the offering I have not yet determined. Such documents as this are worthy of close examination, and it is evident that results may be expected which shall have high value for comparative purposes. Especially fruitful does such an investigation promise to be for the study of the development of the Jewish ritual. So far as I am aware, attention has never been called to this class of documents, which, I should suppose, must exist in considerable numbers in the Assyrian collection of the British Museum.

14. On certain important recent Assyriological publications ; by Prof. Lyon.

The *Zeitschrift für Keilschriftforschung*, under the editorship of Dr. Carl Bezold, has completed its second volume, and maintains its high rank. In entering on its third volume, the name has been changed to

Zeitschrift für Assyriologie. Among the most valuable contributions to vol. ii. are "Additions and Corrections to the fifth volume of The Cuneiform Inscriptions of Western Asia," by Mr. T. G. Pinches; "*Assyriologische Notizen zum Alten Testamente*," by Prof. Friedrich Delitzsch; and "*Der Nabunid-cylinder V Rawl. 64, ungeschrieben, übersetzt und erklärt*," by Johannes Latrille. Of publications which have been appearing in parts, the *Alphabetisches Verzeichniss der Assyrischen und Akkadischen Wörter*, etc. by J. N. Strassmaier, S.J., has just reached completion, and makes a lithographed volume of 1144 pages. This is a work of great industry, representing years of the most painstaking copying and collating, but its value is rather as a concordance than as a lexicon, because the author has rarely given definitions. As an appendix to this volume, Mr. Strassmaier has published a transliterated *Wörterverzeichnis zu den Babylonischen Inschriften im Museum zu Liverpool*, 66 pp. The third edition of Friedrich Delitzsch's *Assyrische Lesestücke* has appeared, revised and enlarged. The greatest changes from the second edition are these: that a short passage is transliterated and translated for the use of beginners; that some Babylonian inscriptions are added, and also a list of the Babylonian signs; and that the book has been provided with a vocabulary of eleven pages, including the most common words in the Assyrian language. This volume is an indispensable book for every Assyrian student. Perhaps the most beautiful and valuable product of Assyrian study during the past year is Dr. Heinrich Zimmern's *Babylonische Busspsalmen, ungeschrieben, übersetzt, und erklärt*, Leipzig, 1885. These penitential psalms, often agreeing to an astonishing extent, both in conception and in expression, with the psalms of the Hebrew Scriptures, are among the most important remains of the Babylonian civilization; and Dr. Zimmern has brought to their interpretation a wealth of etymological material, a familiarity with the cuneiform literature, a keenness of insight, and a soundness of judgment, which have rarely been equaled in Assyrian study. This work, which grew out of Dr. Zimmern's inaugural dissertation, gives promise of the highest usefulness on the part of the young author. Part I. of Prof. C. P. Tiele's *Babylonisch-Assyrische Geschichte* has appeared, Gotha, 1886. It covers the period from the earliest times to the death of Sargon II., 705 B. C. What the author considers as historically beyond question has been printed double-leaded; while his explanations and his references to the literature are in single-leaded type. After the introduction, devoted to the sources, land and people, division and chronology (pages 3-99), comes the brief discussion of the Old Babylonian Period (pp. 100-131), then the First Assyrian Period (pp. 132-216), and lastly the Second Assyrian Period (pp. 217-282). The last section will be continued in Part II. and the New Babylonian Period will be presented. A fuller notice will be given after the whole has appeared.

15. Three Hymns of the first book of the Atharva-Veda; by Prof. Bloomfield.

The following proposed interpretations are founded in the main upon the *Kāuṣika-Sūtra* and its commentary by *Dārila*. Along with a similar

note published in the Proceedings of a year ago (Journal, vol. xiii., p. xlii), they are believed to show that the Atharvan liturgical literature aids the exegesis of the text more effectively than is the case with that of the other Vedas. A trustworthy tradition, as regards the general purport of most hymns and their use in the ceremonial, appears to have been preserved from early time down to the (doubtless late) commentator. A complete comment to the Kāuṣika is still wanting (see Proceedings for October, 1883 : Journal, vol. xi., p. clxxi) ; it is to be hoped that these evidences of its value may lead to a careful search for it on the part of those scholars who are in position to do so with any chance of success.

I. Atharva-Veda i. 2. Translated by Weber (Ind. Stud. iv. 394), who calls it "a charm against colic (*Reissen*)." The word *āsrāva* is the pivotal one, and the translators are by no means agreed as to its value ; it occurs also in ii. 3 and vi. 44. Zimmer (*Altind. Leben*, p. 392) renders it "festering of a wound ;" Ludwig wavers between "attack of sickness" (Rig-Veda iii. 507) and "attack of cold" (ib. p. 509) ; Grill (*Hundert Lieder des AV.*, p. 14) gives it as "bad flux" (*böser Fluss*). A word meaning primarily 'a flowing to' admits evidently of a varied application. The real value however is 'diarrhœa,' which is quite as reconcilable with the etymology of the word ; the Greek and Sanskrit terms, indeed, contain the same root. This sense is indicated by the second verse, which reads in Weber's translation : "Bowstring, wine about us, make my body like stone so hard." The verse is accompanied in practice by the very proceeding described in it. The Kāuṣika-Sūtra (xxv. 6) says . . . *muñjaçiro rajjvā badhnāti*, 'he ties the head of a stalk of *muñja*-grass (to the sick person ?) ;' and the commentator Dārila adds *atisārabhāiçajyam āsrāva-çabdasya tadvdātīvāt* 'a remedy for diarrhœa, because the word *āsrāva* means that.' Compare the fourth verse : "As the missile in its (upward) flight hangs between heaven and earth, so may the *muñja*-grass stand between sickness and diarrhœa." The Kāuṣika goes on : 7. *ākṛtiloṣṭa-valmīkāu parīlikhya* (Dār. *parīlikhanam cūrṇikaraṇam*) *pāyayati* 'one grinds up a lump of earth from a field and a lump containing ants (?), and gives it to the sick person to drink ;' 8. *sarpiṣā līmpati* 'one anoints him with sacrificial melted butter ;' 9. *apīdhamati* : Dār. *apāne dhamati atisārīṇām* : 'one blows upon the anus of those having diarrhœa.'

Further evidence corroborating the view taken of this hymn by the Hindu authorities is to be found in its situation. The hymn next following in the Atharvan, and applied after it in the Kāuṣika, deals with the opposite trouble, constipation and retention of urine, according to the agreeing opinion of the two European translators (Weber, ib. p. 395 ; Zimmer, ib. p. 394), and of the Kāuṣika and Dārila. Its opening verse is very like the first verse of the hymn we have been treating : "We know the father of the arrow, Parjanya of hundredfold manly power ; by this may I bring prosperity to thy body ; make thy outpouring upon the earth ; out of thee let it come, with the sound *bāl*." Parjanya is the god of rain ; and it is clear that these necessary functions are viewed symbolically as a raining down upon the earth, and hence under the control of that god.

II. Atharva-Veda i. 12. This also is translated by Weber, ib. p. 405.

He entitles it "against burning fever," and renders the first verse thus: "A red bull, first product of the afterbirth, comes on, thundering with rain, with glowing breath of wind. May he spare our bodies, he who tears straight along, who in single strength divides himself in three." He regards the fever as puerperal, or else as that of a new-born child. Ludwig mentions the hymn (ib., p. 343), regarding it as perhaps against inflammation. Zimmer (ib., p. 390) refers to it in connection with the word *vāta*, which he translates "wound," also identifying *vāta* and *wound* etymologically: *vātabhrajās* "suffering from wound-fever:" he thinks this makes the hymn clearer. I would, on the contrary, entitle it "prayer to lightning conceived as cause of fever, headache, and colds," and translate thus:

1. 'The first red bull, born from the [cloud-] womb (literally, the placenta), born of wind and the cloud (*vātabhrajās* emended to *vātābhrajās*: cf. verse 3a), comes on thundering with the rain. May he, who cleaving goes straight on, spare our bodies; he who, a single force, divides himself in three.

2. 'Bowling down to thee who fastenest thyself with heat upon every limb, we would reverence thee with oblation; we would reverence with oblation the crooks and angles of thee, that hast vigorously seized the limbs of this one.

3. 'Release him from headache and also from cough, which has entered every joint of him; may he who is born of the cloud, and born of the wind, the whizzing [lightning] (cf. RV. vi. 3. 8d, *vidyūn nā davidyot srēbhīh gūsmāih*: and RV. iv. 10. 4c, *prā te divō nā stanayanti gūsmāh*), strike the trees and the mountains.'

The fourth verse is of no significance.

This book of the Atharvan is a miscellaneous collection of hymns containing in general four verses each. While there is no definite arrangement of the hymns, there is a tendency to group two or more of somewhat similar content. First comes (as in the three following books) a single hymn of more general philosophical character, then (see above) two against diarrhoea and constipation respectively, then three to the waters, then two against witchcraft, then two of diverse content but each mentioning Varuna in the first verse; and then follows the eleventh hymn, for easy delivery in child-bed, containing many times the word *jarāyu* 'afterbirth.' Next to this is placed the hymn now under discussion, doubtless because it begins with the word *jarāyujas*. This does not imply that the scope of the hymn was mistaken; the contrary is shown by the fact that its successor is undeniably a hymn to lightning; but the occurrence of *jarāyu* offered as good a point of connection (in the absence of an alphabetical order—an idea which the Hindus never hit upon) as any other; and they did not mind the incongruence between the literal meaning 'placenta' in the one hymn and the figurative 'cloud-womb' in the other. But it is partly the recurrence of this word that has misled the European translators.

The native treatment of the hymn exhibits considerable divergence, owing to its double character: it is a hymn to lightning; and, on the other hand, the diseases attributed to lightning present yet more salient

points, which are made prominent in its designation and its ritual application. The Anukramaṇī (i. 1. 7) simply calls it "a hymn to cure consumption (*yakṣma*: cf. the word *kāśas* 'from cough,' in the third verse)"; in the *gaṇamālā*, Ath. Pariç. 34. 7, it begins the group of hymns designed to cure *takman*. The Kāuçika employs it twice. Once (38. 1-10) it is used—along with i. 13 and vii. 11, which are palpably hymns addressed to lightning—in an incantation against thunderstorms ('bad weather,' *durdīna*). Thus, 1: *jarāyuja iti durdinam āyan pratyuttiṣṭhātī* (Dārila: *durdīnam meghānām vināçahetuḥ: tadvināçāyā "gachan sūktam jāpan*); 2. *anvṛcam udavajrāḥ*; 3. *asy-ulumka-kīçkurūn* (Dār., *kinḥkuravaḥ mukhīko kṣīraḥ*) *ādāya*; 4. *nagno lalātam unuṣṭjātaḥ*; 5. *utsādyā bāhyato 'ngarakapāle çigruçarkarū juhoti* (Dār., *çigruçatrāṇi çarkarā vā*); 6. *kerārḥkāv ādadhātī* (Dār., *kerāparṇī 'ti yā surāṣṭre puṇḍarīke 'ti* [? MS. *pūvarī*-]); 7. *varṣaparītaḥ pratilomakarṣitas triḥ parikramya khadāyām arkaṁ kṣīpraṁ saṁvapati* (Dār., *evam pūrvatra arkaṁ kṣīpraṁ saṁvapati: varṣeṇā 'tipīḍīto varṣaparītaḥ . . . gartaḥ svabhāvajaḥ triḥ sarvatra gatvā khadāyām arkasamutaḥḥlam (?) prakṛtēna sūktēna pīḍīkṛtam kṣīpati çighram*).

The hymn is again used in Kāuç. 26. 1-10, in a ceremony which is described by Dārila as *çirorogabhāṣujyam*, and in every respect fits the definition; it corresponds to verse 3a of the hymn. As it contributes nothing to the understanding of the hymn itself, this reference may suffice.

III. Atharva-Veda i. 14. This hymn has been translated by Weber (ib., p. 408), Zimmer (ib., p. 314), and Ludwig (ib., p. 459). All agree in regarding it as a marriage-hymn; and Zimmer even describes it as spoken at the end of the marriage ceremony. It will be sufficient to present the first two (closely similar) versions in an English paraphrase:

1. "The joy of love and glory do I take from her to myself, as a wreath from a tree: like a mountain with broad foundation may she dwell a long time with [my] parents."

This is supposed to come from the mouth of the groom, in the presence of the bride's relatives, who thereupon reply:

2. "This maiden here, O ruler, shall be surrendered to thee as thy wife; let her be bound in the house of [thy] mother, of [thy] brother, and of [thy] father.

3. "She shall be the head of thy family; to thee we surrender her now; long may she live with thy parents, until her head turns gray (?) (so Z.; "streaming blessings from head to foot" W.).

Then the young husband replies:

4. "With the prayer of Asita, Kaçyapa, and Gaya do I tie thy fortune to myself, as the sisters tie the trunk."

Zimmer adds: "The sisters here referred to can only be those of the newly-married girl." The trunk, he thinks, contains the dowry; and he adds further: "The prospect of a rich dowry helped many a maiden who would otherwise have remained a spinster to obtain a husband."

Ludwig translates in a manner essentially the same, though with considerable variation in detail, and with more reserve in supplying pronouns and determining speakers.

Against this general understanding of the hymn stands the pregnant fact that it is not referred to in the tenth book of the Kāuçika, where five chapters are devoted to the marriage-ritual. *It is, however, rubricated in the second half of the tenth book, consisting of three chapters and a half (33-36), and entitled by the commentator *stri-karmāñi* 'women's rites;' and the scruple suggested by its absence from the tenth book might admit of being removed. But the Kāuçika offers also evidence of a positive character. The hymn is employed in a ritual evidently of a sinister character, quite unsuited to the joyous occasion with which the imagination of the translators has connected it. Thus : Kāuç. 36. 15 *bhagam asyā varca iti mālā-nispramanda-* (Dār. *krīḍā-yavargājendukah*)-*dantadhāvana-keçam içānahaṭāyā* (D. *jvarahaṭāyāḥ*) *anustaraṇyā vā koçam ulūkhaladaraṇe triçile nīkhanati*, 'with the hymn i. 14 one buries a (her?) wreath, *nispramanda*, teeth-cleaner, and hair, the *koça* (*vulva*?) of a cow slain by Rudra or of a burial-cow, in the hole of a mortar containing three stones;' 16. *mālām upamathyā 'nvāha* (D. *vimathya*? MS. *vimahyañ*), 'one repeats [the hymn] stirring up the wreath;' 17. *trīṇi keçamaṇḍalāni* (D. *puñjakeçān*) *kṛṣṇasū-treṇa viçṛthya* (D. *baddhvā*) *triçile* (D. *nīhanti*) '*çmottarāñi*, 'tying separately three tufts of [her] hair, [he buries them] in the hole containing the three stones, above [each] stone;' 18. *athā 'syāi bhagam utkhanati* :

yañ te bhagañ nicakñus triçile yañ catuḥçile :
idāñ tam utkhanāmasi prajayā ca dhanena ca,

'then one digs up her *bhaga* (fortune? *vulva*?) [with the verse] "what *bhaga* of thine they buried, in a place containing three stones or four stones, that we now dig up again, together with offspring and wealth."'

The commentary is very corrupt in this passage, and many points in the ceremony are not clear; but its character is plainly sinister. I explain the hymn as a woman's incantation against a rival, and translate :

1. 'I have taken to myself her fortune (*bhaga*) and glory, as [one takes] a wreath from a tree; as a mountain with broad foundation, may she sit long with her relatives (? *pitṛṣu*).

2. 'Let this girl be subjected to thee as thy wife, O king Yama; [till then] let her be fixed to the house of [her] mother and brother and father.

3. 'O king [Yama], this [girl shall be] thy housekeeper; to thee do we give her over; [till that] may she long sit with her relatives (? *pitṛṣu*), until her hair is scattered from her head (?).

4. 'With the incantation of Asita and Kaçyapa and Gaya do I bind up thy fortune, as sisters [pack something] within a casket (*koça*).'

The surroundings of this ceremony in the Kāuçika are equally conclusive as to its character, as viewed by the authors of that treatise. It is preceded (36. 13, 14) by one that founds itself on AV. vi. 130, and is regarded by all the translators as a charm to rekindle the love of a truant husband; and it is followed (36. 19-24) by one attaching itself to iii. 18, and explained with equal unanimity as a woman's charm for supplanting a more favored rival.

I add the curious statement of the *Amukramaṇī* as to this hymn : *namas te astu* (i. 13) *bhagam asyā* (i. 14) *iti sūkte vāidyute dve ānuṣṭubhe prathamam vāidyutam* param vārunam vo 'ta yāmyam vā prathamena vidyutam astāud dvitīyena tadartham yanam.* There seems to be no reason for associating these hymns, nor for regarding i. 14 as having anything to do with lightning. It may be noted that the treatise regards the word *yama* in the hymn as a proper name, and not an epithet ("ruler" [*Bändiger, Herrscher*] of the translators).

The concluding word of verse 3, *śamopyāt*, rendered by Zimmer 'until (her hair) turn gray,' on authority of a conjecture of the Petersburg lexicon, is in reality unexplainable. The quarter-verse, *ā śīrṣṇāḥ śamopyāt*, is, indeed, easily filled out by reading it as *ā śīrṣṇāḥ śamopiāt*; but the "hair" and the "three tufts of hair" of the *Kāuṣika* suggest to me the emendation *ā śīrṣṇāḥ kēcam opyāt* 'till she has shed the hair from her head'—i. e. 'has grown bald.' Or is the word to be emended to *samopiāt* (*√vap + ā + sam*)?

16. Lexicographical notes from the *Mahābhārata*; by Prof. Hopkins.

Professor Hopkins had collected various new meanings of words already treated in the Petersburg Lexicon, and gave sundry new compound words from the *Bhārata*, not registered in the Lexicon. He drew attention to the different numberings of the different Bombay editions. The old numbers are retained in the new smaller dictionary, which makes some difficulty in finding the citations from the twelfth book.

17. Introduction to the study of the Old-Indian Sibilants; by Prof. Bloomfield and Dr. Edward H. Spieker, of Baltimore, Md.

The problems which are encountered in an investigation of the Old-Indian sibilants may be best foreshadowed by the following preliminary statistical statements in reference to the Petersburg lexicon. In it we have found quoted 16 words which occur written in various texts with all three sibilants of the Sanskrit alphabet. So e. g. *kṣara* (so the lexicon!) 'cake of rice and sesame' is usually written in the MSS. as *kṣvara*, and occurs also as *kṣāra*; *muśala* 'pestle' as *muṣala* and *muśala*; *bisa* 'lotus-shoot' as *viṣa* and *viṣa*. There are 45 cases (not counting the same word twice in composition, nor the cases in which all three sibilants occur) in which *ç* and *ṣ* exchange with one another: e. g. *dṛṣād* and *dṛṣad* (rare) 'millstone,' *prṣṇi* and *prṣṇi* 'speckled.' Then there are 38 words in which *ṣ* alternates with *s*: e. g. *abhilāṣa* and *abkilāsa* 'desire,' *kaṣa*, *nikāṣa*, and *kasa*, *nikasa* 'touchstone.' There are moreover 68 cases of variation between *ṣ* and *s* in composition, when the second member of the compound begins with *s* and is preceded by an 'alterant' vowel: e. g. *go-ṣaṇi* and *go-sani* 'obtaining cattle;' *ati-ṣāra* and *ati-sāra* 'diarrhœa;' *vi-ṣphuliṅga* and *vi-sphuliṅga* 'spark.' Finally, there are about 250 cases in which *ç* varies with *s*: e. g. *aṅsa* and *aṅṣa* 'shoulder;' *açru* and *asru* 'tear;' *kṛkalāṣa* and *kṛkalāsa* 'lizard;' *pāṅsu* and *pāṅçu* 'dust;' *samṣruta* and *samçruta* 'flowed together;' *keça* and *kesa* 'hair.'

These statements are hemmed in moreover by certain limitations. It was impossible even for a work of the extent of the Petersburg lexicon to accommodate within its framework systematic statements as to the vacillations of the MSS. ; yet these alone can furnish an adequate picture of the excessive unsettledness in the use of the sibilants throughout the Vedic and classical Sanskrit. The lexicon bases its statements in general upon printed editions, and is in most cases shut off from an independent view of the materials which the editor uses. The editor alone has to grapple with the many problems of orthography ; these he solves and presents to the lexicon with varying degrees of correctness and exactness, according to his lights, and according to the extent to which they arouse his interest. Therefore the study of the sibilants, or any other problem in consonant phonetics, in order to be complete, ought to be founded upon an investigation of the MSS. ; at least, such critical material as is published along with the text-editions ought to furnish the ground upon which the investigation is to be founded ; and the only excuse for not referring the matter back entirely to the MSS. is their inaccessibility and the enormous difficulty of the task.

The bearings of the MSS. upon an investigation of the sibilants may be illustrated by the following examples : AV. ix. 1. 14, and xvi. 9. 4, the MSS. and the edition of Roth and Whitney read *vañçišīya* ; vii. 8. 51, *pyāçišīmahī* ; these are recognized by Whitney, Index Verborum under roots *van* and *pyā* (cf. also American Journal of Philology, vi. 277 fg.), as precatives or *siç*-aorist optatives, *vañsiçīya* and *pyāsiçīmahī* ; Kāuç. 3. 8 the MSS. read *āçispate*, which is probably to be emended to *āsiçyate* 'he will sit,' in a formula in the following passage : *āsanīyam brahmasadānañ japatiñ japatiñ bṛhaspatir brahmā brahmasadānañ āsiçyate* (MSS. *āçispate*) *bṛhaspate yajñāni gopāya* etc. ; Māitr. S. iii. 1. 9 (end), the MSS. read *çaiçyati* for *saiñ-çyati* ; Kāuç. 85. 19, two of seven MSS. read *pāçi-çikatā* for *pāçi-sikatā* 'stones and pebbles ;' Kāuç. 88. 13, K. (the best MS.) reads *āçaiñçīnām* for *āçaiñsūnām* gen. plur. of *āçaiñsu* 'desirous ;' Gop. i. 2. 9, the edition reads *çarasa-uçīnareçu* for *sarasa-uçīnareçu* : cf. Āit. Br. 8. 14.

All these cases are in words containing more than one sibilant ; the deviations are due to a well-known tendency towards assimilation, which the sibilants exercise upon one another. There are a considerable number of words in the language in which a sibilant etymologically false has firmly fixed itself, and has been always correctly explained as due to such processes. The most certain cases are, first, root *çuç* 'dry,' *çuçka* 'dry' (for **suçka* ; cf. Zd. *huška*), and root *çuç* (*çvas*) 'blow ;' then *çvāçura*, *çvaçrū* and *çmāçru*, *çaçvat* (for *sa-çvat* ; see Benfey, *Wurzellexikon* ii. 167 ; *Orient und Occident* i. 573 ; "Das indo-germanische Thema des Zahlworts 'zwei' ist *DU*," *Abh. d. Ges. d. Wiss.* xxi. 7). In all of these a lingual or a palatal sibilant has attracted to itself a dental sibilant in the preceding syllable : cf. in general Osthoff, *Zur Geschichte des Perfects im I.-G.*, p. 494. In no way different in principle are the cases of *vañçišīya*, *pyāçišīmahī* and *āçispate* above. The case of *çaçā* 'hare,' in which the original palatal sibilant in the first syllable of the word has attracted to itself a dental of the following syllable, is in no way different from the MS. readings *pāçi-çikatā* and *āçaiñçīnām* above.

It is evident that the conditions under which, and the extent to which, these assimilations may be assumed to have taken place in words containing more than one sibilant will receive valuable help from such MS. readings. In these, such influences are exhibited not in a definitely concluded form, but in the form of a tendency; not in a few effects which allow us to guess at their cause with more or less certainty, but at a stage of the process in which the effect is seen as it were following closely upon the heels of the cause.

The value of collections of this kind is a twofold one. First, they are directly useful in the editing of texts; we learn from them that palatal and lingual sibilants exercise a strong attractive influence upon dentals in syllables immediately preceding or following, and we are thus led to emend with greater confidence in cases where the sense of a passage is improved by the restoration of the dental, as in the case of *āsīṣyate* from *āçīṣpate* above. Secondly, we believe that such persistent writings are destined to play an important part in the discussions on the infallibility of phonetic law, which seem at present to enter upon a new phase, at least as far as non-spontaneous changes are concerned. The AV. contains other *siṣ*-aorist forms in addition to *vañçīṣya* and *pyāçīṣimahi* in which the assimilation of the dental to the lingual is omitted under precisely the same conditions: *hāsiṣtam*, *hāsiṣtām*, *hāsiṣta*, *hāsiṣus* (see Whitney, Index Verborum to Atharva-Veda, p. 337). And nowhere else in the *siṣ*-aorist (Whitney, Am. Journ. of Phil., vi. 276 fg.) does the assimilation take place. Certainly Osthoff's first suggestion of a cause of the absence of the assimilation in the *siṣ*-aorist, which he regards as necessary in the light of *çuṣka* etc. (ibid. 499), becomes improbable on account of *vañçīṣya* and *pyāçīṣimahi*. In general those interested in the discussions respecting phonetic law cannot devote too much attention to the tentative exhibitions of their operation in the MSS.: i. e. to the manner in which a phonetic law affects the individual in the linguistic community.

Not very different in principle are MS. readings like *ādhaçana-çayin* for *adhāṣana-çayin* 'occupying a low couch, Āp. Dh. S. i. 1. 2. 21; *kṛçanāça* for *kṛçā-nāsa*, MBh. 12. 10365. Here the assimilating influence of *ç* seems to operate across a syllable not containing a mute (*nā*); that this mode of writing expresses a genuine phonetic influence seems to us no less certain than in the preceding cases, although we have at hand no case in the language in which such phonetic influence has succeeded in transforming a word conclusively, as in *çvāçura* and *çaçā*.

The Petersburg Lexicon explains the first member of the Vedic copulative compound *çunā-sīrāu* 'the plough and the share' (RV., AV., Çākh. Çr., etc.) as equivalent to *ivṇ. ivuç* 'plough-share.' If this plausible etymology be correct, then *çunā-sīrāu* stands for *sunā-sīrāu* (a mode of writing which is mentioned by the commentaries to the lexicographers*), and we have here a case of the dissimilation of two succeeding dentals (again across the syllable *nā*, as in the cases immediately pre-

* The same commentaries have also *çunāçīrāu*, a mode of writing which in turn represents assimilation, if any value be attached to it at all: cf. *kṛçanāça*.

ceding). This etymology, and this assumption of dissimilating influences exercised by sibilants upon one another, can also be fortified by MSS. readings. Thus, Kāuç. 24. 13 etc., the MSS. read *suçime* in a formula *sollennis* addressed to a woman, married or about to be married : *sumangali prajāvati suçime* : *suçime* must be emended to *su-sime* 'having a beautiful hair-parting.' At AV. iv. 16. 7, the MSS. read *çrañçayitvā* for *srañsayitvā*, where we must assume first dissimilation and then again assimilation (*çrañsayitvā* ; then *çrañçayitvā*). Cf. also *sañçrutam* and *sañçrāvayati* below.

And there are other readings which illustrate the constant tendency of sibilants in the same word to influence one another. AV. vii. 5. 2, the MSS. read *susañçinas* for *suçañsinas* ; Kāuç. 50. 8, all MSS. have the unintelligible *avasasya*, which yields sense if emended to *avaçasya* 'having called down a curse (upon his enemies) ;' Kāuç. 48. 41, two MSS. read *asiçicu* for *açicu* 'desirous of eating.'

We may turn now to a case or two which illustrate the bearing of the MSS. upon words containing but one sibilant. We have mentioned above the fact that the root *sru* 'flow' occurs in the form *çru*. So the Petersburg Lexicon posits by the side of root 1. *çru* 'to hear' a root 2. *çru* 'to flow' ; it brings four cases from the RV. and one from the AV. (i. 3. 6) in illustration ; the case from the AV. is a certain one beyond all peradventure : *yad āntreṣu gavīnyor yad vastāv adhi sañçrutam* 'what has flowed together in the bowels, in the groins, and in the bladder.' The lexicon furthermore has *çravas*=*βροχ* for even a larger number of cases ; then there occurs the variant *āçrava* for *āsrava* 'stream ;' Kāuç. 6. 9. we have *sañçrāvayati* as var. lect. of *sañsrāvayati*. The text-editions preserve the readings with *ç* ; and as investigators of the sibilants we might have been misled into an attempt at a phonetic explanation, but for a case precisely opposite. AV. vii. 66. 1, the MSS. read and the editors have retained *asravan* for *açravan* 'they heard,' just as they have *sañçrutam* for *sañsrutam* above : *yad asravan paçava udyamānañ tad brāhmaṇam punar asmān upāitu*.* Evidently we ought to emend in future editions according to the sense, and recognize that we are entitled to employ this experience wherever a change seems necessary. The gain for grammar, though negative, is valuable enough, for we have established definitely a case of absolute confusion of these sounds in the earliest documents.

Once more, extended study of the MSS. will alone lead to a true estimate even of the most persistent modes of writing, when these are in conflict with other serious considerations. We will illustrate this only by a case or two. At Kāuç. 4. 15, the MSS. unanimously read *vaçiyān* for *vasiyān* : *sa vasiyān yaçamāno bhavati* (in antithesis to *pāpiyān* in the preceding sūtra) ; AV. xviii. 4. 49, all MSS. read *vaçiyas* for *vasiyas* (Whitney, Index Verb. *sub voce*), and the same false writing occurs elsewhere. Kāuç. 8. 10, all MSS. read *viçaye* for *viçaye* in a sūtra of such terseness and obscurity (*viçaye yathāñtharam*) that the

* Cf. also *prasravaṇa*, which according to the Petersburg Lexicon is often written *paçravaṇa*.

editor would certainly have accepted the reading of the MSS. but for Dārila's explicit gloss of the word by *saṁdeha* and *saṁçaya*. Fortified by these and many similar observations, we venture to go a step beyond the Petersburg Lexicon in our treatment of the word *keçara-kesara* 'hair, mane.' There is authority for both readings: the earliest texts, AV. (the word does not occur in the RV.), VS., Çat. Br., etc., write *kesara*, and the etymology (Lat. *cæsaries*) points at first sight to dental *s* not lingualized on account of the *r* following. On the other hand, the MSS. of the classical texts (e. g. Pañcatantra, R̥tusañh̥āra, etc.) write *keçara*: and *keça* 'hair,' *keçava* 'hairy,' *keçin* 'long-haired,' are written with *ç* everywhere. The Petersburg Lexicon arrives at no decision, but heads its article with both writings, giving precedence to the one with *s*. Yet both cannot be correct, and we see reason for deciding in favor of *keçara*. The considerations adduced against that reading resolve themselves into nothing more than the readings of the earlier MSS.: and that alone does not impress us sufficiently, because we have found the MSS. fallible in their treatment of sibilants. So far as the etymology is concerned, we believe that the writing *keçara* favors it as well as *kesara*. We assume that the *k* of the first syllable has assimilated the dental sibilant to a palatal, precisely as *çaçá* for **çasá*. A completer proof of this assumption may be reserved for a future paper. At present we would point to such cases as *keça* etc., *koça* (Gothic *hūs*), *çakṛt* (σκροπ), possibly *çakrā* (*sacer*), and such writing as *kṛçara* (more common than *kṛsara* and *kṛşara*);* the close similarity in pronunciation of *k* and *ç* is proved by cases like *çarkoça* 'a kind of serpent' and *karkoçaka* 'name of a certain serpent,' *lopāçá* and *lopāka* etc. (cf. KZ. xxv. 125), and favors the assumption that *k* may have exercised the same effect upon a neighboring *s* as *ç*. In this way *keçara* is placed upon the same level as *keça* etc., and the earlier writing (*kesara*) may be either simply a case of confusion of *ç* and *s* (of which there are about 250 instances), or perhaps brought about by an analogical imitation of the influence which is always exercised by an *r* following anywhere in a word upon a dental sibilant, which would but for the *r* be lingualized by an alterant vowel preceding it, as e. g. in *dhūsara* from root *dhvas*. The order of development would then be: Indo-European *kaisara*, Indian *keçara*, and finally *kesara*.

The statements just made implicitly contain a programme of the work before us. It consists 1. in fixing the correct orthography of a given word containing one or more sibilants in a given period; 2. in describing and accounting for the variations by which the correct writing is beset; 3. if possible, in fixing the pronunciation of the sibilants at any given period of Indian literature.

The last of these tasks presents well-nigh insuperable difficulties, so far as the lingual and palatal sibilants are concerned. The vernaculars have leveled the difference in the pronunciation of these sounds, even where, as in the case in the Gipsy languages, they have preserved the difference between the dental sibilant on the one hand and the palatal

* Cf. also *çakara* for *sūkara* (Petersburg Lexicon *sub voce*), and *çukanāçā* for *çukanāsā*.

and lingual on the other. Etymological considerations are of course nearly useless in delicate questions of pronunciation.

Our aids in this task in general are threefold. 1. On the hither side we have the history and development of the sibilants in the modern languages of India, beginning with the Pāli-Prākṛit dialect, and continuing with the vernaculars. Our task here is a comparatively simple one, because in general all these dialects present the sibilants in a stage of advanced decay. The sibilants in earliest Pāli-Prākṛit times have been merged into the one dental sibilant; and whatever differences have cropped out in the modern vernaculars are new and of no etymological value. There are two exceptions to this state of things. The Buddhistic inscriptions of king Aṣoka or Piadasi follow in general the literary Pāli in the fusion of the sibilants, except those of the Kapur-da-Giri version. These have preserved the sibilants intact as in Sanskrit, aside from specialties of treatment (e. g. $\zeta=ṣy$). Unfortunately, the material of these inscriptions is very small, and, though it tends to strengthen our confidence in the general correctness of the readings of Vedic and Sanskrit MSS. and editions, it contributes but very little in cases of doubtful orthography.

Somewhat more important is a second document, the language of the Gipsies. Here the palatal and lingual sibilants have become fused into a lingual $ʃ$, but the dental s has kept itself perfectly clear as a dental. So $gukko=ṣuṣka$; $ṣosoi=ṣaṣā$; $deṣ=daṣa$ etc., but $as-ar=has-āmi$; $khasṭ=hasṭa$. But here, as in the case of the Kapur-da-Giri inscriptions, but little aid can be found in cases of special difficulty; the testimony of both will make for conservative criticism from the point of view of inner Indian tradition against testimony from without.

2. On the farther side of the Vedic language lies the testimony to which we must turn for most of our information, the related languages. This is *eo ipso* the foundation of such an investigation; it is hardly necessary to point out how instinctively the representatives in the related tongues of words containing sibilants are searched out as the starting point from which all facts in the later development of the sibilants are to be traced and described.

3. We trust to a closer scrutiny of the sibilant within the private life of the Vedic and classical dialects for most of the information which we hope to contribute to this subject. Here is the point where least has been done, and here we must search for a solution of the difficulties and inconsistencies which are left after the contributions from without have been exhausted. We have exemplified pretty clearly the nature of the help which is to be derived from within by our remarks on the use of the MSS. Numerous other conflicts between etymology and native tradition will undoubtedly be solved in this way, if they are solved at all.

After the usual vote of thanks to the American Academy for the use of its assembly-room, the Society adjourned to meet at New Haven, Wednesday, October 27, 1886.

Proceedings at New Haven, October 27th, 1886.

THE Society met at 3 o'clock P. M. in the Library Room of the Divinity School of Yale University. The President, Professor Whitney, being absent, on account of illness, the Vice-president, Rev. Dr. Ward, of New York, took the chair and called the meeting to order.

The Recording Secretary, Professor Lyon, of Cambridge, Mass., read the minutes of the May meeting and they were approved. The Treasurer, Mr. Van Name, announced, on behalf of the Committee of Arrangements, that an invitation had been extended by President Dwight of Yale University for the members to meet socially at his house in the evening, and that the same had been gratefully accepted.

On the part of the Directors, the Corresponding Secretary, Professor Lanman, gave notice that the spring meeting would be held at Boston on the second Wednesday (the 11th day) of May, 1887, and that the Recording and Corresponding Secretaries were to serve as a Committee of Arrangements.

On recommendation of the Directors, the following persons were elected as Corporate Members of the Society :

- Prof. Charles R. Brown, Baptist Theological Seminary, Newton Centre, Mass. ;
- Prof. S. Burnham, Baptist Theological Seminary, Hamilton, N. Y. ;
- Mr. C. E. Crandall, Yale University, New Haven, Conn. ;
- Prof. Francis B. Denio, Theological Seminary, Bangor, Maine ;
- Miss Caroline FitzGerald, New York City ;
- Mr. Richard J. H. Gottheil, Columbia College, New York City ;
- Mr. Robert F. Harper, New Haven, Conn. ;
- Mr. Morris Jastrow, Jr., Philadelphia, Pa. ;
- Rev. Maximilian L. Kellner, Episcopal Theological School, Cambridge, Mass. ;
- Madame Zénaïde A. Ragozin, San Antonio, Texas.

The Corresponding Secretary laid before the Society a parcel of rubbings of inscriptions from Buddhist convents at Fang shan, some fifteen or twenty miles south-west of Peking. Under date of July 6, 1886, the sender, Mr. Rockhill, writes as follows concerning them : No. 1 is dated in the tenth year Ch'ien T'ung of Tien cha of the Liao of Kitan Tartar dynasty (A. D. 1110). No. 2 is dated in the twelfth year Ta Ting of She tsung of the Kin dynasty (A. D. 1172). No. 3 is of the twenty-third year of the same (A. D. 1183). No. 4 is dated in the sixth year Ch'ien T'ung

of Tien cha (A. D. 1107). No. 7 has the same date as No. 2. The substance of the inscriptions does not seem to be important, except on account of the Sanskrit *dhāranī* and of the Sanskrit quotation written in one of them. Mr. Rockhill adds that this kind of Sanskrit text appears to be the only one now obtainable in or about Peking; and that he hopes to ascertain later on whether there may not be something of interest at Wu t'ai shan, the oldest sanctuary in Northern China.

Protap Chandra Roy, in a letter dated Calcutta, July 17, 1886, describes the way in which the Hindus study their great Epic. Whenever the Bhārata is read, it is read to a group of hearers. The professional reciters, who are all Brahmans, read the poem to larger audiences. They who read are called *pāthakas*. Side by side with them sit the *dhāraḱas* ['supporters'], whose business it is to correct the *pāthakas*. Generally it takes about three months to complete the recitation of the entire Mahā Bhārata. [Leaving out the Harivaṅṣa, this would be at the rate of about one thousand couplets a day.] Both 'readers' and 'supporters' are handsomely paid by those in whose houses the recitations are given. And throughout the entire period, Brahmans are sumptuously fed every day, and are rewarded with the *dakṣiṇā*, which varies from a four-anna bit to a rupee [about twelve to fifty cents]. At the conclusion of the reading, a large number of persons, chiefly Brahmans, are fed, and large gifts are made to them. There is another class of men called *kathakas*, who sing the Bhārata, draw "bumper" audiences, and receive larger remuneration. Sometimes the *pāthakas* recite the poem in the morning and the *kathakas* sing it in the afternoon, the audience of the former being a learned one and that of the latter a miscellaneous one.

Rev. D. Stuart Dodge, through Mr. Van Name, lays before the Society, with a request for suggestions, a scheme for founding a School of Biblical Archæology and Philology in the East. The plan is soon to be more fully set forth in the *Presbyterian Review* by Rev. Henry W. Hulbert, now studying at Beirut, where the school, if established, would probably be located.

The Society now proceeded to the hearing of communications.

1. On the Syriac part of the Chinese Nestorian Tablet; by Prof. I. H. Hall, of the Metropolitan Museum of Art, New York City.

In some quarters it has been the fashion to draw in question the veracity of the old writers on the subject of the Nestorian tablet; particularly of that part which gives the names of seventy preachers of the gospel. The reason for this doubt is the fact that most of the impressions brought to America omit those names. But on comparing the various impressions, scarcely any two are of equal extent, each omitting some part of the stone. Thus there are two in the library of the Auburn Theological Seminary, each partial, and each supplying defects of the other; one at New Haven, showing more than one of the

Auburn impressions, but less than the other; one in the Bible House at New York, showing less than any of those just mentioned; one at Beloit College, showing more than any of them; and so on.

To one who studies the literature of the subject, there can be no doubt that the old writers were in the main correct, and that the seventy names are there. For instance, in J. S. Assemani's *Bibliotheca Orientalis*, tom. ii., pars iii., p. DXXXVIII. ff., the author states that he used two impressions of the stone (*Ex Archetypo desumpta exempla duo consului*), one of which was made (*impressum*) before the year 1631, and the other sent by P. Couplet with many Chinese books to Pope Innocent XI. But in the latter *desiderantur Syriaca nomina septuaginta praeconum Evangelii, quae in altero ad marginem impressa conspiciuntur*.

All the impressions in America have been like this last; that is, they lacked the *edges* of the stone, on which, according to all the accounts, from Athanasius Kircher and Andreas Muller down to Dr. S. Wells Williams, are to be found the seventy names in Syriac. But within a few weeks an impression has come to the American Bible Society, which not only shows the complete face of the stone, but one of the sides complete, and about two-thirds of the other side. Rev. C. Goodrich, a missionary of the A. B. C. F. M., who has seen the stone, thinks it contains the entire inscribed portion. This impression was obtained on the 16th of June, 1886, by Mr. J. Thorne, a well-known colporteur of the American Bible Society. From all considerations that appear in the literature of the subject, this impression must be much the best that has ever been consulted by any of the writers who have treated it. It shows a number of diacritic points, and marks of punctuation, which could not have been seen by Assemani; and the impression enables me to correct a number of mistakes of both Assemani and Kircher; and, at the same time, to decide between the two when they differ.

Unfortunately, the side on which most of these seventy names occur is disfigured by a late Chinese inscription, which cuts into the Syriac and the old Chinese in places, and commemorates the setting up of the stone in 1859, in the position stated by Dr. Williams in *The Middle Kingdom*. But this new inscription rarely interferes with the reading of the Syriac, making hopeless only one of the seventy names, and that one about which Kircher and Assemani differ.

Whether the extra twenty-four names which Kircher gives in his *Prodromus Coptus* exist on that part of the stone which the Bible House impression does not cover, or whether, as Assemani maintained, Kircher forged them, cannot be said. But the twenty-four names read as if Kircher had made a double copy of part of the inscription, and got his two sets of notes confused.

In this summary only a few points of the communication can be noticed. The chief errors in Assemani's reading of the Syriac are here given; reference to Assemani being made by his "Classes," on pp. DXLII. to DXLVI., in the volume and part above mentioned, which include all that is on the impression of the edges of the stone. The impression of the face of the stone, given by Assemani, *ubi supra*, pp. DXLVIII. to DL., can be compared on many of the impressions.

Classis I. No. 8, Assemani **ܐܝܫܐܩ** (Isaac), wrong for **ܐܒܝܐܩܐ** (Ephraim). No. 9, Assemani **ܐܝܫܐܩ** (Isaac), wrong for **ܐܒܝ** (Abi).

Classis II. No. 1, Assemani **ܐܩܐܨܝܘܨ** ("Acacius?"), wrong for **ܐܩܘܨܝܘܨ** (Bakus, or Bacchus); also, Assemani wrongly has a **ܘ** (*waw*) prefixed to the last word; and he has the same mistake with the last word of No. 2. No. 5, Assemani wrongly **ܝܘܗܢܢܐ** for **ܝܘܗܢܢܐ**. No. 6, Assemani wrongly **ܝܘܗܢܢܐ** for **ܝܘܗܢܢܐ**: that is, has the form *Yuhanan* instead of *Yohannes*; also wrongly **ܝܘܗܢܢܐ** for **ܝܘܗܢܢܐ**.

Classis III. No. 3, Assemani wrongly **ܝܘܗܢܢܐ** (*Yoannes*), for **ܐܒܝ** (Job). In this instance Kircher is right. No. 13, Assemani wrongly **ܝܘܗܢܢܐ** (John), for **ܢܘܗ** (Noah). In this instance also Kircher is right.

Classis IV. No. 1. In this instance it is impossible to decide between Kircher and Assemani, for the new Chinese inscription has mutilated the letters too badly. Nos. 4 and 7, Assemani wrongly **ܡܘܨܝܐ** for **ܡܘܨܐ**.

Classis V. No. 2, Assemani wrongly **ܡܘܨܐ** for **ܡܘܨܐ**; and, what is more important, wrongly **ܡܘܨܐ** (of *Sinistân*, i. e. of China), for **ܫܝܢܝܫܬܐܢ** (*Shiangtsû*). It is astonishing that he should make such a blunder, for the "of *Sinistân*" occurs elsewhere in the inscription, on the face of the stone. No. 3, Assemani wrongly **ܡܘܨܐ** for **ܡܘܨܐ**; and wrongly omits the connecting prefix *waw* of the last word, materially changing the sense. No. 11, Assemani wrongly omits the word at the end. **ܡܘܨܐ**.

Classis VI. No. 1, Assemani wrongly **ܡܘܨܐ** (priest), for **ܡܘܨܐ** (canon). Nos. 2 and 3, Assemani wrongly adds **ܡܘܨܐ** (there never could have been any such word on the stone, for the old Chinese fills the place). No. 7, **ܡܘܨܐ** (*Mar Sergius*), is the correct reading; Assemani and Kircher are both wrong; the first reading **ܡܘܨܐ** (*Jacob*), the second reading **ܡܘܨܐ** (*Mar Joseph*). No. 10, Assemani wrongly **ܡܘܨܐ** (*Elias*), for **ܡܘܨܐ** (*Zecharias*). No. 12, Assemani wrongly **ܡܘܨܐ** (*Cyriacus*), for **ܡܘܨܐ** (*Bakus*, or *Bacchus*).

Classis VII. No. 1, Assemani omits a *yud* after the *rish*, in the name.

The corrections to be made in Assemani and Kircher's representation of the face of the stone are much less considerable.

Other matters of the communication, historical, descriptive, geographical, bibliographical, and palæographical, are omitted here for the sake of brevity. The full communication, when printed, will contain also the complete Syriac text of the stone.

2. On a newly discovered Syriac Manuscript; by Prof. Hall.

Some two or three years ago a manuscript in Ancient Syriac was found in a church in the village Minganish in Tiary (in *Kûrdistân*), and copied by Rabban Yonan (**ܕܢܗܘܢܐ**, Rabban Jonah), the only remaining Nestorian monk of the village. The copy was brought to Urmî (Oroomiah) in 1885, by Kasha Oshana (**ܕܩܫܐܘܫܢܐ**, Priest Osha'na, or Ausha'na), who has been engaged with the Rev. Benjamin Labaree in revising the Modern Syriac translation of the Old Testament.

ance of which the author writes the events he treats of, "everything just as it was."

First is the story of Rabban Sauma; then the early history of Mar Yawallaha; then the journey of the two westward. The original start of Mar Yawallaha was from his native place Kúshang, in the East, and was made with a view to becoming an ecclesiastic. Fifteen days' travel brought him to Rabban Sauma, whose disciple he became. After three years' service he became very eager to go westward, and to visit the shrines of the martyrs and Jerusalem. After much persuasion he induced Rabban Sauma to go; and the two gave all they had to the poor, and started, though not without much opposition.

The narrative is interesting. They pass the city Tangút, the country of Lûtûn, thence to Kashgar, to the city Tleos, and to a church called Mar Zion near the city Tûs. Thence to Azerbaijan and to Baghdad. Thence they go to Marga, to Beth Garma, to Arbil, to Mosul, to Singara, Nisibin; to the island of Beth Zodai; visiting shrines everywhere. After some retracing of steps and some trouble, they obtain from King Abaka permission to go to Jerusalem.

On the journey Mar Yawallaha (formerly Mark, son of Beni-el) is made Metropolitan of Katai and Aung, and Sauma is made deputy of the churches. Detained by a war, Mar Yawallaha has remarkable dreams and adventures, and finally is ordained patriarch at the church Kuka, near Baghdad, on Saturday, 24 November, 1593 of the Greeks (A. D. 1281). This date, as well as the main history, agrees with Assemani's account, so far as the two are parallel, except that Assemani gives the day as 1st Sunday of Dedication of a church—i. e., that whose antiphon and lessons have that reference. At that time Mar Yawallaha was 37 years old.

After many adventures he came to Oroomiah, and thence to Maraga. Under King Argoun, he rebuilt his church at Maraga, and cloisters for himself also. Argoun proposed to conquer Syria and Palestine if the Western Christians would join him; and, after consulting Mar Yawallaha, sent, on the latter's recommendation, Rabban Sauma as ambassador to the pope and the kings of the West, providing him liberally with supplies, and presents for the Western powers.

Rabban Sauma's journey then takes place. He goes by the Black Sea to Constantinople, and is received with great honor by the Greek emperor. Is much impressed with Santa Sophia, and other things beyond his power of expression. He sails to Naples, goes thence to Rome, and meets the cardinals—the pope having recently died. From Rome to "Tuzaban" (Tuscany?), thence to Genoa, thence through a country called Unbar to Paris, thence (apparently) to England, or, at least, 20 days' journey to the king of England. Thence to the city of Gíwa, in winter, where things were green all the year; thence to Rome, where he met the pope, transacted his business, and returned to King Argoun, by the same route by which he came. This was in the year of the Greeks 1598=A. D. 1287.

The rest of the manuscript is taken up with chronicles of the years from 1599 (A. D. 1288) to 1623 (A. D. 1312), giving accounts of matters

among the Nestorians. The death of Rabban Sauma occurred in 1605 (A. D. 1294); and the death of Mar Yawallaha is mentioned, as above stated, as occurring in the year of the Greeks 1629. The MS. agrees with Assemani within *two days* respecting this date: "And he departed the night of Sunday of **من كان يفتحن** [the words that begin the ritual of that day], on the 15th of the latter Tishri" [November].

In this sketch it is impossible to hint at the interesting and valuable matter of the narrative. But the MS. is in every way worth publishing entire.

3. Some Arabic proverbs; collected by Mr. James Richard Jewett, Fellow of Harvard College, now studying in Syria:

Mr. Jewett has collected three or four hundred proverbs in the common dialect;* and of these he sent fifty, from Aleih, September 2, 1886. Some of those which he sent have been omitted, because they are given by Khouri or by Landberg.

1. *rāh el ḥnār ḥatta yesta'ir qurūn, rejē bela danna'in.* 'The ass went to borrow horns; he came back without ears.' Used of one who loses what he already has in the effort to get more.

2. *kull ma jēt btākul tāyiyib.* 'The hungrier you are, the better you will eat.'

3. *mīn qillat el chēl šeddu 'al kilāb surūj.* 'From lack of horses they fasten saddles on the dogs.' 'al is for 'ala' l.

4. *ed dik 'ālamu mezbillu.* 'The cock's world is his dunghill.'

5. *rekkebnāk warāna, meddēt idāk 'al churj.* 'We mounted you behind us and you have stretched your hand to the saddle-bag.' Applied to one who has repaid kindness with treachery.

6. *ill bīrūh l' bēn el 'ūrān beddu ya'wir 'aimu.* 'He who goes among the one-eyed must blind his eye,' i. e. render himself one-eyed. *ill* for *illēdi*. When you go to Rome, do as the Romans do.

7. *'allemnāk eš šhādi, sabagtna 'al bāb.* 'We taught you begging (and you have outstripped us to the doors' (and thus deprived us of what we might get; for when we go to any house begging, you have been there before us, and now we get nothing). Applied to one who uses assistance given by another to that other's disadvantage. *bāb* plural of *bāb*.

8. *ill byihāj lil kelb biqūlluh ya ḥājj kelb.* 'He who needs a dog says to him, "Mr. Dog."' Applied in case a man "having an axe to grind" uses a little flattery. *ḥājj*, 'pilgrim,' is a title of respect given to those who have made the pilgrimage to Mecca.

9. *ill bilā'ib el quṭṭ beddu yilqa charamūšu.* 'He who plays with the cat will get its scratches.'

* Transliteration. ا = ; ح = h; خ = ch; د = d; ش = š; ص = s; ض = d; ط = t; ظ = z; ع = ' ; غ = gh; ف = q. The *æ* designates a sound like that in English *hat*; and *ä*, a sound like that in German *Väter*. A macron over a vowel denotes a long sound; a circumflex denotes a long and accented one. And *ä* is always to be understood as long and accented, as if marked with a circumflex.

10. *la aḥad byīsterī semek bil moi.* 'No one buys fish in the water.'

11. *išbi kelbæk yaḥmi dāræk jawwi bissæk yäkuḥ fāræk.* 'Satisfy your dog, he will defend your house. Starve your cat, she will eat your mouse.'

12. *qātu lid dik ših, qāl kull šī bwaqtu mlīh.* 'They said to the cock, "Crow." He said, "Everything is good in its time."'

13. *min charfu min es suchn šār yinfuch 'al leben.* 'From his fear of heat he began to blow on the leben.' Leben is a preparation of milk much esteemed by the natives as well as by many Europeans residing in Syria. It is prepared by putting some fermenting substance in sweet milk. It looks like our curds, but is quite a different thing. It is always most refreshing cool; hence the proverb.

14. *harab min ed dubb, waqa' fi 'l jubb.* 'He fled from the bear. (and) fell into the well.' Out of the frying-pan into the fire.

15. *min ed delfi li taht el mizrüb.* 'From the drops (to) under the spout.' By *delfi* is meant the water which trickles down through the earthen roofs after or during a rain. The *mizrüb* is a wooden spout two or three feet long set in the edge of the roof to drain off the water from the roof, and send it away from the foundations of the house when it rains. The meaning is the same as that of the preceding proverb. In seeking to avoid a few drops one sometimes gets a thorough drenching. Given by Khouri and by Landberg.

16. *zawwajt binti lachluş min baläha, ijitnī u arba' min waräha.* 'I married off my daughter to get rid of the care (trouble) of her, she came to me and four behind her.' *lachluş* for *li achluş*.

17. *ma fi dıbs illa fi Ba'albek?* 'Is there no molasses except in Baalbek?' *Dıbs* is the name of the molasses made from grapes for which Baalbek is famous. *fi* means 'there is.'

18. *şahhäd u mşarif?* 'A beggar and making conditions?' Beggars shouldn't be choosers.

19. *mitl ḥmâr ez zayyät kull ma nadahu şahbu byûqaf.* 'Like the oil-seller's donkey, the more his master calls him the more he stops.'

20. *wækkæl el quṭṭ bil jibnät.* 'He put the rat in charge of the cheeses.' Same meaning as in No. 21.

21. *mitl illi biwa'kkil ed dubb bil kærm.* 'Like the man who puts the bear in charge of the vineyard.' Bears are fond of grapes and make ravages in vineyards.

22. *ta yşib el ghráb.* 'Till the crow grows white.'

23. *il 'âdi tiqta' charazit il bîr.* 'Custom cuts through the curbstone of the well.' That is, a groove is worn in the curb of a well by repeatedly drawing up water and dragging the rope over the stone. The *charazi* is a large stone placed over the mouth of a well and has a round hole in it through which buckets are let down. I have seen stones which had been deeply grooved by the rope.

24. *şâm wâhid byişbi tnén.* 'The food of one will satisfy two.' That is, it costs little more for a family of say five or six, than it does for one of four or five.

25. *'aşrat il chänäti rawwaḥit ḥmâr il mkäri.* 'The khan-keeper's ten paras made the muleteer loose his donkey (lit. made the donkey of

the muleteer go away).’ The explanation of this is said to be that a muleteer refusing to pay ten paras (about a cent) to the khan-keeper for the privilege of tying his donkey in the khan, tied the beast outside and it was stolen.

26. *ill ma’u māl yākul rizz wişfiha will ma ma’u māl byitneşşaq ‘ar riha.* ‘He who has money eats rice and *şfiha* and he who has no money smells the scent.’ *şfiha* is the name of a native dish of meat cut very fine and put on circular pieces of dough having the edges turned up. The whole then is baked. It is like little meat pies with bottom crust but no top one.

27. *mīl el hamīr el biḍ la yhibb illa ‘l marmagha.* ‘Like white donkeys, he likes nothing but rolling (in the dust).’

28. *el matrah ḍayyiq wel ḥmār lebbāt.* ‘The place is narrow and the donkey is a great kicker.’ Used in case everything seems to be against a man, with somewhat of the meaning of our proverb “misfortunes never come single.”

29. *ir rédi rédi, kull ma jlaītu şidi.* ‘The bad is bad (what’s bad is bad); the more you polish it, the more it rusts.’

30. *şirwāl mā lu, dikktu barba’taş.* ‘Trowsers he has none, but his suspenders cost fourteen piasters’ (according to another version, ‘two dollars’ *biryalain*). *şirwāl* are the baggy trowsers of the Syrians. The *dikki*, ‘girdle,’ which I translate by ‘suspenders,’ is in reality a cord passed through a hem in the top of the trowsers and used to fasten them around the waist.

31. *ḍkār id dāb u hayyi ‘l qaḍīb.* ‘Speak of the wolf and get ready the stick.’ Like our “Speak of angels and you will hear the rustling of their wings.”

32. *mīn kām id dīk dalīlu kām el gimn ma’wāh.* ‘He who has the cock for guide has the hen-house for his abode.’

33. *ḍabbīr il jār qabl ed dār wer rafīq qabl el ḥarīq.* ‘Arrange for your neighbor before your house, and your companion before your route.’

34. *el qird ba’in immu ghazāl.* ‘The monkey is in his mother’s eye a gazelle.’

35. *il ma’na baḡalb eş şā’ir.* ‘The meaning is in the heart of the poet.’ That is, the poet alone knows what he intended to express. This seems to be particularly true of some Arabic poetry.

36. *byis’al ‘an il baīḍa mīn baḡḥa wij jāji mīn jābha.* ‘He asks about the egg, “What (hen) laid it?” and about the hen, “Who brought it?”’

37. *lan bişūf ij jaemel ḥirdebbtu kām byiqa’ byiksur raḡbtu.* ‘If the camel should see his hump, he would fall and break his neck.’

38. *beddu y’azzi u ma bya’rif mīn māt.* ‘He wishes to offer his condolence and he does not know who has died.’

39. *ma bya’rif el cliḥ mīn el mādnā.* ‘He does not know an elif from a minaret.’ Like our “He doesn’t know b from a bull’s foot.”

40. *la tiḥki ya lisān bil ḥait fi insān.* ‘Do not speak, O tongue; in the wall there is a man.’ Walls have ears.

41. *el fels es sāyib b’allim en nās es sirqa.* ‘Money (lying about) loose teaches people theft.’

42. *il faras il ašili la y^uibha jlälha.* 'The mare of good blood is not disgraced by her pack-saddle (lit. her pack-saddle does not disgrace her).'

48. *a'qal min el berghút bid dán.* 'More cunning than a flea in the ear.'

4. Two Hymns of the Atharva-Veda, ii.11 and vi.128; by Prof. M. Bloomfield, of Baltimore, Md.

This paper gives further contributions to the exegesis of the Atharvan, based on the ritualistic books pertaining to that Veda, and in confirmation of what was presented in the Proceedings for May, 1885, and May, 1886, vol. xiii. of the Journal.

I. Atharva-Veda ii.11. This hymn has been translated by Weber, *Ind. Stud.* xiii.163. He entitles it 'The *srāktya*-amulet, a counter-incantation.' The purpose of the hymn is doubtless correctly stated, as is clear from stanzas 2 and 3. He bases his description of the *sraktya* amulet, or *srāktya*, as it is called at viii.5.4,7,8, simply on an etymology, and derives the words from *srākti*, 'corner,' and defines them as 'many-cornered.' Accordingly, he thinks that the amulet in question was made of a polished jewel or crystal. Similarly Zimmer, *Altindisches Leben*, p. 263.

The word *sraktya* occurs in a long list of plants and trees, enumerated as *çānta* or 'holy' in the Kāuçika sūtra, viii.15. Dārila defines it by *tilaka*. Moreover, at xxxix.1, a sūtra which serves as rubric to the hymn now in question, the word *srāktya* occurs thus: *dūšyā dūšir ašī 'ti srāktyam badhnāti*; and on this Dārila's comment is *çāntyudakānte bandhanam . . . sraktyavikārah, sraktyamañi, sraktyas tilakah, kṛtyā-çamanārtham*.

According to this the *sraktya* is a kind of *tilaka*-tree. Since it is reckoned as *çānta*, we may infer that it was 'suitable for warding off witchcraft,' or *pratyabhicaraṇa*; for there is a common and technical antithesis between *çānti* and *abhicāra* in the ritual. Thus the Atharvaṇīya-paddhati of the Kāuçika says in the introduction, *sañhitāvidhīm rakṣyāmah; çāntika-pāuṣṭikā-'bhicārikāṇi sañhitāvidhāu* (i. e. in the Kāuçika) *uktāni, trividhāni karmāṇi vidhikarmāṇi avidhikarmāṇi uchrayakarmāṇi*. And Dārila glosses *çāntānām*, occurring at Kāuçika iii.19, by *nā 'bhicārikāṇām*. The word *srāktya* is a regular *vṛddhi*-derivative from *sraktya*, and means 'amulet made from the *sraktya*-tree.' Support is thus furnished for the unauthenticated meaning of *tilakā*, 'eine art halsschmuck,' reported by Böhtlingk in the smaller dictionary.

The vegetable kingdom is a favorite source of the *mañi* or amulet. Thus amulets are furnished by a number of the 'holy' trees mentioned at Kāuçika viii.15; so by the *udumbara*, AV. xix.31.1; the *parṇa* or *palāça*, iii.5; the *jañgiḍa*, ii.4; xix.35; the *varaṇa*, vi.85; x.3. An amulet consisting of a pair of equal *kṛṣṇalā*-berries, *yugmakṛṣṇalam*, is mentioned at Kāuçika xi.19 and lii.18. The hymn AV. ii.9 sings the praises of the *daçavr̥kṣa*, which the Kāuçika and Dārila explain as an amulet consisting of ten different kinds of 'holy' wood; compare *Ind. Stud.* xiii.153-155. Finally, as appears at Kāuçika xxviii.7, the *sadam-*

puṣpā furnishes an amulet employed in connection with the hymn AV. iv.20.

It may be added that the use of this hymn, ii.11, in connection with iv.40; 17; 18; 19; v.14; 31; viii.5; and x.1, is enjoined by the Kāuṣīka at xxxix.7, thus : *dūṣyā dūṣir asi ye purastād iṣānām trā samam jyotir uto asy abandhukṛt suparṇas tvā yām te cakrur ayam pratissaro yām kalpayanti 'ti mahācāntim āvapate*. These pratikas, with the addition of those of vii.65.1,2, make up the second *gaṇa* of the *gaṇamālā*, Atharva-pariṣiṣṭa 34, which bears the name of *kṛtyāgaṇa*. The purpose of the hymn is clear from the Anukramaṇi, which says, *dūṣyā dūṣir asi 'ti kṛtyāpratiharāṇasūktam kṛtyādūṣaṇādevatyam*.

The hymn is mentioned also in the *hastyaśvadīkṣā*, Ath. Pariṣiṣṭa xvii. 2 : *dūṣyā dūṣir iti pratissaram ābadhya* (MSS. *ār-*). And a passage in praise of the *pratissara* occurs in the *skandayāga* or *dhūrtakalpa*, ib. xx.6,7. Dārila's comment on Kāuṣīka xix.22 treats of the *pratissara*. As appears from Weber, l.c., xiii.164, Zimmer, l.c., p. 263, and Ludwig, *Rigveda*, iii.345, the earlier meaning of *pratissara* does not seem to be clearly established, and the *skandayāga*-passage may therefore be given in full : in *ḥloka 5a*, the MS.-reading is *kṛtāt pātah kṣudrāt*, with the variant *kṣudrāḥ*. The passage follows : *ādityakartitam sūtram iti pratissaram badhuṁti*. 6.

*ādityakartitam sūtram indreṇa trivṛtikṛtam
 acvibhyām granthito granthir brahmaṇā pratissarah kṛtaḥ.
 dhanyam yaçasyam āyusyam acubhasya ca ghātanam
 badhūnāmi pratissaram imam sarvaçatrunibarhaṇam.
 rakṣobhyaç ca piçācebhyo gandharvebhyas tathāi 'va ca
 manuṣyebhyo bhayam nā 'sti yaç ca syād duṣkṛtam kṛtam.
 svakṛtāt parakṛtāc ca duṣkṛtāt parimucyate
 sarvasmāt pātakān mukto bhaved rivas tathāi 'va ca.
 abhiçrāt kṛtāt kṣudrāt strīkṛtād acubham ca yat
 tāvat tasya bhayam nā 'sti yāvat sūtram sa dhārayet.
 yāvad āpaç ca gāvaç.ca yāvat sthāsyanti parvatāḥ
 tāvat tasya bhayam nā 'sti yaç sūtram dhārayiṣyati.*

II. Atharva-Veda vi.128. This hymn has been translated by Weber, *Omnia und Portenta*, p. 363, and by Zimmer, *Allindisches Leben*, p. 353. The latter, following a suggestion of the Petersburg Lex., vii.11, regards the hymn as one in praise of an otherwise unknown constellation called *Çakadhūma*, which has the power of bringing good weather. And Ludwig, *Rigveda* iii., p. 187, adopts incidentally a similar view of Max Müller's. Zimmer accordingly renders AV. vi.128.1 thus : 'When the stars made Çakadhūma their king, they offered him good weather ; "this shall be his domain," said they.' Stanzas 2 and 3 are prayers to Çakadhūma for good weather, and stanza 4 contains thanks to Çakadhūma for the same.

Weber's translation is made from a text—given below—which differs from the vulgate text of our hymn in form rather than in content. This text is put by the diaskeuasts as an appendix immediately after the *Nakṣatra-kalpa*, and it is placed here probably on account of the frequent occurrence in it of the word *nakṣatra*. The last three stanzas are

excessively corrupt, and their connection with what precedes is not clear. They begin with an incantation against *yakṣma*, 'consumption.' With such an incantation the immediately preceding hymn, AV. vi.127, ends. And this fact, with the legend of the origin of the disease at TS. ii.3.5, may throw some light on the juxtaposition of these obscure stanzas with this *nakṣatra*-material. It would be interesting to find this text in the Kaçmîr Saṁhitā, if indeed the *pāippalādās* of the colophon warrants such an expectation.

*yad rājānaṁ çakadhūmaṁ¹ nakṣatrāṇy akṛṇvata
bhadrāham asmāi prāyachat² tato rāṣṭram ajāyata.* 1.

*bhadrāham astu naḥ sāyam bhadrāham prātar astu naḥ
bhadrāham asmabhyaṁ traṁ çakadhūma sadā kṛṇu.* 2.

*yo no bhadrāham akaraḥ sāyamprātar atho divā
tasmāi te nakṣatrarāja çakadhūma sadā namaḥ.* 3.

*yad āhuḥ çakadhūma āha³ nakṣatrāṇām prathamajāṁ jyotir agre
tan naḥ⁴ satim abhikṛṇotu rayiṁ ca naḥ sarva-viraṁ niyachāt.* 4.

*yo 'smiṁ yakṣmaḥ⁵ puruṣe praviṣṭa iṣitaṁ dāvyaṁ ha saḥ
agnīṣṭhāṁ⁶ gṛhṭabodhano 'pa skānda no vi dūram asmat
so 'nyena sāmṛchatā⁷ tasmāi prasuvāmasi.* 5.

*yas tvā mātur uta va pituḥ pariḥāyamānam abhisambabhūva
na tvad yam adhināsāyāmāsā⁸ 'nyasmāi sa yātūḥ praviṣṭaḥ.* 6.

*alīklavā⁹ grḍhrāḥ kaṅkāḥ suparṇāḥ çvapadaḥ¹⁰ patatrṇāḥ
vayo 'si çakṣuḥ yo 'muṣyā¹¹ 'muṣyāyāṁasyā¹¹ 'muṣyāḥ putrasyā¹¹ 'dahane
carantu.* 7.

kṛttikārohiṇīmadhye pāippalādā mantrāḥ.

Weber renders stanzas 1 and 4 thus: 'When the stars chose Çakadhūma for their king, good weather was given [*gab man*] to him. From that arose his kingship. . . . Inasmuch as Ç. is called the light of the stars, first-born in the beginning, therefore may he grant us prosperity, and give us wealth with a goodly following.' Weber, recognizing *çakadhūma* as the word on which the interpretation depends, takes it as equivalent to the *çakamaya dhūma* of RV. i.164.43, 'the smoke that rises from burning cow-dung,' a well-known fuel—see Haug, *Sitzungsberichte der bair. Ak.*, 1875, ii., p. 506—and surmises that it may be the first morning fire, kindled while the stars are still shining, and indicating by its rising or falling smoke the weather of the breaking day.¹²

The Atharvan ritual-books yield an interpretation quite different. The hymn is in praise of *çakadhūma*, which, as a possessive compound, means 'he of the dung-smoke,' i. e. 'he who prophesies from the smoke of cow-dung.' The *çakadhūma* predicts the weather for a person about to start on a journey—see below. As weather-prophet, he very natu-

¹ So Codex Chambers and the published text. Three MSS. read *vāka*.

² So all MSS. Weber emends to *prāyachats*; cf. AV. vi.128.1.

³ So all MSS. Weber, *aha*.

⁴ Variants, *taṁ naḥ*, *taṁ vaḥ*.

⁵ MSS. *yakṣma*.

¹² See also Weber, *Ind. Stud.* v.257; x.65; *Die vedischen Nachrichten von den Nakṣatra*, ii.272 note, and 393.

⁶ Read *agnīṣṭha*?

⁷ Read *sum-ṛchatāt*, 2d s. imperative?

⁸? One MS. *adhināsāyāsāmā*.

⁹ So emended. MSS. *alīkla*, *aliṣya*.

¹⁰ One MS. *çvapadaḥ*.

¹¹ One MS. *daranūtu*.

rally comes, like our "Old Probabilities" or "Clerk of the Weather," to be regarded at the same time as controlling the weather for good or bad—in short, as weather-maker. Control of the weather, as a delegated power, would come most naturally from the 'heavenly bodies' or *nakṣatrāṇi*. Hence these are said in stanza 1 to have made him their king. The belief that the bestowal of fair weather was a prerogative of his kingship of course ensured him reverential treatment, and was doubtless fostered by the priests. In accordance with the above, the translations of the hymn may be easily modified.¹

The word *ṣakadhūma* occurs at Kāuṣika viii.17, a *paribhāṣā-sūtra*, thus, *pramando-ṣīra-ṣalaly-upadhāna-ṣakadhūmā jurantaḥ*. Dārila says, *ṣakadhūma* (!) *brāhmaṇaḥ . . . etāni jṛṇvāni pratyetaryānt*. We may render, 'When in the following sūtras there are mentioned the plants *pramanda* and *uṣīra*, a boar's bristle, an *upadhāna*, or a *ṣakadhūma*, it is to be understood that old ones are meant.' It is clear, then, that the *ṣakadhūma* is an old brahman.

In the wedding-ritual, Kāuṣika lxxvi.19, we learn from one sūtra that the priest causes the groom to take the bride's hand, uttering the stanza AV. xiv.1.48. In the next sūtra, it is said that he leads her thrice around the fire with a certain other text. Between the two sūtras, the Daṣa karmāṇi² inserts the statement, *atra sthāne sūryā-pāṭham³ paṭhati*, and the Atharvaṇīya-paddhati,² *atra sthāne catvāraḥ ṣakadhūmāḥ sūryāpāṭham³ kurvanti*. From this it appears that the priestly function of reciting the 'wedding-song' was sometimes entrusted to the *ṣakadhūma*'s.

This hymn, vi.128, is prescribed at Kāuṣika i.13 as part of the ritual of a traveling merchant when about to start on a trading expedition. 'With the hymn AV. iii.15 (see *Ind. Stud.* xvii.247) he sets up his wares after touching them with dregs of sacrificial butter.' Sūtra 13 reads, *nimṛjya digyuktābhyāṃ doṣo gāya pātān na iti pañcā 'naḥudbhyo yamo mṛtyur vicrajan chakadhūman bhavāṣarvār ity upadadhīta*: 'Having wiped them, he loads them up (?), while reciting the hymns iii.26 and 27, incantations against serpents; vi.1, praise of Savitar, who guides unerringly; the five hymns vi.3,4,5,6, and 7, prayers to all the gods for protection and guidance: vi.59,93, and 107, imploring protection for the beasts of burden of the caravan; vi.128, the hymn under discussion, a prayer for fair weather; and iv.28, praying Bhava and Ṣarva to protect man and beast.' Sūtra 14 prescribes certain oblations to be made, *uttamena*, 'with the 'ast hymn,' iv.28.

Sūtra 15 reads, *upottamena suhṛdo brāhmaṇasya ṣakṣṭpiṇḍān paṣvasv ādhāya ṣakadhūman kim adyā 'har iti pṛcchati*: 'With the hymn last but one, i. e. vi.128, he places lumps of dung on the limbs of a Brahman friend and asks the *ṣakadhūma*, "What sort of a day shall we have to-

¹ The stanza calling *ṣakadhūma* the "first-born light of the stars" is doubtless only a bit of exorbitant praise, a further expansion of the idea of his being "king of the stars."

² See *Journal Am. Or. Soc.*, xi.375, and also p. clxx. = *Proc. for Oct.*, 1883.

³ MS. *sūrya*-.

day?" Sūtra 16, *bhadraṁ sumāṅgalam iti pratipadyate*, "A fair day, a very auspicious one," he answers.' And so on.

Our hymn is prescribed once more in the Kṛuṇika, chapter c., in a *prāyaścitti* for a moon eclipse, probably on account of the prayer in the third stanza.

5. Observations on the Condition of Hindu Women according to the Mahābhārata; by Prof. Edward W. Hopkins, of Bryn Mawr, Penn.

This paper contained a study of the facts regarding woman's position in India as presented by the direct statements—aphorisms, legal saws, etc.—of the great Epic, and by the tales therein preserved, the results obtained being compared with those given by the Vedic and legal literature. The whole essay embraced the following heads:

I. 1. General statements regarding women: 2. Character; 3. Honor to; 4. Crimes against; 5. Social condition, freedom, restraint; 6. Property of; 7. As queen, as warrior; 8. The girl before marriage; 9. Sale of the girl; 10. Woman enslaved.

II. 1. The wife, polygamy, polyandry; 2. Marriage-rites; 3. Relation of wife to husband, duty, obedience, guarding, adultery, levirate-marriage; 4. Wife's property; 5. Divorce; 6. General remarks.

III. The mother, power of, etc.

IV. The widow.

I. 1. The necessity of distinguishing between the sayings found in the Epic and the acts therein recounted was pointed out. The latter often contradict the former. A sketch was given of that which we can postulate as the probable position of women in Vedic times, and this was then compared with her position at the Epic period. Between the unmarried woman and the wife a sharp distinction must be drawn, if we would understand woman's true position; also between Aryan and un-Aryan women; also between women of different localities—especially between the 'northern barbarians' and the 'southerners,' the 'northern Kurus' and the 'middle (?) Kurus.' 2. Misogyny has apparently a historical growth, to be traced in the remarks regarding women in the earlier and the later literature in general, and in the 'old and the new parts of the Epic. They whose wives least deserve it are, in India, most prone to speak slightly of woman and wife. *Evāṅga* from the earlier books were contrasted with those from the twelfth and thirteenth. Compare especially: xiii.38.1 ff.; xii.213.7; xii.33.45; xiii.48.36 ff.; 46.8 ff.; xiv.90.13; xii.81.56; iii.150.49; v.38.42; iii.71.6; etc. 3. The Hindu idea of honor to women was discussed.

4. The laws of *radha* and theft of women; probability of a historical reminiscence in the special laws 'given to the barbarians' (old signification of *dasyu* often preserved). 5. Tales of a time when women were not guarded (*anāvṛtāḥ striyaḥ sarvā narāḥ ca*, iii.307.15; *anāvṛtāḥ . . purā striya āsan*, i.122.3 ff. etc.) were compared with the events in the main story, and contrasted with the formal laws requiring such guarding; these laws, again, were compared with the Dharmasūtra; the result was drawn that the Epic story represents more the Vedic free-

dom ; an attempt was made to show at what period the strict rules began. 6. Property, originally none ; gradual growth of property-right was discussed ; mainly treated under wife.

7. *Strīrājyu* (iii.51.23), 'woman as ruler' (*anuṣāsītā*, v.38.43), and the like vague references prove nothing for woman's right to rule. Such cases may have been heard of, but were not admitted as Āryan. A minute examination of the Çikhaṇḍī legend was made ; Holtzmann's view that Arjuna sheltered himself behind Çikhaṇḍī was criticized (cf. vi.19.19 ; 22.3). It was doubtfully questioned whether we have not here a genuine reminiscence of a woman warrior, she being openly recognized as such in spite of the fable *yathā bhavac ca strī pūrvāni paçcāt punistvaṃ samāgataḥ* (vi.107.81). 8. Time of marriage was given as uncertain ; the terms of the law correspond only to the later parts of the Epic. The kind of girl that one should marry is the same as that recommended in the law. Attention was called here and again to the unanimity of the Dharmasūtras with the later Epic.

9. Sale of the girl by *Çulka* was discussed ; we must here separate customs geographically ; this is intimated by the Epic itself. In this regard we probably have no right to say for any one period 'the Hindus had this or that custom ;' *kulīni*, 'gentes,' contemporary, but geographically sundered, are alone to be considered. All generalizations fail till we come to the late time represented by the last additions to the Epic. 10. Slave-selling was forbidden in general (xiii.44.47) ; women were enslaved by gambling (*dyūte jītāsi kṛtāsi dāsī*, ii.67.34) or by war. In the latter case there was a year's respite for the girl (xii.96.15). The law was probably stricter than the usage.

II. 1. While polygamy extends from Vedic times onward, the legal qualifications of secondary wives are never the same ; there is no fixed rule regarding marital connection between high-caste men and low-caste women. Probably they were always held as concubines ; not till late did any claim arise for their legal rights. Hindu polygamy in the epic period, early or late, is practically monogamy plus concubinage. The women became nominally as well as virtually concubines the moment a true wife was wedded. 'The word *dārā*,' it is said, 'has very different meanings.' Polyandry pure and simple is not proved by Vedic or Epic literature. At most we have only the possibility of some such institution in the Veda ; it must have been at that time a mere reminiscence. Whether a limited polyandry did not really exist near enough to Vedic and early Epic times to survive as tradition is not absolutely proved, but the main tale of the Epic and minor tales in it seem to confirm this opinion. It should perhaps be termed rather phylogamy, as in each case the wife marries several brothers. A passage from the legal literature was pointed out as a further indication that the woman was possibly married to the family. But the marriage of one woman to several unrelated men is neither proved nor indicated. The formal statement of the Epic is that 'polyandry is opposed to the world and the Veda,' since 'many men for one woman is a thing unheard of,' i.195.27, though the cases 'heard of' are subsequently given.

2. Marriage-forms. The chief point here was the establishment of a

terminus ab quo to the form of marriage called *svayamvara* or 'self-choice.' Reasons were given for objecting to the popular idea that this is a very old custom. The writer held that it appertains to the time of the advanced Epic, and was a *kṣatriya*, or particularly royal, development of a simpler marriage-form; he made the suggestion, based on some support from the Epic, that this might have been what the law calls the *prājāpatya*. 3. All passages were collected, but no new result obtained: the wife is the husband's chief care; the husband, the wife's divinity. Some differences of custom were noted; another interesting variant to the *khādayet* of Manu (viii.371) and the *ghādayet* of Gāutama occurs at xii.165.64, *ṣvabhīs tām ardayet*.

4. The property of the wife was fixed by the later portion of the Epic. A correspondence here between the late Epic and the late Law was shown. Apropos of the much-disputed *nīrhāra* of Manu ix.199, we find at xiii.47.23-25 *nāpahāraṁ striyaḥ kuryuḥ*. The wife's property may not legally exceed 'three thousand' when inherited from her husband. She shares the rest with his (sons or) relations.

5. Divorce was permitted under different names. The evidence of this is not historical, i. e. based on tales narrated as facts in the Epic, but rather aphoristic. The general rule is, *na patuṇī vihareta*, xii.269.27, comment, *vibhajeta*. Compare ii.5.11 of the Dharmasūtra of Āpastamba. 6. General remarks followed on woman's suicide; on the word for 'kiss,' *ṣghrā + ā*, lit. 'smell at;'; on Hindu goddess-worship, etc.

III. The mother. Her power and venerableness are fully up to the old standard—so far as we can judge from the words and the occurrences of the Epic. Nominally, at least, she is exalted to the rank of a divinity. If she dies, her representative is the eldest sister among her children, or the eldest brother's wife.

IV. The widow. Some new examples were adduced to show how unfamiliar widow-burning, as a general custom, appeared to the writers of even the later Epic. The king is enjoined to support widows, etc.; and frequent allusions are made to widows in all ranks. Second husbands were not looked upon as unusual, although as somewhat reprehensible.

It was pointed out, finally, that the general assertions of the foregoing discussion were subject to certain caste-limitations.

6. On Avestan Similes. I. Similes from the Realm of Nature; by Dr. A. V. Williams Jackson, of Columbia College, New York City.

This paper was intended as an introduction to further studies on the subject. After some general statements in regard to the similes, it first called attention to their comparative frequency throughout the Avesta, with the marked and interesting exception, however, of the Gāthā portion of the literature. The Avestan similes, it was then noted, are drawn (a) from the realm of nature, (b) from animals and their actions, and (c) from man and his relations in daily life; and in addition to direct similes there are found a number of indirect or implied comparisons, while words used metaphorically are not infrequent. The form

and character of the simile were next discussed, and the theory was advanced that the similes, even in the midst of prose passages, seem in general to be capable of metrical reconstruction. Exceptions to this rule were noted and reasons suggested therefor.

The first division of the subject was then taken up in detail, showing that the Avesta derives many of its similes from the realm of nature, as the natural phenomena—the winds, clouds, rains, and fires—are all made to form the groundwork of a comparison. The terrestrial objects, moreover, as the sea, river, mountain, the tree, grass, grain, and stone, furnish each an image; and points of resemblance are sought also from the earth, sky, sun, moon, and stars.

The action (1) of the wind, it was shown, appears in a simile in the following passages, Vd. iii.42=viii.30, Afr. iii.6, Ys. lvii.28, and (?) Yt. xviii.5; (2) of the rains in Ys. lvii.28; (3) of the clouds at Ys. ix.32, Yt. xiv.41, and also Ys. lvii.28. These passages were commented on, and metrical reconstructions proposed. (4) The fire was the next element noticed; it occurs in three places, Ys. lxxi.8, Yt. xxiii.6, xxiv.4; partial parallels from Rig Veda vi.18.10, iv.4.4, v.87.6-7, i.112.17, were cited.

The comparisons drawn from terrestrial objects, (5) the sea Vourukasha in Vd. v.23, and (6) from the rivers, Vd. v.24, Yt. viii.24; Ys. lx.4=Yt. xiii.32, and Ys. lxxv.3=Yt. v.3, xiii.6, were also examined in particular. The Yasna and Yasht passages here quoted, however, are implied similes rather than real, but reasons were given for including them; and the question of the compound adjectives *zemfrathaiih*, *dānudrājaiih*, *hvarebarezaiih*, each equivalent to a simile, was discussed with some fullness. (7) The mountains, it was further remarked, are used figuratively in Yt. viii.24. The simile derived (8) from a tree, Vd. v.24, and the image from the fading (9) of the grass, Vd. ix.46, were next examined, a metrical reconstruction being suggested also for the latter passage. Further, *yavōfrathaiih* at Vd. xix.19 was regarded as an adjective of measure drawn (10) from the size of a grain, and equivalent to our 'thick as a barley-corn;' while (11) a stone, used as a weapon, was quoted in a simile at Yt. xvii.20. A comparison (12) from the size of the earth itself, Ys. xix.7=Ys. lxxi.15, was next taken up, and it was shown how the passage may be considered metrical. In this connection the adjective *zemfrathaiih*, equivalent to a simile in Yt. x.44, as well as in Ys. lx.4=Yt. xiii.32 already spoken of, was recalled.

Passing from the realm of earth to the celestial regions, a simile undoubtedly drawn (13) from the sky was shown to exist in Vd. v.25, and the metrical defect in the passage it was proposed to remedy by reading,

*yatha (hāu asma) imām zām
āca pairica bavāva.*

the pronoun also being supplied with *asma*, to bring out the antithesis, as so frequently in the Old Persian Inscriptions *imānu bunīm*, *avam asmānam*, the Skt. *asāu dyāus*, *iyām pṛthivī*, and particularly in Yt. xiii.2, after which the passage is modeled. (14) The sun as affording an image at Yt. x.118, Ys. lx.4=Yt. xiii.32; (15) the moon at Yt. xxiii.6,

xxiv.4, x.143; and (16) the stars as occurring in Yt. x.143, (?) xviii.5, gave passages that were specially treated.

In conclusion it was noted that the ancient Irānians were appreciative observers of nature, and had chosen similes from this realm to illustrate some of their noblest thoughts.

7. On a Modern Nestorian MS. Ecclesiastical Calendar; by Prof. I. H. Hall.

Among the objects brought back by Dr. Ward from the journey of the "Wolfe Expedition" is an Ecclesiastical table, written in Syriac, in modern Nestorian hand and ink, but obtained at Mardin. Some Nestorians now in New York tell me that they have seen others like it; but they themselves do not understand it; nor can they tell me anything respecting its use. One of these Nestorians, the Rev. James Doonan, said also that the handwriting closely resembles that of his teacher **ܐܘܫܐܢܐ ܕܘܪܘܡܝܐ**, or Priest Ausha'na of Oroomiah, whom he had seen writing similar calendars. It consists of 29 pages, of which 28 form one continuous table, in which the headings or arguments are repeated with each page. This long table gives the fasts and feasts, and other matters ecclesiastical and chronological, for two grand cycles of the sun and moon; or for every year of the *Enneakaidodekaëteris*, beginning with the first year of the 14th cycle of 532 years. The specimen page here given (translated) shows the arrangement of the table. At the right hand are seen the names of the festivals, etc.; and from right to left, in the horizontal lines, run the dates for the several years, of which those belonging to cycle 14 occupy the last line but one, and those in cycle 15, the last line. As there are 19 years in the lunar cycle (or in each page), 28 pages make $28 \times 19 = 532$, or the complete solar and lunar cycle. The table begins with the Alexandrine year 1737 and ends with 2800; the years of cycle 14 running from 1737 to 2268, and those of cycle 15 from 2269 to 2800. Of course the dates in the lowest row differ from those in the next above (each respectively) by 532; and, also of course, the table might be extended indefinitely earlier and later by adding more rows of years, arranging them after the same rule. The specimen page was taken at random. It is to be noted that, since these cycles began at the creation of the world, we obtain (by computing backwards, and reducing to the Christian era), as the date of that event, the 1st October, B. C. 5492.

In general, the use of this table is clear. It gives the month and the day of the month upon which occur, severally, the Presentation in the temple, the festivals of Moses, Elias, *Nāsardil*, Pentecost, Ascension, Easter, Sunday before Lent begins, Rogation, and Annunciation. Only we should reverse this order, since the year runs that way, and these pages are to be read from the bottom up, and from the last page to the first, as well as from right to left. For the other festivals, except Good Friday, the number gives the day of the week (Sunday=1, Monday=2, etc.). The "Foundation" gives the day of the week of the beginning of the year, or rather, directly the last day of the preceding year. In the Oriental calendars which begin with January 1, the "foundation"

| | | | | | | | | | | | | | | | | | | | | | | |
|------|----|------|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|-------------------------------|-----------------|
| 31 | T. | 25 | T. | 3 | 5 | 6 | 30 | 31 | 1 | 3 | 4 | 5 | 30 | 1 | 2 | 3 | 4 | 30 | 31 | Tishri. | Pre-entation [at the Temple]. | |
| 25 | T. | 18 | T. | 26 | T. | 15 | T. | 8 | 18 | 6 | 14 | 2 | 2 | 18 | 26 | 6 | 21 | 2 | 10 | Tishri. | Moses. | |
| 3 | T. | 7 | T. | 7 | T. | 6 | 3 | 2 | 1 | 6 | 5 | 4 | 3 | 1 | 7 | 6 | 5 | 3 | 2 | 2 | The Cross. | |
| 3 | T. | 7 | T. | 7 | T. | 6 | 3 | 2 | 1 | 6 | 5 | 4 | 3 | 1 | 7 | 6 | 5 | 3 | 2 | 2 | Elias. | |
| 3 | T. | 7 | T. | 7 | T. | 6 | 3 | 2 | 1 | 6 | 5 | 4 | 3 | 1 | 7 | 6 | 5 | 3 | 2 | 1 | Mary. | |
| 16 | T. | 25 | T. | 12 | 30 | 9 | 24 | 4 | 12 | 28 | 8 | 16 | 31 | 12 | 20 | 30 | 15 | 24 | 4 | Nûsardel. | | |
| 18 | T. | 6 | H. | 12 | 21 | 5 | 16 | 1 | 24 | 9 | 20 | 28 | 12 | 24 | 12 | 27 | 5 | 5 | 16 | Tammuz. | | |
| 18 | T. | 27 | H. | 14 | 22 | 2 | 11 | 26 | 6 | 14 | 10 | 18 | 2 | 14 | 22 | 2 | 17 | 26 | 6 | Heziran. | | |
| 2 | T. | 7 | T. | 7 | T. | 6 | 3 | 2 | 1 | 6 | 5 | 4 | 3 | 1 | 7 | 6 | 5 | 3 | 2 | 2 | Pentecost. | |
| 9 | T. | 18 | T. | 5 | 13 | 2 | 17 | 28 | 5 | 21 | 1 | 9 | 24 | 5 | 13 | 24 | 8 | 17 | 28 | Iyyar. | | |
| 20 | T. | 28 | T. | 15 | 23 | 4 | 12 | 27 | 7 | 16 | 3 | 11 | 19 | 6 | 15 | 23 | 3 | 19 | 27 | I. | | |
| 31 | T. | 8 | T. | 15 | 23 | 3 | 7 | 18 | 27 | 11 | 22 | 30 | 15 | 25 | 3 | 14 | 30 | 7 | 18 | I. | | |
| 7 | T. | 8 | T. | 6 | 7 | 4 | 5 | 8 | 5 | 8 | 5 | 6 | 9 | 6 | 7 | 4 | 6 | 8 | 5 | 7 | Ascension. | |
| 7 | T. | 6 | T. | 5 | 4 | 2 | 6 | 5 | 4 | 2 | 1 | 7 | 6 | 4 | 3 | 2 | 1 | 6 | 5 | 4 | George. | |
| 28 | T. | 29 | T. | 1 | 3 | 27 | 28 | 29 | 1 | 2 | 3 | 27 | 29 | 30 | 1 | 2 | 27 | 28 | 29 | 28 | Resurrection [Easter]. | |
| 6 | T. | 5 | T. | 2 | 7 | 6 | 5 | 4 | 2 | 1 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 6 | 5 | 4 | Annunciation. | |
| 19 | T. | 18 | T. | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 4 | "Foundation." | |
| 6:6 | T. | 3:15 | T. | 5:20 | 2:9 | 4:21 | 1:1 | 5:12 | 7:24 | 4:4 | 1:15 | 3:27 | 7:7 | 4:18 | 6:30 | 3:10 | 5:22 | 2:2 | 6:13 | 1 | "Changes." | |
| 2211 | T. | 2209 | T. | 2208 | 2207 | 2206 | 2205 | 2204 | 2203 | 2202 | 2201 | 2200 | 2199 | 2198 | 2197 | 2196 | 2195 | 2194 | 2193 | 2192 | 2191 | Years cycle 14. |
| 2743 | T. | 2742 | T. | 2741 | 2740 | 2739 | 2738 | 2737 | 2736 | 2735 | 2734 | 2733 | 2732 | 2731 | 2730 | 2729 | 2728 | 2727 | 2726 | 2725 | 2724 | Years cycle 15. |

In "years cycle 14," from the second 2206-2209, the number is one too small, by scribe's error. In line "Presentation," T. stands for Tishri; as also in lines "Moses" and "Annunciation." In "Elias," A. stands for Ab, I. for Ilûl. In "Nûsardel," T. stands for Tammuz. In "Pentecost" and "Ascension," I. stands for Iyyar, H. for Heziran. In "Resurrection," A. stands for Adar, N. for Nisan. In "Annunciation," C. stands for Canûn. There are sundry mistakes in the (whole) table, but it is scarcely worth while to make a note of them.

numbers are the “*numeri concurrentes*,” which were supplanted later by the Dominical Letters (being, with them, the supplement of 7 [or 8]). The line called “Changes” has three numbers, written closely in one line, but here the first is placed above for convenience. Its second number gives the dates of the new moons in Tishri I., or October; and not, as might be guessed, the date of the Easter new moons. The first number in this line is merely the number of the year in the lunar cycle of 19 years. This line is the same on all the 28 pages. The second number of this line appears to give the so-called *terminos paschales* (*Ostergrenzen*, Easter-limits); i. e. the date of the full moon that determines Easter—omitting, for brevity, the name of the month. Thus 25 means the 25th Adar; 13, the 13th Nisan; 2, the 2d Nisan, and so on. The third number of this row is the *number concurrent* (*x*) with the day of the Easter full moon, which serves to determine the day of the week of the latter, by combination with the “foundation” (*f*). Add *f* and *x*, and you have the week day (counting Sunday as 1, Monday 2, etc.) of the *terminus paschalis*. The next Sunday after this is Easter. To illustrate, taking, as sufficient, the first six places in the row :

| | | | | | | |
|------------------------------------|-----------|-----------|----------|-----------|-----------|----------|
| Numbers (<i>x</i>), | 1 | 6 | 2 | 5 | 3 | 6 |
| Foundation (<i>f</i>) | 4 | 5 | 7 | 1 | 2 | 3 |
| Sum; adding and sub- | 5, | 4, | 2, | 6, | 5, | 2, |
| tracting 7 from the sum | | | | | | |
| when necessary : | Thursd. | Wed. | Mond. | Friday. | Thursd. | Mond. |
| Making days till Sunday : | 3 | 4 | 6 | 2 | 3 | 6 |
| Add the date of <i>term.</i> | 25 Nisan. | 13 Nisan. | 2 Nisan. | 22 Nisan. | 10 Nisan. | 30 Adar. |
| <i>pasch.</i> (2d number in row) : | | | | | | |
| And we have the date of | 28 Nisan. | 17 Nisan. | 8 Nisan. | 24 Nisan. | 13 Nisan. | 5 Nisan. |
| Easter Sunday : | | | | | | |

Or, to be a little more intelligible, this row of “Changes” gives exactly what is in the little table of the Williams MS. (which was printed in the Proceedings for October, 1885), together with the numbers of the years (which in the Williams MS. are marked by the position of the small table under the large one); but this now omits the names of the months, which are given in the Williams MS. table.

The row with the title “Good Fridays” appears to show how many *entire* weeks have passed from the beginning of the year till Good Friday, the Friday before Easter—or rather, as the number of weeks is always more than 20, it gives the number over 20, and leaves the 20 number to be understood. I do not deem it necessary to add illustrations to facilitate the computation. If any one chooses to verify, he will find it easy. The mistakes of the scribe who wrote the table will not be found numerous enough to mislead. At the same time, the tables are not written with extreme care; and perhaps the table was computed from lunar elements that differ slightly from those used in the other, to be presently described.

I should also add, that, for solving most of the puzzling things, especially that presented in the row of Good Fridays, and in the row of “changes,” I am indebted to Dr. C. H. F. Peters, of the Litchfield Observatory of Hamilton College. Also, it seems to me that the lexicons

need to add something in their definitions of the word **ܢܘܨܪܕܝܠ**. It here stands, in the plural, for the *terminos paschales*, and can mean nothing else. No definition in any of the lexicons will fit; much less any that has been suggested by any of my linguistically learned friends. Of course, through the scientific and technical channel hinted at above, the derivation of this meaning is natural enough from the regular Syriac root; but the hint of a scientific man, who saw at once through the application of the term, and judged it from his own view-point outside of the Syriac, suggested a transliteration of the Greek *ἐπακτα*; which alone would have a strong favorable color.

Respecting the feast *Nûsardîl* or *Nûsardel*, it is the Nestorian name for the first Sunday of ecclesiastical summer, or the seventh Sunday after Pentecost; which, in the common Syrian lesson-tales, is called "of the blessed apostles," or simply, "of the apostles." But for a full account, see R. Payne Smith's *Thesaurus Syriacus*, 2326.

The "Rogation" or "Supplication" in the calendar is not the same time as that of the Roman church. In the latter, "Rogation" is the three days preceding Ascension. In the calendar, it is a feast twenty days before the "Sunday before Lent," or 69 days before Easter, and therefore always on a Monday.

Interesting is the arrangement of feasts by periods of seven weeks. Lent Sunday ("Dimanche gras") is 49 days or seven weeks before Easter. Pentecost is 49 days or seven weeks after Easter. Nûsardîl is 98 days or twice seven weeks after Easter. Elijah is 147 days, or thrice seven weeks after Easter. Moses is 49 days after Elijah, or four times seven weeks after Easter.

The calendar contains a number of mistakes in its body. Thus, on the first page of the calendar are the following errata:

| | | | |
|-----------------|----------------|---------------|-----------------|
| Year 1741, line | "Elijah," | for 10 Ab | read 10 Ilûl. |
| 1748, | "Nûsardîl," | for 17 | read 27 |
| 1753, | "Pentecost," | for 4 Heziran | read 20 Iyyar. |
| 1752, | " | for 15 Iyyar | read 4 Heziran. |
| 1751, | " | for 24 Iyyar | read 15 Iyyar. |
| 1741, | "Ascension," | for 13 Iyyar | read 25 Iyyar. |
| 1740, | " | for 25 Iyyar | read 5 Iyyar. |
| 1739, | " | for 5 Iyyar | read 13 Iyyar. |
| 1744, | "Easter," | for 22 Nisan | read 12 Nisan. |
| " | "Fast" (Lent), | for 12 Shobat | read 22 Shobat. |
| 1745, | "Rogation," | for 8 Canûn | read 18 Canûn. |
| 1742, | " | for 22 Shobat | read 22 Canûn. |

The other table, of one page, needs scarcely more description than will appear from the following translation of it. It is a table to find the new moon, or the beginning of the lunar month, for any time in the Alexandrine calendar. Below the table is the arithmetical rule and explanation, of which the translation is here given.

This table is explained in the rule appended. It contains, however, a great many mistakes. According to the periods adopted by the Church, 19 Julian years=235 synodical months: i. e.=6939½ days. Hence 1 synodical month=29^d.53. Instead of this exact number, 29½ days was taken as the number for finding the "golden numbers," adding alternately

29 and 30 days. The remaining fraction was provided for by the "*saltus lunæ*," whose position in the cycle according to the Alexandrine computation differed from that of the Roman. Beginning, therefore, from 19 Tishri I upwards in the first right hand column, we find the dates that follow by adding alternately 29 and 30, and having regard to the days of the month. Another check is the following : 12 synodical months are, to a small fraction, 11 days shorter than the Julian year. Hence, in any one horizontal line, the difference between two successive numbers (right minus left, or right + 29.5) should be 11, or sometimes 10, and only in occasional instances 12.

| | | | | | | | | | | | | | Months. | | |
|-------|-------|----------|----------|---------|---------|----------|----------|------------|----------|----------|----------|-----------------|---------|-----------------|-----------------|
| 9 31: | 1 12 | 22 4 15 | 25 7 18 | 29 10 | 21 2 13 | 24 6 17 | 27 9 11 | 30 1 12 | 22 4 16 | 26 7 18 | 29 10 13 | 1 12 Tammuz. | | | |
| 21 | 5 13 | 24 6 16 | 27 8 20 | 30 1 12 | 22 4 16 | 26 7 18 | 29 10 13 | 1 12 | 23 5 16 | 27 9 20 | 30 1 12 | 1 12 Heziran. | | | |
| 22 | 4 15 | 25 7 18 | 28 10 21 | 2 13 | 23 5 16 | 27 9 20 | 30 1 12 | 23 | 4 15 | 26 7 18 | 29 11 22 | 3 14 Iyyar. | | | |
| 23 | 4 15 | 26 7 18 | 29 10 22 | 3 14 | 24 6 17 | 27 9 20 | 30 1 12 | 24 | 4 15 | 26 7 18 | 29 11 22 | 3 14 Nisan. | | | |
| 24 | 6 17 | 27 9 21 | 30 1 13 | 23 | 4 15 | 26 7 18 | 29 11 22 | 25 | 6 17 | 28 9 20 | 1 12 24 | 5 16 Adar. | | | |
| 25 | 6 17 | 28 9 20 | 1 12 24 | 5 16 | 26 7 18 | 29 11 22 | 30 1 12 | 26 | 8 19 | 29 11 22 | 3 14 25 | 5 16 Adar. | | | |
| 26 | 8 19 | 29 11 22 | 3 14 25 | 6 17 | 28 9 20 | 31 1 13 | 24 | 27 | 8 19 | 29 11 22 | 3 14 25 | 5 16 Adar. | | | |
| 27 | 8 19 | 29 11 22 | 3 14 25 | 6 17 | 28 9 20 | 31 1 13 | 24 | 28 | 6 17 | 28 9 21 | 1 12 24 | 5 16 Adar. | | | |
| 28 | 9 20 | 31 1 12 | 23 | 2 15 | 27 | 8 19 | 29 11 22 | 3 14 25 | 6 17 | 28 9 21 | 1 12 24 | 5 16 Adar. | | | |
| 29 | 10 21 | 2 13 24 | 2 16 27 | 9 20 | 31 1 12 | 23 | 4 15 26 | 7 18 | 28 9 21 | 1 12 24 | 2 16 27 | 9 20 31:1 12 23 | 4 15 26 | 7 18 Tishri [2] | |
| 29 | 11 22 | 3 14 25 | 6 17 28 | 10 21 | 2 13 24 | 5 16 27 | 8 19 | Tishri [1] | 29 11 22 | 3 14 25 | 6 17 28 | 10 21 | 2 13 24 | 5 16 27 | 8 19 Tishri [1] |
| 19 | 18 17 | 16 15 14 | 13 12 11 | 10 9 | 8 7 6 | 5 4 3 | 2 1 | Numbers. | | | | | | | |

'In the name of Our Lord, I write a complete computation of the lunar months. If, therefore, you desire to know on what day in the solar month the new moon occurs, take the number of the Alexandrine year that you are seeking, and reject from it one thousand and seven hundred and sixty; and divide the remainder by 19; and take that which remains and enter at the number written in the row of *olaf beth* [i. e., the lowest line] in the table preceding, in the column of *yud* and *teth* [i. e., the perpendicular column corresponding], and go down opposite the number of your remainder; thus [you will find] the beginning of the lunar month, opposite the [name of the] solar month. And if the year be a leap year, when you have passed Shobat, subtract one day from the number of your remainder. And when there are two numbers for the months, marked with two points, in those months there begin two lunar months, at the first and at the last of the month, since ending it changes to the beginning. And pray for me in love.'

Obvious errors in the table are : Line *Ilâl* : col. 19, for 9 read 19; col. 18, for 31 : 1 read 1 (the month has only 30 days); col. 16, 22 more correct than 23; col. 13, 25 better than 26. Line *Ab* : col. 18, for 5 read 2; also, more correctly : col. 15, for 6 read 5; col. 11, for 20 read 19; col. 9, for 12 read 11; col. 7, for 4 read 3; col. 6, for 16 read 14 or 15. Line *Canûn I* : col. 13, for 2 read 4. *Tishri II* : col. 13, for 2 read 5; col. 8, for 31 : 1 read 30. *Tishri I* : col. 8, for 2 read 31 : 2; col. 19, for 29 read 31 : 1. The table seems to be computed very roughly.

It seems hardly worth while to print entire the other table of the MS., or to append a list of the scribe's errors. In reading the table, the difficulty is much increased by the scribe's habitual omission of the points which distinguish *dolath* from *rish*. Yet in that case there was almost always the check that the one stands for 4, the other for 200, which could not well be mistaken in the connection.

8. Further Inscriptions in the Metropolitan Museum of Art, New York ; all from the Cesnola Collection ; by Prof. I. H. Hall.

I. Cypriote Inscriptions.

1. On a gem of soft milky colored stone, $\frac{1}{16} \times \frac{3}{16}$ inch in dimension. Figure of antelope with head turned back, running. Over the hind quarters the character *ti. no.*, $\frac{3}{32}$ inch high, reading, apparently, from right to left. Probably genitive of owner's name *Tiwo* or *θiwo*. On the back of the gem is the figure of an antelope, with the Phœnician star (or sun) and crescent. The star is made of a central disk surrounded by dots.

2. On an amphora of red pottery, 2 feet 5 inches high ; $10\frac{1}{2}$ inches greatest diameter ; neck 9 inches high ; mouth 3 inches inner diameter, $3\frac{1}{4}$ inches outer ; handles 8 inches high ; shape like the Rhodian amphoræ, but more slim ; and a ring around the base. Cypriote letter, 1 inch high, on one handle : *ti*. Maker's mark.

3. Fragment of pottery, vase-handle. Cypriote letter *lo.*, incised before baking. Strokes $\frac{3}{4}$ inch long.

II. Greek Inscriptions.

1. Handle of Rhodian jar. Rectangular stamp (right-hand one), $2 \times \frac{8}{16}$ inches in dimension ; impression bad at top, because stamp did not reach the clay throughout. Thick letters, $\frac{1}{4}$ inch high. Reads IEPOKAEYΣ . Maker's or proprietor's name, in the genitive. The same termination of that case appears in other examples.

2. Handle of Rhodian jar (right-hand one). Rectangular stamp, $1\frac{1}{8} \times \frac{8}{16}$ inches in dimension. Letters $\frac{3}{16}$ to $\frac{1}{4}$ inch high. Reads HPAKAEITOIY . Proprietor's or maker's name, in the genitive.

3. Rhodian jar, 2 feet 6 inches high ; greatest diameter 1 foot ; neck 11 inches high ; handles 1 foot high. Mouth 5 inches outer, 4 inches inner diameter. Circular seals on handles, each with the conventional rose. Stamps $1\frac{1}{4}$ inches extreme diameter. Letters with bases towards the center, or reading from within.

a. Letters $\frac{1}{16}$ to $\frac{1}{8}$ inch high. Stamp only partly impressed, and a gap in the inscription. Reads $\text{EΠI EPM} \dots \text{AMOY IANAMOY}$. Eponym, and name of Doric month. The space where the stamp is defective would have held about 5 letters, or possibly 6 ; but the clay evidently spread or stretched after the impression. A trace of a letter at the beginning of the gap in the second word looks like I, but it is uncertain. Instead of MOY , the true reading may be NOY , but the stroke needed to make a M of the N is there, whether by accident or not. Not unlikely the name is EPMIANOIY , and the trouble made by the stamp's moving during impression.

b. Letters $\frac{3}{16}$ inch high. Badly and only partially impressed. Reads EΠI KAEYTAI[OY] . The bracketed letters have traces, but their ending is uncertain. Eponym.

4. On bottom of small handled vase, or pitcher, or cup, but handle broken off. Vessel $2\frac{1}{2}$ inches high, $3\frac{1}{4}$ inches greatest diameter, $2\frac{1}{16}$ inches across top ; bottom slightly concave, $1\frac{1}{2}$ inches diameter. Red Roman pottery. On bottom, above, arranged in a curve, reading from the center, the letters $\Phi\Pi\upsilon$. Below, a letter that may be either M or Σ :

probably the latter; though its position is so ambiguous that nothing can be decided.

9. On Hebrew Genealogy; by Gen. H. B. Carrington, of the United States Army.

The author illustrated the fact that—given a sequence of long lives—it takes only a very few to bridge over a long space in human history; and that—accepting the figures of the book of Genesis as correct—the lives of five patriarchs span the entire time from the Creation to Abraham. He then adverted to the bearing of this on the life and value of tradition.

10. Note on the proper name Bu-du-ilu; by Dr. Morris Jastrow, Jr., of the University of Pennsylvania, Philadelphia

The name of this king of the Ammonites is mentioned by Sennacherib, I.R.38, col. ii.52, and by Esarhaddon, III.R.16, col. v.18. It is read by Schrader, K.A.T.² p. 141, and by Delitzsch, *Assyr. Lesestücke*², p. xiii.52, as Pu-du-ilu: and it is explained by the former as the equivalent of the Biblical פרוהאל of Numbers xxxiv.28. Against this interpretation several objections may be urged. First, we have the name Pa-di-i in the inscription of Sennacherib just cited, line 70; and this, as Schrader, p. 164, also admits, is clearly the Biblical פריה of II. Kings xxiii.36 and elsewhere; so that we should expect, as a transcription of פרוהאל, either Pa-di-ilu or Pa-du-ilu, but not Pu-du-ilu. Secondly, the more usual value of the first cuneiform sign is *bu*. It might, of course, be *pu*; but an examination of the Assyrian transcription of foreign proper names reveals the fact that when ambiguous cuneiform signs are used, they are, as a rule, employed with their more usual value. In proper names, at least, there is not that great freedom in the use of a sign with several phonetic values indifferently, which is elsewhere so characteristic of Assyrian writing. The scribes seldom deviate from this rule, and only perforce.

I would therefore read the name as Bu-du-ilu. In explanation of it, we may observe that there are many Phœnician proper names, originally compounded with עבר, which have become abbreviated in the course of time by the loss of their initial ע. Thus we find ברמלך for עברמלך; בראשמן for עבראשמן; ברמלכרת for עברמלכרת; ברבעל for עברבעל; and other the like: see Schröder, *Phœnizische Sprache*, p. 88. In like manner, I take Bu-du-ilu as the equivalent of בראל, and this in turn as a shortened form of עבראל, 'Servant of El.'

There is another Assyrian name which is compounded with בר; and it supports the explanation just given. It is Bu-di-ba-al, and occurs in the great Assurbanipal inscription, V.R., col. ii.83 and 91. The *i* of *Budi* is probably a connecting-vowel, analogous to that found almost invariably in Ethiopic and very frequently in Hebrew names: thus, Abītal, 'Father of dew'; Achinoam, 'Brother of loveliness'; Achimoth, 'Brother of death'; Eliezer, 'God of strength.' Accordingly, Buḡi-baal corresponds exactly to the above-quoted ברבעל of the Phœnician inscriptions, and means 'Servant of Baal.'

The identity of Budu- and Budi- will hardly be questioned; especially since we find a king of Assyria with the name Bu-di-ilu, mentioned at I.R.6, No. 3a and b.—As the Greek transcriptions show, the בר of the Phœnician names was pronounced Bōd, and this could be rendered in Assyrian only by Budu- or Budi-.

The abbreviations cited above have their parallel in the Old Testament also. At I. Samuel xii.11, the name ברן stands for עברן, and is identical with עברון of Judges xii.13. Considering the lateness of the Phœnician inscriptions in which these abbreviations are found, it is the more important that an instance occurs in Assyria so early as Sennacherib.

After the presentation of this paper to the Society, the writer's attention was called to a passage in Bezold's new book, *Assyrisch-Babylonische Literatur*, from which it appears that Dr. Jensen also explains Bu-du-ilu as above—a confirmation, which, coming as it does from so high a source, is certainly valuable and welcome.

11. On Assyrian and Samaritan; by Dr. Jastrow.

This paper, embodying the preliminary results of a study of Samaritan in its bearings on Assyrian, aimed to exhibit the light which Samaritan throws on many points of Assyrian Lexicography, and the aid it furnishes for the explanation of some of the phenomena of Assyrian phonology. The following abstract gives a summary of the more important points touched upon.

The stem *épěšu* is one of the most common in Assyrian, and is as extensively employed as our own English *fix*. Its equivalent in the other Semitic languages has hitherto been sought in vain; but it is found in Samaritan, and the context in which it occurs shows its use to be quite similar to that of the Assyrian. As a verb we meet with it in the Samaritan translation of Genesis iv.21, where the Hebrew תופש כנור ועונב is rendered עפש 'פלנא וקטרס (מן). A noun formed from this stem occurs several times in the Samaritan Genesis. The word חיה, in the phrase חיה השרה (Gen. ii.19,20; iii.1.14, etc.), is invariably עפיסת כרה or עפיסת חקלה. Similarly החיה in viii.1 is עפיסתה—the ה corresponding to the א in Syriac; so also חיותו (Gen. i.24,30) is עפיסת; and finally, in i.28, חיה by itself is עפיסה.

From the use of the word in these passages as 'living thing' and also as the translation of הפש 'handle,' it is evident that its use is quite as wide as in Assyrian. If, however, we start from what seems to be the fundamental signification in Assyrian, 'to do' or 'make,' we can easily see how the word came to be used to designate an animal—as 'something made' or 'created.' The Samaritan would correspond exactly to the German *Creatur* or our own *creature*. And bearing in mind the idiomatic use of the Assyrian equivalent in such phrases as *épěšu pa*,

¹ פלנא is evidently a corruption for *σάλπιξ* and קטרס is of course *κιδάρα*. My quotations from the Samaritan are taken from Heidenheim's edition of Samaritan texts, *Bibliotheca Samaritana*, vol. i., Leipzig, 1884.

literally 'making mouth,' for 'speaking,' and *ēpēšu uzna*, 'hearing,' it is nothing remarkable that 'making the harp' should signify 'handling the harp.' It is possible, moreover, that the Samaritan translator takes the Hebrew word in the literal sense of 'fashioning,' and intentionally designates Jubal as the *inventor* of the two musical instruments there mentioned. However this may be, it will be admitted that we have in the Samaritan עַמַּם the counterpart of the Assyrian stem, and that the two have a similar signification in the two languages.

The Assyrian *talimu*, which is usually rendered 'full-brother,' has hitherto been found only in the dialect of the so-called Targum Jerushalmi, and that in a single passage, Gen. xlix.5. where Simeon and Levi are spoken of as אַחֵי תַלְמִין. From this it follows—since Simeon and Levi are children of the same mother—that the word here also is limited to the signification 'full-brother.' In Samaritan, תְּלִים is a very common term, but is used in the general sense of 'brother' without any distinction as to 'half' or 'full.' It is used interchangeably with אַח. Thus in Gen. xlii.8, the brothers of Joseph are spoken of as תְּלִמֵי.

Such passages as Gen. xvi.12, וְעַל פְּנֵי כָל אַחֵי, and ix.5, in the phrase אִישׁ אַחֵי, and xix.7, where Lot addresses his fellow-citizens of Sodom as אַחֵי 'my brothers,' in all of which the Samaritan has *talim*, show that any distinction which may once have existed between *ah* and *talim* has disappeared.

The feminine of *talimu*, namely *talimtu*, which has only been found in Assyrian, is in common use in Samaritan; and the passages in Genesis in which תְּלִימָה is met with (xx.2; xxiv.30,60; xxv.20; etc.) prove that it has acquired the same general signification as its masculine equivalent. We need therefore not be surprised if we some day find the word in an Assyrian text in a wider sense than the hitherto accepted 'full-brother.'

It may be of interest to note that the Samaritan version translates אַחֵי (xli.2) with תְּלִימֵי, taking אַחֵי for *ahiv*—a very curious blunder.

The development of the stem שָׁלַם presents an interesting feature in Assyrian. From the signification 'to be complete,' it has given rise, on the one hand, to such derivatives as *šulmu*, 'safety, peace,' *šalimtu*, 'uninjured, intact, whole;' and on the other hand (since 'completing' also involves the idea of 'ending'), to *šalamu*, 'complete one's life' and so 'die,' whence *šalamtu*, 'corpse.' Similarly τελευτᾶν, 'to complete, end, die.'

Now while the cognate languages use the word only in the first sense of 'complete,' i. e. 'safe' or 'perfect,' the Samaritan again agrees with the Assyrian in using the stem in the two-fold sense. Thus in Gen. xx.8, הִנֵּן מָוֶת, lit. 'Behold thou art dead,' is rendered in the Samaritan version by הִנֵּן שָׁלַם; and so also in Gen. xxi.16, מָוֶת הִלֵּךְ is translated by שָׁלַם יִלְיָדָה. Furthermore the verb נָוַע 'expire' is invariably given as שָׁלַם (Gen. vi.17; xxv.8,17; xxxv.29; xlix.33; etc.). As an instance of its use in the sense of 'perfect and intact,' Gen. xvii.1 may be cited, where תָּמִים is translated by שָׁלַם.

The word אבי in the already quoted כל חופש אבי (Gen. iv.21) is translated by ארש. Nouns formed through the addition of an elif seem to be quite common in Samaritan. Thus we have אנקבה for Hebrew נקבה (Gen. vi.19; vii.3); ארם for Hebrew רם, 'blood' (ix.4,5; xxxvii.26,31). The word ארש is a similar formation of רש, which is the same as the common Semitic stem ראש, so that ארש means 'chief, head' or the like.

In the Bilingual vocabulary, II.R.vii.36 ff., we have a series *u-ra-šu*, *a-ra-šu*, *ur-ru-šu*, and lines 42 ff. *šubat a-riš-ti*. The ideogram for 'head,' which is used in connection with *u-ra-šu* and *ur-ru-šu*, places it beyond doubt that we have here some derivatives of *rēšu*, which is actually found just above in l. 36. *A-ra-šu* and *arištu*, we may therefore safely conclude, go back to the same root. A further proof, however, that *arištu* stands in a close relation to the idea of 'head, chief' and the like is furnished by II.R.30. No. 1, Rev. l. 22. where the same signs—as in the left column of II.R.vii. l. 42 ff.—are explained by *šubat ēlitu* (cf. l. 21 *ēluti*). Whatever the phrase may mean, *ēlitu* can only be from עלה 'high' (cf. l. 14 ff.). But *arištu* is a noun formed exactly like the Samaritan ארש through the addition of elif merely with the feminine-ending; and since *arašu* and *urrušu* are evidently infinitive forms, the one of the simple Kal conjugation, the other a Piel, it follows that the Assyrian had a verb ארש as well. Whether this verb is a denominative or not is another question.

The Hebrew שבועתי 'my oath' (Gen. xxiv.8) is translated by אמי, from the same root which in Assyrian means 'speak,' and whence we have *ammatu*, 'word, promise, command,' and *mamitu*, 'oath.' The passage in Gen. xix.29. מתוך ההפכה בהפך, is translated by מכנו שלקוחה בשלקו, which shows the stem to have a meaning similar to Assyrian *šalaku*, 'cut-out, tear open' (cf. Arabic *salaku*). The word seems to be a Shafel extension of לקי, which is found in Samaritan, Gen. xix.15,17, as the translation of Hebrew כפה 'perish.'

The word קרבה is used at Gen. xiv.2,8 for Hebrew מלחמה. One of the meanings of *kitrubu*—from *karabu*—is 'attack,' so that we have in the Samaritan the counterpart of the Assyrian word.

The weakening of the gutturals is, as we now know, a phenomenon which, far from being limited to Assyrian, is, on the contrary, common to all Semitic languages. On this point they differ only in the extent to which the process has gone on. Arabic forms no exception, as a comparison of modern with classic Arabic shows; it simply stands at one end of the scale, having preserved a greater wealth of guttural sounds than any of its sisters. In the Assyrian this weakening has gone so far that the distinction between alif and hē has entirely fallen away, as also the distinction between the weaker heth (the unpointed ḥa of the Arabic) and the two ayins; very frequently, indeed, the same sign stands for any one of the five consonants. The Mandaic, as Professor Nöldeke conclusively shows (*Mand. Gram.*, p. 58 ff.), does not fall far behind the Assyrian. The Samaritan seems to have gone, if possible, still further than the Assyrian. Here there is absolutely no difference whatever between any of the gutturals.

We meet constantly with examples where a stronger guttural has

been replaced in writing by a weaker one; thus מְדַנֵּעַ, for Hebrew מְדַנֵּעַ, 'east'. (Gen. xii.8; xiii.14): זֶרַע, 'seed' (Gen., viii.22); עֵר is the translation for שׁוּב, 'return,' showing that it is the same as Hebrew חֹר; אֹרֵעַ is the translation of דֶּרֶךְ, 'way,' and therefore equivalent to אֹרֵחַ, etc. But not only this—the same word is written indifferently with almost any of the guttural letters. Thus we have חֲנַל and עֲנַל as the translation of רָאָה, 'to see'; אֵיל and חֵיל, for Hebrew אֵל, 'god.' For עֵר we have חֹרֵי—probably an abbreviation of אֲחֹרֵי—side by side with עֵרֵי. We find אֲרֵלָה and עֵרְלָה as the rendering of טָרַם. Also אֲרַפָּה and עֵרַפָּה עֵרַפִּים, and many more.

It is known that the Hebrew and Arabic 'hand' is in Assyrian *îdu*. In Samaritan, the word for 'hand' is invariably written אַד, which leaves no doubt that the pronunciation must have been the same as in Assyrian.

In like manner, the Assyrian *immu* 'day, daylight' has a counterpart in the Samaritan אִמְמָ (Gen. viii.22; xxxi.39,40), where again the initial aleph points to an agreement in the pronunciation with the Assyrian. This opens the very important question as to the original sound of the letter jod: perhaps it was an *î*, at least in some cases, in all the Semitic languages. The Assyrian and Samaritan and, we may add, the Syriac (where we also have *îd* and *îmana*), would seem to indicate that such is the fact.

The writer proposes to continue his investigations as the succeeding numbers of the *Bibliotheca Samaritana* appear. The results obtained from a mere fragmentary study of Samaritan literature warrant the conclusion that a thorough and exhaustive study will greatly advance our knowledge of the Assyrian tongue.

After the customary vote of thanks to the Faculty of the Divinity School, the Society adjourned to meet in Boston, May 11, 1887.

Prof. Hall sends the following note respecting the MS. described by him in the Proceedings for May, 1886.

Deserving of public mention is the fact that the text of the Lives of the Prophets in the Philadelphia MS. is the recension which Syriac scholars have been hunting after for a long time, the others known not fitting closely enough. What is probably the Syriac original is extant in British Museum MSS., and also in MSS. known to the American missionaries in Oroomiah. Nestle published so much of the Syriac as included the four major prophets, and that "e tribus codicibus musei Britannici," but giving no variants. His text shows some variants, but the Greek is a marvelously close translation. The Syriac readily solves some knots caused by the awkwardness of the copyist, confirms my conjecture as to slips, and so on.

Since writing this note I observe that Prof. Fr. Baethgen, of Kiel, in an article in *Zeitschr. f. d. alttestl. Wiss.* describing Sachau MS. no. 131 (which appears to be a copy of that whence came several MSS. in the Union Theol. Seminary, N. Y.), finds the Syriac text, and assumes it to be a translation from the Greek of "Epiphanius of Cyprus." The Syriac copy indeed attributes the treatise to Epiphanius of Cyprus, but the concomitants of the Greek recensions show that it was probably one of the literary remains of Epiphanius of Tyre, in "Hebrew" (i. e. the local Aramaic), which were translated into Greek by Dorotheus.

Proceedings at Boston, May 11th, 1887.

THE Society met on Wednesday morning at 10 o'clock, in the hall of the American Academy. The President, Professor Whitney, being absent, on account of illness, the Vice-President, Rev. Dr. Peabody, of Cambridge, took the chair.

The Recording Secretary, Professor Lyon, of Cambridge, read the minutes of the foregoing meeting and they were approved. The general order of proceedings was announced, and after this the reports of the retiring officers were presented.

The accounts of the Treasurer, Mr. Van Name, were referred, with the book and vouchers, to the Rev. Messrs. Dickerman and W. H. Ward as a Committee of Audit, and upon examination were reported to be correct. They may be summarized as follows:

| RECEIPTS. | |
|---|------------|
| Balance on hand, May 12th, 1886, | \$953.14 |
| Assessments (100) paid in for year 1886-87, | \$500.00 |
| Assessments (26) for other years, | 130.00 |
| Two life-memberships, | 150.00 |
| Sale of the Journal, | 36.48 |
| Interest of bank-deposit, | 35.41 |
| Total receipts for the year, | 851.89 |
| | \$1,805.03 |
| EXPENDITURES. | |
| Printing of Proceedings, | \$240.41 |
| Job-printing, | 21.75 |
| Expenses of correspondence (postage, etc.), | 22.50 |
| Total expenditures for the year, | \$284.66 |
| Balance on hand, May 11th, 1887, | 1,520.37 |
| | \$1,805.03 |

The Bradley type-fund now amounts to \$1,083.86.

The Librarian, Mr. Van Name, reported as follows: The accessions to the Society's collections during the year 1886-87 consist of thirty-six volumes, seventy-six parts of volumes, and one hundred and one pamphlets. Aside from the regular exchanges, the most important contribution has come from the government of India, ten volumes, some of them of unusual value. The number of the titles of printed books is now four thousand three hundred and sixty-nine, and of manuscripts, one hundred and sixty-two.

For some time past, the crowded state of the Library of Yale College has left but scanty accommodations for the Library of the Society, and made the proper arrangement of the books impossible. From this difficulty there is now prospect of a speedy relief.

The Corresponding Secretary, Professor Lanman, of Cambridge, announced for the Committee of Publication that the printing of Professor Bloomfield's edition of the *Kāuṅikasūtra* was so far advanced as to render the early issue of the first half of the thirteenth volume probable; and that ample material was on hand with which to begin the fourteenth; leaving the second part of volume xiii. for the rest of Professor Bloomfield's work, if this should appear desirable.

On behalf of the Board of Directors it was announced that the next meeting would be held on Wednesday, October 26, 1887, either at New Haven or at Baltimore, the President and Treasurer to serve as a Committee of Arrangements. The Committee of Publication had been re-appointed, so that it consists of Messrs. Salisbury, Toy, Van Name, W. H. Ward, and W. D. Whitney. The Directors proposed and recommended to the Society for election the following persons:

As Corresponding Member—

Prof. J. H. Haynes, Central Turkey College, Aintab;

and as Corporate Members—

Prof. John Binney, Berkeley Divinity School, Middletown, Conn.;

Prof. Hermann Collitz, Bryn Mawr College, Penn.;

Prof. H. V. Hilprecht, University of Penn., Philadelphia;

Rabbi Emil G. Hirsch, Sinai Congregation, Chicago, Ill.;

Mr. James R. Jewett, Harvard College, Cambridge, Mass.;

Mr. Charles Knapp, Columbia College, New York City;

Prof. J. G. Lansing, Theological Seminary of the Reformed Church, New Brunswick, N. J.:

Prof. George F. Moore, Andover, Mass.

The gentlemen thus proposed were duly elected.

The Chairman named as a committee to nominate officers for the ensuing year the Rev. Mr. Dickerman and Professors T. O. Paine and Elwell. The Committee reported later on, proposing the re-election of the old board, with the substitution of the name of Professor Edward W. Hopkins for that of Professor Short, recently deceased. The proposal of the Committee was ratified by the meeting without dissent.*

* The names of the board as now constituted may be given for convenience: *President*, Professor W. D. Whitney, of New Haven;—*Vice-Presidents*, Rev. A. P. Peabody, of Cambridge; Professor E. E. Salisbury, of New Haven; Rev. W. H. Ward, of New York;—*Recording Secretary*, Professor D. G. Lyon, of Cambridge;—*Corresponding Secretary*, Professor C. R. Lanman, of Cambridge;—*Secretary of the Classical Section*, Professor W. W. Goodwin, of Cambridge;—*Treasurer and*

The Corresponding Secretary read the names of those who had died during the year. They were as follows:

The Honorary Members,

Prof. Adolf Friedrich Stenzler, of Breslau;

Mr. Alexander Wylie, of London;

and the Corporate Members,

Prof. E. W. Gurney, of Cambridge, Mass.;

Mr. Henry C. Kingsley, of New Haven, Conn.;

Prof. Charles Short, of New York.

Stenzler, the Nestor of European Indologists, was born July 9, 1807. His greatest achievements were upon the fields of the drama, of law, and of lexicography. He is perhaps most commonly known by his widely circulated *Elementarbuch der Sanskrit-sprache*. To his vast knowledge of Indian antiquity was joined a character remarkable for modesty, amiability, and stern devotion to duty. Like our lamented Dr. Williams, Mr. Wylie* was a self-taught man, and devoted to a similar life-work, the spread of the Christian Scriptures in the Celestial Empire, where he was agent for the British and Foreign Bible Society. He wrote in Chinese important works, original or translated, on Arithmetic, Geometry, the Calculus, Astronomy, Mechanics, the Steam Engine, and on Manchu Tartar Grammar; a Dialogue on Christianity, and the Gospels of St. Matthew and St. Mark in Manchu and Chinese. In English, he published articles on Chinese religion, literature, and science, on the history of Protestant missions in China, translations from the "Ethnography of the Han," and "Notes on Chinese Literature," the last a most valuable contribution to Chinese Bibliography, reviewing over two thousand treatises. The great fruitfulness of Professor Gurney's† life was in fields of action that brought him little into the notice of the bustling world. As Professor of History, as Dean, and as Fellow of the Corporation of Harvard College, he has done a work whose influence upon individual minds and characters and upon the general development of higher education in this country has been and will long continue to be beneficent and powerful. Mr. Kingsley, of the class of 1834 in Yale College, had been for twenty-four years the Treasurer of that institution,

Librarian, Mr. Addison Van Name, of New Haven;—*Directors*, Professor John Avery, of Brunswick, Maine; Professor Joseph Henry Thayer, of Cambridge, Mass.; Mr. Alexander I. Cotheal and Professor Isaac H. Hall, of New York; Professor Edward W. Hopkins, of Bryn Mawr, Penn.; and President Daniel C. Gilman and Professor Maurice Bloomfield, of Baltimore.

* A memoir of his life and labors by M. Henri Cordier will appear in the July number of the *Journal of the Royal Asiatic Society*.

† A brief sketch of his life and services was presented to the American Academy of Arts and Sciences by Professor Dunbar, May 11, 1887, and may be found in the *Proceedings* of that body for that date.

and brought to the responsible duties of that office an untiring self-sacrifice and distinguished sagacity. Mr. Short graduated at Harvard in 1846, and had been for many years Professor of Latin in Columbia College, New York. Aside from his work as a teacher, the latter years of his life were devoted to the critical study of the New Testament, and he served as a member of the American Committee on the revision of the translation thereof.

The Corresponding Secretary laid before the Society some of the miscellaneous correspondence of the half-year. Shankar Pandurang Pandit, of Bombay, sends the Society a MS. of Dārīla's Comment on the Kāuṣṭhika Sūtra for the use of Professor Bloomfield. Darab Dastur Peshotan Sanjāna writes from the same city expressing his interest in the work of the Society and his cordial recognition of the contributions, now making and in prospect, towards the elucidation of the ancient monuments of his religion. Mr. James Richard Jewett, who has been teaching in Arabic in a little native school at Zahleh, Mt. Lebanon, writes that he has a large collection of proverbs and other texts in the common Arabic dialect of Syria, with translation, notes, and vocabulary—all well advanced towards readiness for publication.

After the miscellaneous business, the Society proceeded, at 11.15 A. M., to the hearing of communications, which were continued until 5 P. M., with a recess between 1 and 2 P. M.

1. The rising sun on Babylonian seals; by Rev. Dr. W. Hayes Ward, of New York City.

The family of seals discussed embraces those on which George Smith, in his "Chaldean Genesis," saw the building of a "tower." Of these there are nine which have been copied in various publications, besides a tenth in my own possession. Of all these, copies were shown. Menant and others have seen that it is not a tower that is represented, but a gate, or door, which the porter is opening or shutting. The projections on the top and bottom on one side, on which the door turns in its sockets, are clearly seen in some cases. The fact that the door is often narrower in the middle simply indicates that the seal is not a pure cylinder, but is smaller in the middle. These cylinders have one or more gates, with bands across them, like the bands on the gates of Balawat, and the porter has his two hands on the gate. On the other side of the gate from the porter, and so outside of it, is a very striking figure of a god. He has the horned headdress of a god, or has wavy rays proceeding from his shoulders. On one side of him, or on both sides, is a prominence half his height, on the top of which he lifts one foot; or he puts one hand on the top of each of the two as if lifting himself by that means. In his hand he holds a notched weapon. I am surprised that what is the simple explanation has not immediately occurred to me and to others. The gates are, I think, the gates of the dawn. The two gates are for symmetry, as is the fact so often in the case of other devices on the older seals, as of Gisdubar fighting a lion. I prefer this explanation to any which might make one gate that of the morning and the other of the evening. The gate of the dawn is being opened by the

porter for the exit of the sun-god, who appears as a mighty man, ready to run a race, and climbing over the hills of the east. That this is a true explanation is confirmed by several hymns to the sun-god, which were read from the translations of Mr. Pinches and M. Lenormant, in which the sun is apostrophized as entering at night into the gates of night and coming out of the gates in the morning. If this explanation is correct it also explains another much more abundant class of Babylonian seals, generally in hematite. On these a god stands with one foot slightly elevated, resting on a low prominence or stool, which sometimes takes the shape of an animal. In his hand he carries the same notched weapon, but he has no rays from his shoulders. I regard this as the same sun-god Shamash, in a more conventional form. These cylinders may date from 1500 B. C. to 700 B. C., while those with gates are older—having the archaic larger size and concave outline. The notched weapon I imagine to be a wooden sword or club, armed with flakes of flint, like the Mexican Maquahuitl. Associated with the sun-god on these hematite cylinders is almost always a flounced beardless figure with horned headdress and hands raised in an attitude of respect, which I take to be a deity and not a worshiper, and probably the goddess Aa, wife of Shamash. On these cylinders very frequently the only inscription is “Shamash and Aa,” which, I take it, is one of the few cases in which the inscription identifies the deities represented. Besides these two figures often occurs a third divine figure (or, at least, wearing a horned headdress) leading in a man without a distinguishing headdress. Probably we have here a soul presented to Shamash who is called in the hymns “Judge of men.” The hills up which the god climbs in the cylinders with gates would seem to indicate that the design had its origin in a hilly country like Elam. The hills of Elam were not visible from the cities of Southern Babylonia, but it is to be considered whether these hills can possibly be those which formed the chief feature of Chaldean scenery, the high-mounded banks of the great canals.

2. On the Syriac text of the book of *The Extremity of the Romans*; by Prof. Isaac H. Hall, of the Metropolitan Museum of Art, New York City.

This paper discussed one of the manuscripts recently acquired by the Union Theological Seminary, New York City, through the Rev. James E. Rogers, a missionary at Oroomiah. The manuscript is a small book, $6 \times 4\frac{1}{2} \times 1\frac{1}{2}$ inches in dimension, probably written in the last century. The writing is Nestorian, and somewhat careless. The contents are (1) The Revelation of the Apostle Paul, substantially the same with that in a manuscript belonging to the American Oriental Society, of which a translation by the Rev. Justin Perkins was published in volume viii. of the *Journal*; (2) “The Extremity of the Romans,” a composition appearing to have been in part suggested by the Revelation of Paul, and narrating the matters about a letter that fell down from heaven in the year A. D. 779, in the days of the patriarch Athanasius; (3) a Hymn of “Praise before the Holy Mysteries.” The last two compositions were given in the original text and translation, with a few notes and a little

preface, and will appear in the Journal. The Revelation of Paul, it was remarked, ought to be published in the original text, after the manuscripts are collated.

3. On the transliteration of Sanskrit proper names into Tamil; by Rev. John S. Chandler, of the Madura Mission.

The Tamil is a Dravidian language with its own independent structure and laws; but with a phonetic system widely differing from that of its Aryan neighbors. In religion, mythology, and legendary history, on the other hand, the Tamils are dependent, and have borrowed largely from the Aryans; so that the names of their gods and heroes, which are also the most common names of the people, are to a large extent Sanskrit names, which have suffered such transformations as the incommensurability of the two phonetic systems involved.

We have therefore to note the Sanskrit sounds which do not occur in Tamil, and for which in Tamil substitutes have to be provided.

Tamil has no lingual nor dental vowels; no sibilants; no aspirates; no sonants as distinguished from surds; no palatal mutes except the nasal; no *visarga*; and no *anusvāra*. Concurrent consonants must be assimilated or have a vowel inserted between them. No sonant can begin, and no mute of any kind can end a Tamil word. Nor can a surd stand in the middle of a word without being doubled. But as "surds" and "sonants" are convertible, and as the same Tamil character stands for both, these changes are easily made.

1. *Lingual vowels*.—Sanskrit *r* becomes in Tamil the syllable *ru*. Thus the prior element *re* or *rk* in the name of the first Veda shows the following changes: *r* becomes *ru*. As initial, the sonant *r* requires a prothetic vowel, here *i*. Since a final mute is inadmissible, an *u* is post-fixed. The guttural mute is now medial and must be doubled to retain its surd quality. Hence the result, *Irukku*.

2. *Sibilants*.—The lingual, *ṣ*, is generally changed to the cognate mute, *ṣ*; while the dental, *s*, is changed to the palatal sibilant, or is dropped.

Thus *Viṣṇu* changes the sibilant to the mute, and, to avoid the concurrence of mute and nasal, inserts *u*, which, reacting on the mute, causes it to be doubled. Result, *Viṣṭunu*. The Tamil forms of *Kṛṣṇa* and *Tvaṣṭā* show changes essentially similar; they are *Kiruttinan* and *Tuvaṣṭā*, the epenthetic vowel of the first syllable (palatal *i*, labial *u*), according in each case with the following consonant. In *Yudhiṣṭhira* we note a double loss of aspiration, and the entire loss of the initial sonant. Result, *Udiṭṭiran*.

The change of the dental *s* to the palatal *ç* is common: e. g., *Sāman* becomes *Çamam*; *Viçvedevu*, *Viçvadevar*; *Sarasvatī*, *Çaraçvadi*; *Sudarçana*, *Çudariçanam*. Alternative treatment is possible with an initial group: thus *Skanda* becomes either *Çikkandan*; or simply *Kandan*.

3. *Aspirates*.—Aspirates are generally dropped. Aspirated mutes lose their aspiration and become surd or sonant according as they are initial or medial. Thus *Bhīma* becomes *Pīman* or *Vīman*; *Dharma*,

Taruman; Arundhatī, Arundadi; Bhārata, Paradan; Vidarbha, Vidarppan; Bhagavan, Pagavan, etc.

All Tamil sonants are weaker than those of the Sanskrit; but the guttural sonant is notably so, and is more like an aspirate made with the guttural organs. It is thus a fitting substitute for the Sanskrit aspirate, when the latter is not dropped. Thus for *Ahalyā* we find *Agaliyei*; for *Naravāhana, Naravāganam*; for *Rāhu, Iragu*; but for *Brāhmaṇa, Pir-āmaṇam*.

4. *Palatals*.—The non-nasal palatal mutes of Sanskrit, *c, ch, j, jh*, are represented by the palatal sibilant *ç*; or else by the same doubled and so changed to a palatal surd mute. Thus *Caṇḍāla* becomes *Çaṇḍalan*; *Candra, Çandiran*; *Piçāca, Piçaçam; Yajur, Eçur; Jātavedas, Çāda-vedā*.

5. *Visarga and anusvāra*.—As the *visarga* generally belongs to the ending, and the Tamil follows its own rules as to finals, this sound hardly appears. The *anusvāra* is represented by *m*.

6. *Concurrent consonants*.—Of concurrent consonants (aside from doubled surds, and from the nasals under certain conditions), we find either (a) that one is dropped, as at the beginning of a word; or (b) that the two are assimilated; or (c) that they are separated by a vowel.

Thus (a) *Kṣatriya*, with loss of the first of the initial group, becomes *Çattiriyān*. (b) *Yakṣa* becomes *Iyakkan*. (c) *Arjuna* becomes *Aruccunan*. Other examples are: *Droṇa, Turoṇar; Agni, Akkini; Atri, Attiri; Arya, Ariyan; Indra, Indiran, etc.*

7. *Surds and Sonants*.—Tamil consonants, being naturally surd, retain that quality at the beginning of words, and as medial when doubled. When medial and single, they must be sonant. In the name *Buddha*, therefore, after despiration, the consonants lose their sonant character, and the Tamil form is *Puttan*. On the other hand, *Nakula* becomes *Nagulan*. *Gāntama* shows two reversals, becoming *Kaudaman*.

It should be added, finally, that the Tamil sometimes uses certain Grantham characters, and is thus enabled to write some foreign names in their correct Sanskrit form.

4. On Naville's Book of the Dead; by Rev. W. C. Winslow, of Boston, Mass.

Egyptology rejoices over the recent issue of the "Book of the Dead," which the Congress of Orientalists, held in London in 1874, commissioned M. Naville to prepare. It is a monument of arduous labor and the most critical hieroglyphical scholarship. All orientalist sympathize with Egyptologists in their special rejoicing; and it is fitting that of our learned bodies in America this Society in particular should take note, even if but very briefly, of M. Naville's labors and their results.

The labor involved an exhaustive study of the papyri in the British Museum (26 in number), of Paris (17), of Leyden (5), of Berlin (5), and of Dublin, Hanover, Marseilles, Rome, Florence, Naples, Turin, and other places in Europe, as well as of the Boulak papyri and the inscriptions at Thebes.

The results are—21 entirely new chapters collected and collated,—Lepsius having, in 1842, published from a faulty text 165 chapters, which Birch, in 1857, translated in his Bunsen's, "Egypt's Place in Universal History," but which, made from a corrupt text, is, in parts, far from intelligible to the un-Egyptological reader. The published results are: one folio of 212 leaves, containing 186 chapters with their variant vignettes, which number perhaps 800 in all; one folio of 448 leaves, in which the thousands of variant readings, as collected by Naville, are tabulated in 182 chapters; one quarto of 204 pages, introductory, explicative, and commentatorial on each of the 186 chapters. These volumes are beautiful specimens of hieroglyphic art and text. The advanced student has now before him for use a clear, full, reliable collection of these sacred writings of Ancient Egypt. It now remains to make a careful translation of these 186 chapters, for both student and popular reader.

5. On the relationship of the Kachari and Garo Languages of Assam; by Prof. John Avery, of Brunswick, Maine.

Within the circle of the Tibeto-Burman group of languages, there are certain closely-affiliated tongues which have been called the Kachari or Bodo sub-group. The limits of this subordinate division have not been exactly defined; but its two principal members are the Kachari and Garo. Of less consequence are the Mech, Dhimal, Pani-Koch, Rabha, Hajong, and Lalung; to which should probably be added the Deori-Chutia and Hill-Tipperia, and possibly the Mikir.

The design of the paper, of which the following is a brief outline, was to show—mainly from the side of grammatical structure—the grounds on which Kachari and Garo are believed to be sister languages.

Kachari varies much, according to the district in which it is spoken; but may be divided into two principal dialects, one heard on the plains (P.K.) and the other in the hilly district of North Kachar (H.K.). The latter, as being less exposed to Assamese influence, shows, in many respects, closer accord with the Garo than does the former.

The chief points of comparison between Kachari and Garo are as follows:

I. *Sounds*.—The two alphabets agree in most points, among which is the absence of aspirated sonants, except as these have been rarely introduced with Aryan words; but P.K. also lacks the palatals *c*, *ch*, and *j*, for which, under Assamese influence, it substitutes *s*, *z*, or *zh*. For the same reason P.K. has the semivowel *w*. Neither of these peculiarities is exhibited in H.K. or G.

II. *Nouns*.—Gender, in both K. and G., is indicated, with rare exceptions, of animate objects only: and this is effected, (1) by special words, as Eng. "son," "daughter"; (2) by determinative words, as Eng. "man-servant," "maid-servant"; (3) by grammatical suffixes adopted from the Sanskritic languages. This last is found in the speech of the plains: e. g. *omā būndā*, 'boar'; *omā būndī*, 'sow'. The gender-determinatives vary to some extent with the class of objects denoted, and this differentiation is more complete in K. than in G. The words themselves are not the same in the two languages. Number is expressed

only as singular and plural. The ordinary suffixes of the latter are: *rāng, māng*, in Garo; *fūr, far*, or *frā*, in P. Kachari; *rāo, nishi*, in H. Kachari. Case-relations are expressed by suffixes; which are, to a great degree, substantially the same in the three idioms, as will be seen from the following example:

| GARO. | P. KACHARI. | H. KACHARI. |
|---|-----------------------------------|-----------------------|
| Sing. | Sing. | Sing. |
| Nom. <i>mānde</i> | <i>mansui</i> | <i>shubung</i> |
| Acc. <i>māndekho</i> | <i>mansuikho</i> | <i>shubungkho</i> |
| Inst. <i>māndeci</i> | <i>mansuizang</i> | <i>shubungjang</i> |
| Dat. <i>māndenā</i> | <i>mansuini</i> | <i>shubungne</i> |
| Abl. <i>māndeoni</i> , or <i>-onikho</i> | <i>mansuinifrai</i> | <i>shubungnifrang</i> |
| Gen. <i>māndeni</i> | <i>mansuini</i> , or <i>-ha</i> | <i>shubungni</i> |
| Loc. <i>māndeo</i> , or <i>-onā, -ei, -cinā</i> | <i>mansuiau</i> , or <i>-niau</i> | <i>shubunghā</i> |
| Plu. | Plu. | Plu. |
| Nom. <i>mānderāng</i> | <i>mansuifūr</i> | <i>shubungrāo</i> |
| Acc. <i>mānderāngkho</i> | <i>mansuifūrkhō</i> | <i>shubungrāokho</i> |
| etc., etc. | etc., etc. | etc., etc. |

A nominative suffix *ā* is sometimes used, in both languages, for emphasis.

III. *Adjectives*.—Comparison is made in precisely the same manner in K. and G., except that the particles used are different. Adjectives are declined or not, according as they follow or precede their nouns.

IV. *Numerals*.—Up to “ten,” these present little difference, P.K. apparently showing the greatest corruption of forms, as will appear from the following:

| GARO. | H. KACHARI. | P. KACHARI. |
|-----------------------|----------------|------------------|
| 1. <i>shā</i> | <i>she(sī)</i> | <i>se</i> |
| 2. <i>gni</i> | <i>gini</i> | <i>ne</i> |
| 3. <i>githām</i> | <i>gātham</i> | <i>tham</i> |
| 4. <i>brī</i> | <i>biri</i> | <i>bre(brui)</i> |
| 5. <i>bangā</i> | <i>bungā</i> | <i>bā</i> |
| 6. <i>dak</i> | <i>da</i> | <i>rā(da)</i> |
| 7. <i>sni</i> | <i>sinī</i> | <i>sni</i> |
| 8. <i>cet</i> | <i>jai</i> | <i>zat</i> |
| 9. <i>skhu</i> | <i>shugū</i> | <i>skho</i> |
| 10. <i>ci(-khung)</i> | <i>ji</i> | <i>zu(zi)</i> |

V. *Pronouns*.—As was to be expected, we find here much agreement in the three forms of speech, thus:

| | GARO. | PERSONAL. | H. KACHARI. | P. KACHARI. |
|-----------|---|-----------|-----------------------|----------------|
| 1st Sing. | <i>āngā</i> | | <i>āng</i> | <i>āng</i> |
| Plu. | { <i>ācingā</i> (incl.)
<i>cingā</i> (excl.) | | <i>jang</i> | <i>zang</i> |
| 2d Sing. | <i>nāā</i> | | <i>nu(nung)</i> | <i>nang</i> |
| Plu. | <i>nāshimāng</i> | | <i>nushi (-nishā)</i> | <i>nangsur</i> |
| 3d Sing. | <i>uyā</i> | | <i>bwa</i> | <i>bi</i> |
| Plu. | <i>uyāmāng</i> | | <i>bwanishi</i> | <i>bisur</i> |

DEMONSTRATIVE.

| | | | |
|--------|------------|------------|------------------|
| 'this' | <i>iyā</i> | <i>eb</i> | <i>be</i> |
| 'that' | <i>uyā</i> | <i>bwa</i> | <i>boi or bi</i> |

INTERROGATIVE.

| | | | |
|---------|----------------------------|-------------|-----------------|
| 'who' | <i>shā</i> or <i>shāoā</i> | <i>shōr</i> | <i>sur(sar)</i> |
| 'which' | <i>māy</i> | ? | <i>mā</i> |

A relative pronoun, rarely used, is borrowed from Aryan speech; and appears as *je* in G., and *zi* or *zai* in K.

VI. *Verbs*.—This part of speech is simple and regular in structure in both languages. The suffixes of inflection, which agree in part only in K. and G., are attached directly to the simple or compounded root, with the occasional insertion, in K., of a euphonic vowel. The following are some of the most common suffixes. It will be noted that distinctions of person are confined to the imperative mode.

| | | GARO. | H. KACHARI. | P. KACHARI. |
|--------|-------------------------|---------------------------|------------------|-------------------------|
| Ind. | Present | <i>ā</i> | <i>re</i> | <i>(i)u</i> |
| | Progress. Pres. | <i>engā</i> | <i>đu</i> | <i>dang</i> |
| | Past (Impf.) | <i>āhā</i> or <i>jak</i> | <i>bā</i> | <i>bai</i> |
| | Remote Past | <i>cim</i> or <i>ācim</i> | <i>khā</i> | <i>dangman</i> |
| | Future | <i>gen</i> | <i>nāng</i> | <i>gan</i> |
| Imv. | 2d Person | <i>bo</i> | — | — |
| | 3d " | <i>cinā</i> | <i>ba-pu</i> | <i>thang</i> |
| Cond. | Present | <i>ode</i> (ptc.) | <i>jadi</i> 'if' | <i>bā</i> or <i>blā</i> |
| | Past (contrary to fact) | <i>gencim</i> | <i>kāde</i> | " |
| Pples. | Present | <i>oā</i> | <i>hi</i> | <i>ni</i> |
| | Pres. Cond'l | <i>ode</i> | — | — |
| | Past | <i>e</i> | <i>hi-dādā</i> | <i>noi, nai</i> |
| Inf. | — | <i>nā</i> | <i>mā</i> | <i>nū</i> |

Garo has never developed a passive voice; but P.K. occasionally uses one, formed of the past participle and verb "to be," after the analogy of Hindu speech. Both languages have a "negative voice," which is formed by a syllable *jā* or *khujā* in Garo and *ā* in Kachari, inserted between root and tense-sign; but in the imperative both take a prefix *dā*, instead, which finds an analogy in the so-used *ta* or *te* of Ao Naga. The negative conjugation differs in a few other respects from the positive one. Both tongues freely compound the verb with other verbs, with nouns, adjectives, adverbs, and a variety of particles—a characteristic which puts them outside the monosyllabic class.

VII. *Syntax*.—The structure of the sentence is simple, and is substantially the same in G. and K. The verb stands last, and the subject—less invariably—first. The position of intermediate words, relatively to the verb, is determined by considerations of emphasis or euphony. Nouns or pronouns precede the words which they limit. Adjectives have no fixed position relatively to their nouns. Postpositions, which are often the locative case of nouns, take the place of prepositions. Relative clauses precede antecedent clauses; but, instead of these, participial and postpositional constructions are vastly more common.

Our conclusion from these data—but partly indicated here—is that Kachari and Garo are closely related tongues; but they also present points of contrast, which can only be explained when we are better acquainted with the speech of neighboring tribes.

6. Notice of Delitzsch's *Assyrisches Wörterbuch, Erste Lieferung*; by Prof. David G. Lyon, of Cambridge, Mass.

For the work of popularizing Assyrian study among Semitic students in general, and as an aid to the beginners in the language in particular, no book is now so necessary as a dictionary. The one by Edwin Norris, most valuable at the time when it was made, was never completed, is now out of print, and is below the requirements of to-day. In this state of affairs, the student must rely on the small but valuable glossaries of various Assyriological publications. Such glossaries suffice for the reading of many historical inscriptions, but they are frequently of small service for other classes of writing and their use is attended by much inconvenience. What is wanted is a good hand-lexicon of a thousand pages or so, giving the ascertained lexical facts, and devoting small space to what is only conjectural. Of course, the thesaurus and the concordance are also needed, as timely aids for the specialist; but before they are made, we should have a less pretentious work, a hand-lexicon.

For the preparation of such a work no one is so well qualified as the professor of Assyriology at Leipzig. It has been known for many years that Prof. Delitzsch was engaged on an Assyrian dictionary, and at various times we have hoped that its appearance might be a matter of the immediate future. At last we have the first fascicle of 168 pages from the well-known house of J. C. Hinrichs in Leipzig. Author and publisher announce that the whole work will comprise about ten such parts, which shall appear at suitable intervals. Each fascicle is to cost about 30 marks, so that the whole, if it does not exceed the estimated size, 1600 pages, will cost 300 marks, or \$75. It is a matter of regret that such a price places the Assyrian dictionary beyond the reach of many who ought to own a copy. But it is to be feared that the work will be much larger than author and publisher suppose. From a calculation made by comparing various glossaries with the contents of fascicle I., it would seem that the whole work, carried out on the same proportions as this fascicle, will contain something like 5000 instead of 1600 pages, and cost about 900 marks or say \$225. Only libraries and a few of the more fortunate specialists could afford to buy such a work.

Delitzsch's dictionary is intended to cover the whole published Assyrian-Babylonian literature, and a considerable part of that which is not yet published. His design is to lay a "broad, sure foundation" on which younger powers may build, and to prepare a work which shall be serviceable to all Semitists for comparative purposes. The author's guiding principle is to explain the Assyrian vocabulary from Assyrian sources, and only in the most important cases to refer to related words in the sister dialects. The dictionary is to be followed by indexes, and by notes, the latter intended chiefly to give the names of the scholars who first succeeded in making out the various stems and words. Such notes

might be of service, but it would be almost impossible to reach exactness, and they are likely to be the source of much contention. A dictionary of proper names will form the closing part of the work.

The mechanical execution of fascicle I. is beautiful. The nature of the work makes lithography a necessity, though type is always more agreeable to the eye. The successive stems are numbered, and are expressed in Hebrew letters. The Hebrew is omitted in case of those words of whose stems the author is in great doubt. The stems, and also the Assyrian words to be defined project to the left of the line. Assyrian words are underscored, those which are defined are also written larger, while the notes are written smaller than the body of the article. The paragraphing is in general good, but at times somewhat scant. The word *abûbu*, for instance, contains nearly two pages without a break to rest the eye, and there are not a few cases of a whole page without a paragraph. This criticism naturally touches only the long articles. The Hebrew letters at the top of the page are a great convenience.

Of small scribal errors and oversights I have noted the absence of the dot under *k* in *itêk* 33⁸, of the period after "Trauer" 34¹⁵, of the hyphen between the syllables *zak-ri* 38⁴, and of the underlining of the Assyrian words *nâsir*, etc., 37¹⁴, and *ša ana rigim* 153⁸. The figure 3 must be inserted after "Nr." 45¹². In one case the author corrects in a note what he had written in the body of an article 75¹², whereas a reading in 4¹⁹ is corrected in a note 153¹⁴.

On the other hand, Delitzsch points out a number of mistakes which are due to the original scribe, as on pages 121, 122, 130, 146. Even Assyrian scribes were fallible. I have seen as many as half a dozen erasures on a single small tablet.

Delitzsch seems to be at a loss how he shall name the hero of the great "Izdubar Epic." No satisfactory proof has been offered that this hero was the same person as Nimrod, much less that the two bore the same name. It seems strange therefore to see the hero called *Namrâdu* on pages 25, 63, 91, 97, *Namrâdu* with interrogation mark on pages 37, 91, 96, 101, Nimrod on pages 52, 91, and Nimrod with interrogation mark on page 84. This inconsistency is, of course, inadvertent, but worse than the inadvertence is the adoption without sufficient proof of the long proposed identification. True, the hero was perhaps not called *Izdubar* but we have for that reading at least the natural values of the signs.

It is very tantalizing to be constantly referred to future fascicles of the dictionary, as on pages 91, 118, 131, 136, 140, 154, etc. In some cases it would have been better to give the explanation than to promise it, reference to something published being more satisfactory than reference to a work in preparation, if not so easy.

The arrangement of the stems is alphabetical, the derivatives coming under their respective stems. It is to be hoped that Prof. Delitzsch will re-enter some of these derivatives under their first letter with reference to the places where they are defined. There are some words which might easily be derived from several stems, and the re-entry should in such cases by all means be made. Fascicle I. contains 95 numbers, and discusses 188 words. The last stem is ארר. The א, however,

represents five letters, corresponding to Hebrew א, ה, weak ו, and the two י's. It thus appears that if fascicle I. had been devoted exclusively to the letter corresponding to Hebrew א, most of the words beginning with that letter might have been disposed of.

The work contains much matter besides what is strictly lexicographical. Of greatest interest and value are the comments on the various doubtful stems, discussions of ideograms, suggestions for completing words in mutilated passages of text-editions, and the publication in full or in part of important tablets or fragments of tablets. To the Assyrian student these will be very welcome. To the beginner or even to the general Semitic scholar they can not be of much practical service for the reason that he is not prepared to understand them. Omitting those cases where not more than half a dozen lines are given, fascicle I. contains as much as thirteen pages of texts, for the most part in transliterated form. Several tablets are given entire, as on pages 114-115, 141-143, 164-165, all being reports addressed to the king. Of greatest general interest is the large fragment of the fourth tablet of the creation series, p. 100. As has long been known, the Babylonian version of the creation of the heavenly bodies and of the animals was preceded by an account of the genesis of the gods, and a further account of the war waged between one of their number, *Marduk*, and the great dragon *Tiamat*. It is to this struggle, resulting disastrously to *Tiamat*, and her allies, that the new fragment given by Delitzsch is devoted.

With all one's delight at having such texts edited, one cannot approve of the plan of scattering them through the already burdened pages of a large dictionary. If the author does not choose to issue the texts in a separate publication, nor to offer them to some one or more of the existing journals, like *Zeitschrift für Assyriologie*, he might well place them with independent paging at the end of the several fascicles, so that when the work is complete, the texts might be bound into a separate volume.

There are also other materials in this work, which are most interesting and valuable, but which are not properly a part of the dictionary. In such a class I should place the long note, pages 64-66, on the word *ni-bi-ru* as one of the titles of the god *Marduk*, and the note of a page (50-51) on the tablets from the foundation of Sargon's palace. There are many other notes of a quarter or a half page in length, whose connection with the dictionary is not very close. This criticism does not touch the notes, but their length as a part of the lexicon. Still, one greatly prefers to have them as they are rather than not to have them at all.

A good deal of space might be saved if the author would make use of some symbol to express his doubt in cases where he does not know to what stem he should assign a word. He would thus escape the need of the oft-repeated statement that he places a word under a given stem with the greatest reserve, and only because the user of the book would be likely to seek the word under that stem. With the considerable number of Assyrian words of unknown meaning it is, of course, not possible to make a lexicon on a strictly etymological arrangement of stems, and a very simple device might indicate those words of unknown stems.

One might find fault with fascicle I. in the superfluity of elementary

matters, and of passages cited. Under the word *âbû*, 'father,' for instance, one is glad to see the various forms *a-bu*, *a-ba*, *a-ba-am*, *a-ba-(a)-am*, *a-bi*, *a-bi-ia*, *a-ba-ka*, *a-bu-šu*, *a-ba-šu*, *a-bi-šu*; but the references to some of these forms are needlessly numerous. Furthermore, it is only the beginner who needs to be told that *a-bi-ia* means 'of my father,' *a-ba-ka*, 'thy father,' *a-bu-šu*, 'his father,' etc. But most beginners will not be able to purchase such a costly book. Even they might better acquire such elementary matters in an Assyrian grammar. For their sakes, therefore, it would be well if the following fascicles were made on a scale very much reduced. The time is not ripe for a thesaurus, and the preparation of one is an undertaking too vast for any individual scholar. But for a convenient lexicon there is a pressing need.

Perhaps the most remarkable feature in the dictionary is the attitude of the author toward the famous *Sumero-Akkadian* controversy. It has long been the opinion of most Assyriologists that a great civilization preceded that of the Semites in Mesopotamia, and was a powerful factor in the development of the Babylonian-Assyrian culture. To this civilization was ascribed the invention of cuneiform writing, much of the Semitic mythology and religious literature, as well as numerous words current in the Assyrian language. Indeed, where a word existed in Assyrian and in what was supposed to be the literary remains of this older civilization, some scholars went to the length of always claiming that the borrowing had been made by the Semites. More moderate students asked why the borrowing might not at times at least have been in the opposite direction. The representatives of this pre-Semitic civilization were supposed to be the inhabitants of the districts of *Sumer* and *Akkad*. Whether the civilization and the people should be called *Akkadian* or *Sumerian*, was for a long time a bone of contention. Finally the discovery seemed to be made that both names were right, and represented two branches of the same people, and two dialects of the same language.

Against all of this real or supposed discovery one distinguished scholar has for many years raised his voice in dissent. This was Prof. Josef Halévy of Paris. In opposition to the "Akkadists," he has long maintained that the civilization of Mesopotamia is distinctively Semitic, and that what was held to be non-Semitic literary remains is only a hieratic way of writing Assyrian. After fighting single-handed for a long time, he won to his view the brilliant and lamented Stanislas Guyard. It would now seem that Prof. Delitzsch has espoused the same cause. It is not long indeed since he announced courses of instruction in the *Sumero-Akkadian* language. But it has been evident from his published utterances during the past two years that he was rapidly approaching the position of Halévy. In the 3d edition of his *Assyrische Lesestücke*, 1885, he rarely uses the terms *Sumerian* and *Akkadian*, preferring to say "non-Semitic." In Zimmern's *Babylonische Busspsalmen*, 1885, Delitzsch stated that his use of the expression "non-Semitic" had not been a mere matter of convenience, p. 113. In the same connection he expresses his approval of Zimmern's position that the Babylonian

penitential psalms, and many other of the "so-called bilingual texts" are not *Akkadian*, but of genuine Semitic origin, and adds: "I seize this opportunity for my part to recognize openly the high services of Halévy relating to the *Sumero-Akkadian* question, above all to the question as to the existence of *original* *Sumero-Akkadian* texts. It seems to me necessary to test anew, unbiased, in all details, this fundamentally important 'tradition' which has been delivered to us younger Assyriologists." In the foot-notes of his *Prolegomena eines neuen Hebräisch-Aramäischen Wörterbuchs zum Alten Testament*, 1886, there is much skirmishing with Halévy, but the disputed ground is etymology rather than *Sumero-Akkadian*.

In reviewing this work in the *Revue des Études Juives*, Jan.-Mar., 1887, Halévy writes, p. 160, that he learns through a letter from Delitzsch that the Assyrian dictionary of the latter is to be pervaded by a "strongly anti-Sumerian spirit." Fascicle I. is a commentary on the letter, and shows how near Delitzsch comes to an agreement with the chief "anti-Akkadist." The change is seen in his treatment of syllabic values, and of words which have been regarded as of non-Semitic origin. When he uses the terms "*Sumerian*" or "*Akkadian*" at all, he frequently encloses them in quotation marks, as on pages 23, 32, 41, 88, 111, 138, 139, 140, 150, 155, 166. In cases where the quotation marks are wanting, the author uses the word "so-called," as p. 115, or adopts the terms as employed by others, as on pages 80, 89, 116, 118, 120. Among the words in fascicle I. which have been held to be of *Sumero-Akkadian* origin are No. 14, *a-ba*, a certain official title; No. 23, *abkallu*, 'great decider;' No. 38, *abâru*, 'lead;' No. 51, *agubbû*, 'pure water;' No. 55, *agû*, 'crown;' No. 71, *ugaru*, 'field;' No. 75, *agarinnu*, 'mother;' No. 77, *adaguru*, 'censer;' No. 79, *êdû*, 'flood.' On *a-ba* he remarks that the title is certainly good Semitic; on *abkallu*, that the derivation from a "*Sumerian*" *ab-gal* is extremely uncertain; on *agubbû*, that it is held to be a borrowed word from the *Sumerian* *a-gub-ba*; on *agû*, that if one feels compelled to consider it a foreign word, the form *a-gê* may best be considered as the "*Sumerian* original, but that against the assumption of borrowing, the weightiest objections exist; on *agarinnu*, for which he offers no etymology, that there is no reason to despair of finding one from Semitic sources; on *adaguru*, a similar remark; on *êdû*, that its Semitic character is obvious when one compares the word with kindred forms. Unless I have overlooked the passage, there is not a single case in which he allows that a word is indisputably of *Sumero-Akkadian* origin. In the notes also occur various words whose non-Semitic origin is denied or disputed, as p. 139, *šâru*, 'excess, 3600, σάρος;' p. 140, *mû*, 'name;' p. 166, *êdinu*, 'plain.'

The non-Semitic origin of certain ideograms is also declared to be most doubtful, as those representing *tarbašu*, 'womb,' p. 118; *adaguru* 'censer,' p. 120; *sikkuru*, 'bolt,' p. 150. Syllabic values are also claimed as Semitic, which have been held to be certainly not so. Such are *nun*, p. 116; *ad*, p. 122; *mu*, p. 140; *kit*, p. 140. If these values be Semitic in origin, they may not be employed in reading non-Semitic texts, and Delitzsch makes this remark as to the syllable *kit*.

As illustrating his position on the subject of a *Sumero-Akkadian* language, two passages may be quoted from the notes: "But if my explanation of the two lines above is correct, there falls anew a glaring light on the supposed bilingualism of the respective texts," p. 68: "Therewith falls indeed a supposed most genuine 'Sumerian' word, which is absolutely indispensable for the reading of 'Sumerian' texts. Nevertheless one must hold himself ready, with ever more thorough penetration of the Assyrian literature, and ever deeper knowledge of etymology and of primary signification, to see yet many more such props of the 'Sumerian' invention of writing, and of the 'Sumerian' language break down," p. 139.

A monograph from Prof. Delitzsch on this subject is greatly to be desired. Indeed the matter is so important that we could even wish he might turn aside for a while from the work on the lexicon in order to prepare such a monograph.

Of the new and interesting remarks and translations the number is too large even to give a list of them, but a few may be mentioned. The passage in the account of the deluge which has been translated as referring to the future, is here referred to the past: 'Instead of thy having brought a deluge—lions, jackals, famine, or pestilence should have afflicted men,' p. 9. The excursus on pages 64–66 discusses the word *Nibiru* as a title of the god *Marduk*, and establishes the order of the first five tablets of the creation series. According to the exposition presented, the first tablet, beginning *é-nu-ma é-liš*, is the one of which a fragment has long been known recounting the genesis of the gods; the second tablet closes with the offer of *Marduk* to chastise *Tiamat*, after *Anu* and *Ea* have been in vain besought to do this; the third tablet records how the god *Sâr*, by reference to *Tiamat's* terrible companions in arms, induced the other gods to accept *Marduk's* offer; the fourth tablet recounts the battle and the victory of *Marduk*; the fifth, the preparation of the abode of the gods, and the ordering of the year and the months.

A passage from the deluge tablet receives a new interpretation on p. 120. The *adagur* vessels, used in the sacrifice after the deluge, Delitzsch takes to be censers, and they have poured into them (not put under them, as according to former translations) calamus, and other aromatic substances. The expression "seven and seven *adagur* vessels" he understands as meaning that seven censers were filled with calamus, seven with cedar, etc. He compares the direction in Ex. 30:34 as to the preparation of incense.

The Hebrew word **אָדָּם** receives on p. 125 a new meaning and etymology. According to Delitzsch the word is inseparable from the Assyrian *édû*, 'flood, mass of water.' The meaning 'mist' for **אָדָּם** he denies altogether. The **אָדָּם** of Ps. 32:9 Delitzsch also recognizes in the Assyrian *adû*, 'harness, bridle,' p. 144.

Among the many wrong translations corrected in fascicle I. are *édû*, 'one,' p. 123, and *šibirru*, 'grain,' p. 68. The first word is shown always to mean 'flood' and the second 'staff.' On the other hand Delitzsch's reading *masnakti* instead of *masnakti*, pages 35, 161, is

proved by a Nebuchadnezzar fragment in the collection of the Wolfe Expedition to be incorrect. This fragment divides the syllable *maš* into *ma-aš*. While the first radical is thus assured as *š*, the third may be *g*, *k*, or *h*. The word *mašnak(g, k)tu* can have no connection with *šanāku* 'to press.'

The late arrival of fascicle I. has not allowed time for any accurate examination of the strictly lexicographical features of Prof. Delitzsch's great work. This part of the notice I reserve for the future.

If the dictionary were finished, it would be a boon of priceless value to every student who could own a copy. On examining fascicle I. the reader feels that he is in the company of a man who is familiar with the large Assyrian literature and who has penetrated far into the secrets of its philology. If I have seemed to criticise the plan of the work, one of the reasons has been my fear that we may have to wait many years for its completion, or even that the author, though hardly yet in his full prime, may not live to complete his task. To indicate what a treasure the work is, one may refer to the treatment of the stems אלו *ālu*, 'city,' pages 5-9; אבא, *ābā*, 'father,' pages 17-21; אנן, 'to be sharp, to project,' pages 37-45; אבר, 'to cross over,' pages 59-66; אבת, 'to destroy,' pages 71-75; אגל, 'enclosure,' pages 83-90; אגנא, pages 95-101; אנר, 'to enclose,' pages 105-111; ארה, 'to go,' pages 127-143; אדן, 'to be firm, strong,' pages 160-166.

To take up one of these stems and show what it contains, we may select אבא, No. 13, pages 17-21. Under this stem comes first *ābā*, 'father,' pl. *ābē*. There are four divisions: (1) Father in the sense of begetter, used of men and of gods: (2) Father in the sense of forefather, ancestor, of special frequency in the pl.: (3) Father as a title of reverence and affection, in an address to the moon-god; (4) Name of the necklace, *ābi abnē*, 'father of the stones.' Then follows the list of the ideographic ways of representing the word 'father.' The two methods of saying 'parents,' by using the pl. of *ābā*, or by using *ābā* and *ummu*, 'mother,' together, are next explained. Two lines are devoted to *ābātu*, 'fatherhood,' various proper names compounded with *ābā* are cited, and the article closes with a page of notes. The various forms *a-bu*, *a-bi*, *a-ba*, with and without suffixes, are given under No. 1. At the same place is explained the use of *ābā ilāni*, 'father of the gods,' as a title of various deities, *Bel*, *Asur*, *Anu*, *Ea*. Then comes the expression *bīt ābi*, 'father's house,' and the use of *ābā* in connection with certain participles, as *bānu*, *ālidu*, *zārū*, 'begetter' (from the stems בנה, ולר, זרע). The terms for 'grandfather,' *ābi ābi*, *ābi ābi ālidi*, and for 'great-grandfather,' *ābi ābi ābi*, with corresponding references, close the first division. Under the second division the use of *ābā* as ancestor receives many references and a list is given of the expressions *mahrū*, 'a former one,' *ālik mahri*, *ālik pāni*, 'one going before,' which emphasize more sharply the idea 'ancestor.' The term *ultu ābā*, 'from ancient times,' i. e. 'from the fathers,' is then explained. There is not enough material to make any subdivisions of paragraphs 3 and 4. The vastness of the undertaking and the incredible amount of labor necessary in the

preparation may be imagined from the fact that the first paragraph under *Abû*, 'father,' covering about a page and a half, makes no less than 122 references to the cuneiform literature.

The services rendered to Semitic study by the brilliant worker on the Assyrian dictionary fall short of those of no other man of the present generation. To prepare a lexicon on the scale planned by Prof. Delitzsch and to make one's way through the enormous difficulties which beset the explorer, is a monumental task. May his strength be equal to his large conception.

7. The discovery of the Second Wall and its bearing on the site of Calvary; by Rev. Selah Merrill, of Andover, Mass., late U. S. Consul at Jerusalem.

Dr. Merrill explained how he came to discover the Second Wall, upon the exact location of which so much depended. The conjectures of scholars had differed widely as to its location because they had had absolutely no hints to guide them. This wall is from ten to fifteen feet below the surface of the ground, and Dr. Merrill by great perseverance was enabled to have one hundred and twenty feet of it exposed. Had he not been on the spot to follow the matter up, the work would have stopped at half that distance. The stones lie on the native rock and are in some cases one, in others two, and in others three courses in height. The stones are ten feet and some of them twelve feet in length. As both the starting point and the terminus of this wall are now known, and one hundred and twenty feet of it actually traced, if it followed any natural course, it would inevitably pass at some distance to the west and north of the present Holy Sepulchre; which fact would be fatal to the claims of the latter as being the site of Calvary. English as well as American scholars regard this discovery of Dr. Merrill as one of the most important that have been made during the present century in connection with the topography of Jerusalem at the time of our Lord.

8. On Ikonomatic writing in Assyrian; by Prof. Morris Jastrow, Jr., of the University of Pennsylvania, Philadelphia.

The following is an abstract of this paper: A theory has recently been advanced by Prof. D. G. Brinton¹ to account for the transition from picture-writing (either imitative or symbolical) to sound-writing (again falling into the two classes, syllabic and alphabetic), which, aside from its correctness, calls attention to an important feature in the Egyptian, Mexican, and Chinese systems of writing that finds its counterpart in the Assyrian cuneiform. Between the method of expressing thoughts by means of pictures and the simple reproduction of the sounds of a word, Dr. Brinton assumes an intermediate stage in which pictures are used to recall words coincident or similar in *sound* with the object represented by the picture. Thus in Egyptian, *nefer* is a 'lute' and is represented by the picture of that instrument; but *nefer* through a coincidence of sound (not identity of stem) has also the significations

¹ On the ikonomatic method of phonetic writing with special reference to American Archaeology, in the *Proceedings of the Amer. Philos. Soc.* for October, 1886.

'door,' 'colt,' 'conscript soldier' (as in English we have *pear*, *pair*, *pare*), and accordingly the same picture is used to denote any of these words, generally with the addition of some distinguishing determinative to indicate which one of the various *nefers* is meant.² To this method of writing, which as will be seen, is identical in principle with the ordinary rebus, Dr. Brinton gives the name of "ikonomatic,"³ because, as he says, it is a writing by means of pictures (*εἰκῶν*), not of things—and therefore "rebus" is an inexact term—but of the *names* (*ὀνόμα*) of things, or as we might better say of their *sound*.

Instances are adduced to prove the existence and extended use of the ikonomatic method of writing in the Mexican and Mayan systems, where the principle is carried to much further excess than in Egyptian, a remote similarity of sounds—a far-fetched pun as we might say—being sufficient to warrant the use of a picture in this way. And the Chinese,⁴ which, because of its strong tendency to monosyllabism, is excessively rich in homophonous words, lends itself even more readily to such a method.

The following examples from the Assyrian find a satisfactory explanation on the same assumption that identity and in some cases similarity of sound has led to the employment of a sign to express various objects, not otherwise related.

(1) The sign compounded of *ka* and *mit* (No. 16 of Delitzsch's *Schrifttafel*)⁵ is the ideograph for *imtu*, 'breath,' and *imtu*, 'fear,' the former probably from a stem אמה, the latter from אים.

(2) The sign *nam* signifies *šimtu*, 'fate,' and *šimuntu*, 'swallow,' where we have a similarity of sound suggesting a word totally distinct in stem and meaning, since there is nothing to justify the explanation sometimes brought forward that the swallow is represented by this sign as being the bird of fate.

(3) *Gi* is *kanu* (קנה), 'reed,' and *kenu* (כון), 'faithful.'

(4) No. 94 stands for *erû*, 'box, chest,' from חרה (?—like Arabic *harâ*), and then by an extension through identity of sound for *erû*, 'bronze,' from ערה.

(5) *Dup* is *duppu*, 'tablet,' and also *tabaku*, 'pour out.' The similarity in this case is, it must be admitted, remote; but the examples given by Dr. Brinton from the Mayan scrolls (p. 9 f.) show that the principle can be carried to much further excess.

² Such a use of pictographical signs must of course be sharply distinguished from instances where an association of ideas, near or remote, extends the meaning of a sign. So Dr. Brinton himself falls into the error of classing *goud* (for which in Egyptian the same picture of a lute is used) together with *door* etc.; but in this case we clearly have absolute identity of stem and not mere coincidence of sound: *nefer*, 'lute,' and *nefer*, 'good,' being the same word, and the instrument probably receiving that name because it was considered good, just as in the Semitic languages the *camel* is the 'beautiful.'

³ More accurately "ikon-onomatic."

⁴ See Wuttke, *Entstehung der Schrift*, p. 268 f.

⁵ In cases where the phonetic value is uncertain or unknown, the number of the sign as given in Delitzsch's *Assyr. Lesestücke* (3d ed.) is quoted.

(6) No. 116 is the sign for *šēru* (שֵׁר), 'field,' and again—a very clear instance of ikonomatism—for *šir* (שִׁיר), 'against.'

(7) *Ne* is *išatu*, 'fire' (אֵשׁ), and *eššu* [for (*h*)*eššu* חֶדֶשׁ], 'new.'

(8) *Hi* for *ašaru*, 'to be favorable,' and also for *šar* (σάρως), the numeral for 3600.

(9) No. 256, *tukultu*, 'help,' and *takiltu*, 'face,' 'apparition.'

(10) No. 308, *libittu* (לִבְתָּן), 'brick,' and *lipittu* (לִפְתָּן), 'fence.'

(11) *Ku* is *šubtu* (וְשֵׁבַת), 'dwelling,' and *šubatu* (צִנְתָּא), 'dress.'

(12) *Mé* is *ašibu* (וְשֵׁבַת), 'dwelling,' and *išibbu* (חֶשֶׁב?), 'prince.'

The following for various reasons are doubtful:

(a) *Du* is *alaku*, 'walk,' and also *anaku*, 'lead.'

(b) *Mit* equals *nakbu*, 'hollow,' 'cave,' and (Delitzsch) also *nagpu*, 'weak.'

(c) *Am* signifies *rīmu*, 'wild ox,' and, according to a private communication from Prof. Halévy,⁶ also *rēmu* (רָחֵם), 'mercy.'

This list, which might be further extended,⁷ is sufficient to prove that the ikonomatic device is by no means of rare occurrence in Assyrian.

Dr. Brinton sees in all this the link between picture-writing and sound-writing, and endeavors to establish it as a general theory that the ikonomatic method of phonetic writing represents a stage through which every system of writing *must* have passed before reaching the purely phonetic stage. It cannot be denied that there is much to be said in favor of this theory. It fills out very satisfactorily the gap which has always been felt to exist between picture-writing and sound-writing. The use of a picture to recall, not a picture, but sounds, is certainly a step towards phoneticism, and one which it seems natural for people to take. And we can readily see how after this step has once been taken, the next one may follow, which consists in using a word or, by throwing off one or more of the final letters ("acrologism"), a part of a word, purely as a syllable entering into the formation of some other word; and this in turn, through the continuation and extension of the 'acrologistic' process, naturally leads to single letters instead of syllables.

Moreover, we can safely assume that the thought of using what was originally at least the picture of some definite object to recall the mere sounds of the object and not necessarily the object itself could only have occurred to people at a time when the picture—which gradually came to be drawn in mere outline—no longer accurately or definitely portrayed the object which it was supposed to represent. As long as

⁶ Cf. moreover Halévy, *Aperçu Grammatical de l'Allographie Assyro-Babylonienne* (vol. ii. of 6th Oriental Congress), p. 4 f., where "homophonie" in Assyrian is touched upon.

⁷ One might be tempted to add as a particularly striking example the sign *šah* used (*a*) for *šibirru*, 'sceptre,' from שֵׁבֶרֶט, which can be further traced back to the biliteral elements שֵׁב, giving us in Hebrew שֵׁבֶט, 'staff,' and (*b*) *šibirru*, 'harvest,' from שֵׁבֶרֶט, a šafel extension of a root שֵׁב which appears in שֵׁבֶרֶט, 'winnow,' שֵׁבֶרֶט, 'grain;' but the authority of Delitzsch is now (*Assyr. Dict.*, p. 63) against the use of the sign in the latter sense.

the sign for *pear* was a real and a full picture of that fruit, it could only suggest to the eye and mind a pear; and it is highly improbable that as long as this was the case, mere similarity of sound with the word *pair* or *pare*, could lead to the extension of the picture for the purpose of conveying these words also to the reader. But when the picture has once undergone a decided modification from its original form, being either simplified for the sake of convenience, or, as frequently happened, a part being deemed sufficient to recall the whole (the horse's hoof for the horse, the head of the bull for the bull, and the like)—in short when the picture became a sign and a symbol rather than a picture, the chief obstacle in the way of an advance to phonetic writing, namely, the too exclusive appeal to the eye in the case of an exact picture, is removed, and the intermediate stage of ikonomatism follows very naturally; so that the *graphic* development accords very well also with Dr. Brinton's theory.

If, however, the explanation at present adopted by all Assyriologists, with the exception of Halévy, Pognon, and the late Stanislas Guyard, of the origin of the phonetic values of the cuneiform signs in Assyrian be correct, there is no room, as far as the latter is concerned, for such an intermediate stage. On the assumption of the non-semitic origin of the cuneiform writing, the phonetic values of the cuneiform signs in Assyrian are non-semitic, or, to use the more usual term, Sumero-akkadian words,⁸ of which the ideographic values of the signs represent the Assyrian equivalents.⁴ Thus in the examples given above *nam* is the Sumero-akkadian word for Assyrian *šimtu*, 'fate;' *gi*, for *kanu*, 'reed,' etc. The Assyrians, according to this theory, when they adopted the cuneiform writing from the early inhabitants of Chaldaea, also took over the non-Semitic words and used them, as far as practicable, as syllables to form words (for which ideographs did not exist or which could not be expressed ideographically), and in particular also to indicate inflectional forms.⁹ The Assyrians in this way reached the phonetic method of writing without any intermediate ikonomatic stage. This of course does not affect the existence of ikonomatism in Assyrian (or its importance) but simply the conclusion which Dr. Brinton draws from the occurrence of the phenomenon in the Egyptian and other systems of writing.

That the so-called "Sumero-Akkadian question," however, is still far from a definite settlement is very plain when we consider the recent and important modifications of views concerning it on the part of many Assyriologists—especially of Prof. Delitzsch, whose lately increasing reserve on the subject is particularly noticeable. Without going so far as Prof. Halévy,¹⁰ therefore, who denies *in toto* the non-Semitic origin of

⁸ Exception must of course be made for the large number of phonetic values which are derived from Assyrian words (by the acrologistic process) as *rēš* from *rēšu*, *lib* from *libbu*, etc., which are due to the further growth and development of the cuneiform system after the Assyrians had adopted it. See the list (which can be extended) given by Haupt, *Akk-Sumer. Keilschrifttexte*, p. 173.

⁹ See the valuable discussion of the subject by Haupt, loc. cit., p. 163 f.

¹⁰ His view is concisely given in his *Aperçu Grammatical*, above-mentioned.

the cuneiform writing, we must admit that the theories now current are likely to be still further and very essentially modified. And accordingly, pending their ultimate adjustment, the facts and analogies adduced by Dr. Brinton call urgently for careful consideration in the discussions of the question.

9. The Loḳman-legend; by Prof. C. H. Toy, of Cambridge, Mass.

The late, probably medieval date of the so-called Loḳman fable-book is now generally admitted; much of its matter is no doubt ancient, but this, whatever its source, has nothing, as far as the testimony goes, to do with the Arabian sage, in whose history there is no mention of fables.

The Loḳman-material, in chronological arrangement of the authorities, may be summarily stated as follows: En-Nabīga, El-'Asha, and Lebid refer to the story that Loḳman lived as long as seven eagles or vultures, the name of the seventh vulture, Lubad, is given by the first and third of these poets, and the second mentions Kail, who went with Loḳman as ambassador from 'Ad to Mecca, and was slain by God for his unbelief; in the Koran (Sura 31) Loḳman is a monotheistic sage, and a number of his sayings are quoted, and allusion to an apothegm of his is also found in Lebid: Ibn Ishāq speaks of a *Majalla* (=Heb. *Megilla*, 'book,' Sprenger, *Mohammed* i. 95) attributed to him (ed. Wüstenfeld, p. 284); Ibn Koteiba (Sprenger, i. 101) puts him under Hārith er-Raish, founder of the Tobba dynasty of Yemen; Ṭabari (ed. Barth, etc., I. i. 235-241) relates the occurrence of the drought in 'Ad, the sending to Mecca of the ambassadors, of whom Loḳman was one, the failure of the attempt to procure rain, the death of Kail, who refused to accept any fate but that of his people, the bestowal on Marthad of the gift of piety and truth, and Loḳman's choice of a life as long as that of seven eagles (each eagle living eighty years), and describes the catastrophe as follows:

"And when only the seventh eagle remained, Loḳman's brother's son said to him, O my uncle, there remains of thy life only the life of the eagle; and Loḳman said to him, O son of my brother, this is Lubad (which word in their tongue meant 'fate' or 'time')—and when Loḳman's eagle had reached a ripe age and the end of its life was come, the eagles flew in the morning from the top of the mountain and Lubad did not spread his wings among them, and Loḳman's eagles used not to be away from him, but were ever in his sight—and when he saw not Lubad with the eagles, he went up to the mountain to see what he was doing—and Loḳman felt himself weak as he had not felt before—and when he came to the mountain he saw his eagle Lubad fallen out from among the eagles, and he called out to him, Mount O Lubad, and Lubad essayed to mount, but could not . . . and they died both of them."

The Persian version of Ṭabari (ed. Zotenberg, i. 432), fifty years later than its original, describes, besides this 'Adite Loḳman, one of the time of David, a black sage of Ila, and friend of the Jewish king; in Mas'udi (ed. Barbier de Meynard, i. 110, iii. 366), A. D. 943, we have also a double

personage, he of David's time being described in nearly the same terms as in the Persian Tabari, and the 'Adite barely mentioned as the grandson of 'Ad, the builder of the dike of Mareb, and as having lived as long as a vulture (he quotes from a poem of El-Khazraji the line: "O vulture of Lokman, how long wilt thou live?"); Beidāwi (on Sura 31, 11) describes the sage Lokman as a near descendant of Job and as living down to David's time; Abulfeda (*Hist. Anteiislam.*, ed. Fleischer, pp. 20.116.174) has the double Lokman, nearly as Persian Tabari; and he appears in many proverbs, in which there is reference to his personal qualities, as wisdom, strength, treachery, voracity, and to his longevity—other proverbs mention the embassy to Mecca: but it is difficult to determine their age precisely.

It appears from this statement that the Lokman-story suffered constant increase with time, as is the nature of such stories, and we must try to establish the earliest known form of the legend, that is the form it bore in the sixth century, when it was yet mostly unconscious, and had not been tampered with by history-mongers. A part of the above material may safely be rejected.

In the first place, the Jewish element may be thrown out. Though Jews had been settled in Arabia already several centuries in Mohammed's time, it is not probable that their sacred books were then known to the Arab people in such way as to affect the Arab folklore. In the Koran Mohammed talks as if this Jewish history were something new. Even if the people had caught from the Israelite residents scraps of their old histories, these would still be thought of as foreign. After the establishment of Islam and the rise of historical writing, the reverence felt for the old Jewish religion induced the Moslem writers to seek points of contact between old Jewish history and their own, and it was in fact out of Jewish material that they constructed their own *origines*. The relation of Lokman to David and Job is a simple invention of a late period. And so falls away the necessity for a double Lokman; we may dismiss the Jewish sage, and confine ourselves to the 'Adite.

Of the 'Adite story also as given in the Koran (Suras 89 and 7, 66 ff.) and the historians, much is pure fable. 'Ad and Thamud were in existence in the time of the geographer Ptolemy, and perished, not by wind and earthquake, but by a change in the routes of trade and the cessation of the commerce whence they derived their prosperity; see Sprenger, *Leben Moham.* i. 62 ff., 505 ff.; Loth, *Z.D.M.G.* xxxv. 622 ff. The story of the prophet Hud is a late invention, probably of Jewish suggestion; probably also the drought and the embassy to Mecca are embellishments. The 'Adites are described as Aramaeans (Koran, Sura 89, and historians); they lived north of Mecca, and there seems no good reason to suppose a tribe of that name in Yemen. Some connection between Lokman and 'Ad is to be assumed.

No stress can be laid on the part that Yemen plays in the story. That the Koran (46, 20) assigned 'Ad to the south was sufficient reason to the historians and commentators to elaborate a Yemenic history of the tribe. Why Mohammed thought of Yemen is not clear; perhaps because he knew of ruins there like the northern 'Adite (Sprenger, as

above; more probably because of the presence of Yemen tribes in the north and the confounding of them with the original inhabitants. It is not likely that he invented Al-Aḥḳāf, 'the sand hills,' as the name of the 'Adite region; it was probably in the story that came to him. Possibly it originally applied to a northern region, and was only later referred to the Yemen coast because it had come particularly to designate the sandy district between Oman and Aden. (Kremer, *Südarabische Sage*, p. 21, would nevertheless hold to a Yemenite 'Ad; but the authorities on which he relies are all influenced by the Koran. The etymology of the name 'Ad is not clear: and it is not easy to say whether the adjective 'ādiyy, 'old,' is derived from the name of the tribe.) In any case Lokman's connection with Yemen must be given up. The Arab histories of Yaman were compiled (doubtless from native southern sources) under the influence of the Koran and the distortions and confusions of Jewish traditions that followed the rise of Islam.

That part of the legend which makes Lokman a Nubian and a slave is to be rejected. It arose either from the connection between Nubia and Yemen, or else from the desire to enhance the hero's wisdom by a sharp contrast of origin.

These deductions made, the legend of Lokman in the sixth century may be conceived to have been somewhat as follows: he was a wise man of the tribe of 'Ad who survived the destruction of his people, and lived to a great age, as long as a vulture or as seven vultures.

Can we interpret this of an individual man? The improbability is great that the Meccan Arabs would hold in memory such a history of a foreigner; of their own people they remembered only ancestors and heroes of combats a few generations back. Lokman is not a warrior, but a sage; and his story, with its legendary coloring, differs greatly from the memories of feuds, raids, and combats that are preserved by the poets respecting their own countrymen. He is an Arab, but he lives in a remote region and a dim period. This difficulty has been so strongly felt that the attempt has been made to identify him with some known personage of history or tradition—that is, of course, to make him Jewish, though this must be difficult in face of the fact that he seems to be a part of the Arabic folklore.

Derenbourg (in his ed. of the Fables) has suggested that Lokman may be the same with the Biblical Balaam, the two names having the same meaning ('devourer'), that is, the Arabs translated the Hebrew name. This is not probable because no example of such translation is elsewhere found; in the Koran the Biblical names from Adam to Mary are transferred; Idris, 'the Learned,' of Enoch, and Du'n-Nun, 'He of the fish,' of Jonah, are descriptive epithets. Balaam would probably have appeared in the Koran under his own name. Nor is it likely that he was transformed at an early period and so taken by the early poets and Mohammed. If this had occurred, we should expect to find in Lokman some reminiscence of his Biblical prototype; but there is none, except that both, in the later Moslem account, are servants of Allah. Balaam's history is given in Ṭabari (ed. Barth, I. ii. 508), and is supposed by some commentators to be alluded to in the Koran (7, 174).

Sprenger (*Leb. Moh.* i. 93) finds Lokman in the Jewish-gnostic Elxai, the presumed founder of the Elkesaite sect, living east and south of the Dead Sea in the second century of our era and later. His grounds for this view are that both Elxai (or Elkesai) and Lokman are monotheists, and that the sayings attributed to them begin in the same way, with the address "O sons" and "O my son." He himself does not regard these reasons as very strong. And, besides the difference of name and rôle between the two personages, there is grave doubt whether Elkesai is the name of a man at all, or only of a book, or, whether, if a man be intended, it is not rather an imaginary than a real person. The early appearance of Lokman as seemingly a character in the Arabic folklore would lead us to regard him as representing an Arabic figure of some sort.

Failing the attempts to find any satisfactory origin for him as an individual man, we might be disposed to think of him as a dim survival of legendary longlived ancestors, or as a deity. But neither of these suppositions has much in its favor. The Arabs had no myths or old legends—at least there is no trace of such stories. They were a people of feeble religious sentiment and short memory, without a pantheon, and without remote ancestors; the adoption of Islam enabled them later to dispense with gods, and for a respectable list of ancestors the historians had recourse to Jewish traditions and their own imaginations. Lokman, in the popular saga, could hardly have gone back to the days of the macrobites.

His connection with the vulture might suggest the Arab eagle-deity, and those eagle-like birds (unless they be Roman eagles) found by Doughty in 1875 at Madayn Salih, the region of the old Thamud (*Documents épigraphiques recueillis dans le nord de l'Arabie*, Paris, 1884, p. 16). But elsewhere, in Koran, poetry, commentaries, and histories, many names of deities appear as such, and there seems no reason why the divine character in this particular case should have been completely forgotten. Doughty's list of deities contains no name resembling Lokman.

Possibly the conditions of the question may be better met by supposing the name to designate a clan or family that survived the extinction of the 'Adites. This event occurred after the beginning of our era, probably in the 2d or 3d century (compare Caussin de Perceval, *Essai sur l'histoire des Arabes*, i. 25 ff.; Loth, *loc. cit.*). The remains of the tribe's former greatness excited the astonishment of the neighboring peoples, and the catastrophe was interpreted by the Jews and Jewish Christians (Sprenger, *Leb. Moh.* i. 64) as a direct divine punishment. This was the account which Mohammed, perhaps with embellishments, inserted in the Koran; and so dim was the event to him that he could speak of it as belonging to a remote antiquity. If now several families or clans were all that survived to represent the old tribe, they would naturally appear in the tradition as individuals, and stories would arise to account for their escape from destruction. Such a story in the Old Testament is that of Lot saved from the destruction of Sodom, which is intended to account for the existence of a Lot-tribe in a region whose

former inhabitants were held to have been destroyed. According to Tabari (ed. Barth, I. i. 235) there were four 'Adite ambassadors to Mecca besides Lokman, of whom only one, Marthad, is said to have escaped with his life (p. 240). If the names Lokman and Marthad should be found in North Arabia as names of tribes, that would supply the evidence needed for this hypothesis; so far, however, the names have not been found, though Martab occurs in Doughty's list as name of a deity. The Tabari MSS. fluctuate in the writing of the names.

On the supposition of the survival of a Lokman-tribe we can account with some probability for the development of the legend in its present form. The name Lokman was connected with 'Ad and naturally followed its fortunes. First geographically and religiously. The 'Ad-legend was worked up under a double influence, Jewish and Yemenic. To the former we must refer the history of the prophet Hud, and Lokman's relations with Job and David; to the latter the Yemenic history of Lokman, his becoming king of the "Second 'Adites," and his building the dike of Mareh, his relation to the founder of the Tobba-dynasty, Hārith er-Raish (Mas'udi, iii. 366, Caussin de Perceval, i. 16 ff.); Hud also was transferred to the South. In the "Second 'Adites" we have the reminiscence of a survival of a portion of the tribe. The tradition assigns Lokman to various points in the legendary history.

Since this family survived, the legend would naturally represent it as having received the gift of long life, and this, from the Jewish point of view, would be regarded as the reward of piety. The connection with the longlived eagle would then easily follow. The Arab story, as given by Tabari (as above), conveys also a moral-religious lesson: Lokman and Marthad were assured that the gifts they received would not make them immortal; the seventh eagle, Lubad, is "time" or "fate," which brings everything to an end (so in Nabiga, as above). This form of the story is pre-islamic. Marthad receives the gift of piety; this perhaps points to some differences in the character and fortunes of the clans of Lokman and Marthad.

Once established as a popular hero, Lokman would give birth to proverbs; a large number of these are given by Hammer-Purgstall in *Jahrbücher der Literatur*, vol. 97, pp. 34-42, and in *Literaturgeschichte der Araber*, i. 36 ff.; they add nothing of importance to the material already cited. The fact that he appears only as sage or warrior, never as prophet, agrees with the supposition that his legend is in good part of Arab growth.

As to the form of the name Lokman, it might belong to a person or to a tribe. Tribes and families were sometimes called by a single name, without the prefix *banu*; see Nöldeke in Z.D.M.G., xl. 170 ff. The omission of the "sons" may be simply an abbreviation, or the name may have been originally that of a place. Tribal names ending in *an* occur abundantly in all parts of Arabia (many are given in Wüstenfeld's *Arabische Stämme* and Kremer's *Südarabische Sage*), and the termination is also found in names of places. "Lokman" is given as a place-name by El-Bekri in his *Geographical Dictionary* (ed. Wüstenfeld, p. 495); this, he says, is the opinion of Abu 'Amr and Ibn El-Kelbi, who

cite from Nabig'a a verse in which mention is made of a journey "from Beit Ras to Lokman;" Beit Ras, according to El-Bekri, p. 189, is a fortified place in Syria. El-Asmai, however, regards the Lokman of Nabig'a's verse as a man, a wine-dealer (the poet is speaking of the transportation of wine from Beit Ras). El-Bekri does not give the position of Lokman; there is nothing in what he says to prevent our putting it in Northern Arabia. If there was such a place in that region it would give some support to the view that the tribal or clan name Lokman was derived from or otherwise connected with the name of a place.* It is of course possible that it was also the name of a deity, though there is no evidence of this.

10. A Syriac Bahir'a Legend; by Dr. Richard J. H. Gottheil, of Columbia College, New York City.

Among the many forms with which the polemic literature of the Middle Ages clothed itself, that of the Apocalypse was a very favorite one. We possess a whole literature of such writings in Arabic, Hebrew, Syriac, and Latin. The point of this polemic lay often in the attempt to show that one religion had borrowed largely from a sister-religion.

No religion gave an opportunity for a polemic on these grounds as did the Mohammedan. Born in the full light of day, with enemies surrounding it on all sides, who were only too willing to note everything which might possibly tell against its founder, secrecy was impossible. A minute tradition of the sayings and doings of the Prophet, gathered together at no very late date, has put us in the position of seeing, as Renan cleverly says, a religion whilst it is being born.

Mohammed played a high game. It was either win or lose. He had taken it upon himself to astonish the Meccans with his knowledge of the history of their supposed ancestors, to put himself on a par with Jews and Christians by making a book the basis of the new religion. For this he needed material, which he took, without any scruple, from every possible quarter. At first this seems to have been done in good faith, at least as long as Hadig'a lived. Increasing knowledge did not benefit him morally. His most difficult task was to raise himself out of his own *G'ahiliyya*. He had involved himself—perhaps unintentionally—in contradictions of all sorts, which his Jewish and Arab opponents were not slow to point out to him. He had recourse to lying and fabrication. If we read the Qur'an chronologically, we can see how Mohammed gradually learned one thing and another; corrected some of his former utterances, patched them together, and added to them.

The question naturally arose: whence did Mohammed get this information? Tradition has stepped in and given us the names of two persons, Waraka, the learned cousin of Hadig'a, and Bahir'a,¹ a Christian monk.

* Doctor Richard Gottheil has called my attention to a passage in Az-Zuzeni's *Tarikh al-Hukama'*, quoted in Amari's *Bibliotheca Arabo-Sicula*, p. 614, in which it is said that Empedocles received instruction from "Lokman the sage in Syria."

¹ On the name, see Sprenger, *Mohammed* ii. p. 384; Steinschneider, *Polemische und Enegetische Lit. der Juden*, p. 160; Nöldeke, *Z.D.M.G.*, xii. p. 704.

We all know what Sprenger² has made out of this monk. Of Jewish descent, favoring Jewish-Christian ideas, he is represented as having been the mentor of Mohammed, the real power behind the throne. Few will feel able to follow Sprenger in this combination.³ What Mohammed knew of the Old and New Testament, bears to the very largest part, the stamp of hearsay.

The Mohammedan tradition as regards Bahîrâ is, in the main, this:⁴ either in his youth, whilst travelling to Syria for his future wife, or somewhat later in life, Mohammed came upon a Syrian Râhib (monk) who, by certain signs, discovers that he is the great prophet who is to appear.

This material has been made use of for many different legends. Such a one, in the Syriac language, I wish to present here to-day.⁵ The text is taken from two Mss. in the Sachau Collection of the Berlin Library (Ms. 10 and 87). The one, in a Nestorian hand of about the 16th or 17th century, is defective both at the beginning and at the end. The second Ms. is written in a Jacobite hand of this century. The variations between the two texts are very great. The older Ms. has additions at the end which do not at all occur in the younger one. I can only give a short account of the legend here, as text and translation will appear in the Journal of the Society.

The heading of Ms. 87 runs thus: "Further, by the help of God, our Lord Jesus, our hope, I write the story of Rabbân Sargîs (Sergius), who is called the Saracen, Bahîrâ, and the Syrian. They call him hater of the cross; monk, who lives on Mt. Sinai; and [the story of] how he taught Mohammed. Amen." The speaker throughout is one Yêsu'yab^b (Nest. 'Isô'yab^b) the Anchorite. The first part seems to be based on a history or legend of this Mâr(i) Sargîs. He came into conflict with his ecclesiastical superiors for having preached the worship of only one plain wooden cross; for, as he said, the Messiah was crucified only upon such a one. He was driven from his church, and came to Yathrib (Medina). Here he was well received by the Kât^bôlikâ Sab^brîsô' (سبح محمد), the same who, as Yêsu'yab^b tells us, converted Na'man, King of the Arabs, by means of his power of healing. He had come to Yathrib by way of Sinai, Egypt, the valley of Scete (الشميد), and Thebais (الظبي). In Yathrib he finds Bahîrâ, old in years, teaching the Arabs from the holy books and prophecying to them about the fourteen kings who were to rule over them.

Sargîs is overjoyed to see him, having met no Christian for forty years.⁶ Now he knows that his end is at hand. He tells Yêsu'yab^b the

² Sprenger, *Das Leben Mohammeds* i. 178 f.

³ Nöldeke, *loc. cit.*; Kuenen, *Volksreligion und Weltreligion*, p. 298.

⁴ Sprenger (*loc. cit.*) has gathered the Mohammedan traditions—see also ii. p. 384 f. See further Z.D.M.G. xii. p. 238 ff.

⁵ This is the only Syriac version that I know of. It is probably identical with the Arabic versions in the Medicean, Paris, and Bodleian libraries. According to the Catalogue, the title of the Bodl. Ms. is: "Acta Sergii سرجيوس الراهب qui ab Arabicis بكير vocatur." Steinschneider, *loc. cit.*

story of his coming to Yathrib, which is, in substance, as follows: He travels to Palestine to visit the holy places. Coming to the convent of Mt. Sinai, he passes a night on the top of the mountain, against the wishes of the monks. Here he sees a vision, which runs in the usual Apocalyptic style. He sees a white animal with twelve horns, a black one with seven, and then a bull coming along quietly. These are explained to mean: the kingdom of the Ismaelites, of the B'nai Hašem (عقب سهد), i. e. the Abbasides, and of the Mahdi the son of Fatima (عنه و ص فؤينه). He then sees a panther, a goat, and a lion. These represent the B'nai ŠFN, who will drive the Mohammedans back to Yathrib;⁶ of the Joktanites; and of the last of the children of Hagar. He then sees a wagon, which is to represent the Romans, and a whale (Ms. 87, dragon), the sign of Antichrist. He sees Satan falling from heaven; after whom Elijah comes with the four angels. By one of these angels Sargis is taken up to heaven, shown the worthies of old, and the fires of the nether world. Here he adds, "All this I saw in spirit and not in my body."

The same angel then sends him to the Emperor Maurice (عنه ممد), before whom he breaks his staff as a sign that the supremacy of the Romans (i. e. Byzantium) is coming to an end. Maurice listens to him quietly, but some of the nobles, under the leadership of Phocas (وعنه خذلا عنه ا) revolt. Thence Sargis goes to Persia, and does the same thing before K'hosro (عنه سرت Ms. 87, عهسرت i. e. K'hosrau II. Parviz). In Luristan he is again persecuted on account of his doctrines concerning the cross. He then goes to the Arabs and settles among them. After Yēšu'yab^b has been there seven days, Sargis dies. His bones work miracles for some time afterwards.

Now to account for the fact that Mohammed was such a poor Christian, although, as is afterwards related, he was instructed by Sargis, a certain Ka'ab is brought upon the stage. He spoiled the work of Sargis, and made the Arabs believe Mohammed to be the forerunner of the Messiah.⁷

We now come to the real Bahfrā story. It probably formed a distinct

⁶ Ms. 10; but Ms. 87 reads هسهم. At the end, where some of these names occur again, we read هسهم, i. e. Soph'yan, which is probably the correct reading.

⁷ Probably Ka'ab el 'Ahhār, a Jew renowned for his knowledge of Biblical stories. He became a Mohammedan under Omar. Ibn Koteiba, p. 219:

كعب الاحبار هو كعب بن مانع ويكنى ابا اسحاق وهو من حبيبر من آل ذى رعين وكان على دين يهود وينزل اليمين فاسلم هناك ثم قدم المدينة في اصرة عمر ثم حرج الى الشام فسكن حمص حتى توفي بها سنة اثنتين وثلاثين في خلافة عثمان Ms. 87 has عكف, which is simply a mistake for عكف, cf. Z.D.M.G. xxxiv. 738.

part of itself, the former being, at a later time, attached to it. Yêšu'yab^b hears it from a certain Ḥakim (حكيم) a pupil of Sargîs. One day Bahîrâ was standing outside of his cell. He sees a caravan coming. Mohammed is with them. Arrived at the cell, the others go in to eat, leaving Mohammed outside. But Bahîrâ, having recognized Mohammed by means of a halo around his head, calls him, and tells him all the great things his successors will do; of his own journey to Sinai and what he saw there; of his being a Christian and what Christianity is. Bahîrâ then asks Mohammed for special consideration for the monks who, like himself, have renounced all worldly goods. Mohammed fears that his people will not receive him as he is an unlettered man. Bahîrâ comforts him; promising to teach him what is necessary; of course, in secret. Mohammed is to say that this knowledge has come to him from Gabriel, and, strange for a Christian, to picture heaven to them in its full Mohammedan beauty. Mohammed's last question is: And should they say to me, bring some proof to verify what you have said, how shall I answer them? Bahîrâ replies: I shall write a book and bring it to you. On a Friday I shall put it in the horn of a cow. Do you collect all the people to one place, and say to them: Know that this day God will send down to you a writing with which you shall busy yourselves all your days. The earth was not worthy to receive it; the cow, therefore, had to be its bearer. It is therefore called to this day the Sura of the cow (سورة الحقة, Ms. 10, سورة الحقة).


Here the real Bahîrâ legend ends, and the narrative returns again to the future of the Mohammedan rule. The Ḥašimîtes are to be handed over to the Mahdî; the Joḡtanites come from the east and drive the Îsmaelîtes back to Yathrib; the Romans reign for a year and a half. Then come the Turks, who are followed by Gog and Magog. God, however, sends his messengers to destroy them. Elijah comes; the dragon is overcome, and the last judgment day is at hand. Here one Ms. ends.

The older Ms. contains a number of disjointed notes, presumably by the same Yêšu'yab^b. We learn that Sargîs was born in the city Sošan (سوشان), a city of Bé(i)t^h Garmai; that he was a Kaššîsâ; that the Arabs formerly worshipped an ابلیس, i. e. إبليس. There then follows:

عقبتهم، وماذا صنع. يصيرون كمن يفرسها. مايتروكها؟ وفرسها:
 حجبها، ويستكفيا. صنع صنه فوضمها، وجعلها في ايمصتكما فيك
 حقلها. اني يصف كمن واقفها. صنع صنع انصه.

There follow some more historical notices; the last person named being 'Ḥag'g'ag' ben Yussup^b 'Amîr of the whole land of Bé(i)t^h 'Armâyê (Assyria), in which he built a great city, and called its name . . . ' probably Wâsiṭ.⁸

⁸ His full name was الحجاج بن يوسف بن ابي عقيل See Ibn Doreid, ed. Wüstenfeld, p. 186. For the founding of Wâsiṭ, see Mokaddasi, ed. de Goeje, p. 118, l. 15; Weil, *Geschichte der Chalifen*, i. p. 465.


This is merely an outline of what the Ms. contains. A good many things, lying very distant from each other, are here brought together. Most of the persons mentioned can be readily identified. The assumed author seems to be Yêšû'yab^b of Gadala, who, as we learn from *Assemânî* (B. O. ii. 416; the Bee, p. ) lived at the beginning of the seventh century.⁹ It is impossible to tell how far he is the author; certainly not of the whole. The number of kings mentioned in the first part would bring the body of the story down to about the ninth century, the time of Harûn ar-Rašîd. In the tenth century we have the first mention of Bahîrâ being identified with Sargîs. It is by the historian Mas'udi. The final redaction, however, falls much later; as is shown by the mention of the Turks.

It is likewise difficult to say how much history there is in the figure of Sargîs. Perhaps the person intended is a Sargîs whom an historian mentions as having been born in Bê(i)t^h Garmai.¹⁰ But there are probably interwoven many facts belonging to the history of Sargîs, the patron saint of the Roman Syrians and Arabs. Great stress is laid upon the preaching of this Sargîs relative to the one cross. I do not know what historical fact the writer here refers to. That might give us a more definite clue.* The Byzantine historians do call him a *ψευδαββῆς*;¹¹ but I am unable to say whether the two stand in any relation to each other.

The writer lived probably in Persia. He lays great stress upon the coming of the Mahdî. The serpent which is to come at the end of the world is Zohak, the incarnation of Ahriman; who, the Persians believe, will then go through the world in triumph. It is the Persian Anti-christ.

11. On a Syriac manuscript of the New Testament belonging to the Rev. Mr. Neesan, by Dr. Richard J. H. Gottheil.

The Ms. measures 10½ by 7½ inches, and contained originally twenty-eight quires. Three leaves are wanting at the end, and one at the beginning. Quires 7 and 9 have only nine leaves each. There were originally 278 leaves. The Ms. is written upon parchment over which a certain preparation has been laid to facilitate the work of the scribe. The Ms. contains the usual P^risîtâ version, with the usual omissions. The writing is in a bold Estrangela hand of the thirteenth century. With the exception of a very few places the Ms. is legible throughout. The colophons have suffered most, and are very illegible. The Ms. was finished on a Monday in 'Âb, 1518 A. Gr. or 603 A. Heg. = 1206-7 A. D., in the "Monastery of the holy Mâr(i) Mikhâ'êl, companion of the angels," situated in Hesnâ 'Ebhîrâyâ [of] Mausal. Mr. Neesan tells me he knows only of a Hesnâ Suryâyâ; but see the authorities cited by Payne Smith, col. 1338. The monastery is mentioned in 'Abhdîšô' of

⁹ For Sab^hrîšô', see *ibid.* p. 415; the Bee, p. .

¹⁰ *Assemânî*, B. O. iii. 440.

¹¹ George Phrantza, p. 294: ἦν δὲ τις ψευδαββῆς ὀνόματι Σέργιος διὰ κακοπιστίαν ἐκ τῆς Κωνσταντινουπόλεως ἐξόριστος καὶ φίλος ἦν τῷ Βωάμυθ.

12. On the manuscript of a Syriac lexicographical treatise, belonging to the Union Theological Seminary of New York City; by Dr. Richard J. H. Gottheil.

In the year 1880, Prof. Hoffmann published a collection of grammatical and exegetical Syriac Nestorian writings under the title *Opuscula Nestoriana*. The first treatise is on words which are written alike, but pronounced differently. It is a late compilation of two previous works, one by Rabbân 'Nânîšô' of Ḥad^hyab^h, i. e. Adiabene, 650 A. D.; and the other by the celebrated Honein bar Iṣḥâk, who died in 873. Such treatises as these were much liked by Oriental grammarians. We have several of them in Arabic, Syriac, and in Hebrew. This little treatise, especially that of Honein is again interesting, as it shows us the influence of Greek learning upon Syriac Lexicography. This is not to be wondered at with a man like Honein. Nöldeke has already pointed out (Z.D.M.G. xxxv. 494) that the formula which introduces each rubric Δ ܕܢܗܘܢܐ reminds one of the Greek *διαφέρει*, etc., and a number of the explanations given can easily be found in Hesychius, Zonaras, the Etymologicum Magnum, etc. The Ms. of the East India House, however, does not seem to contain a good text; towards the end, the scribe cut off whatever he considered unnecessary, i. e. a clear statement of the vowels, the Rukkâk^hâ and Kuššâyâ belonging to each word. For us, to-day, this is perhaps the most important part, and we are glad whenever we can recover the same. In a Ms. belonging to the collection of Prof. Sachau (No. 72), I discovered a few pages of this treatise, containing a fuller recension. This will be published at the end of my edition of the Grammar of Eliâ of Šôb^hâ. The Union Theological Seminary of New York came into possession, about a year ago, through Rev. James E. Rogers, of a Ms. containing this treatise as well as the second one published by Hoffmann. I was glad to find that this also contained the longer recension. But in addition to this it contains a large amount of matter which is not to be found at all in Hoffmann's edition. This gives the Ms. a great importance and may help to throw more light upon the origin of the two original treatises. I have carefully collated the Ms. and have noted all the variants of any value. The same I hope to publish in the Journal of this Society.

The Ms. is of quite recent date, 120 pages in all, written upon paper bearing a Russian watermark. To all appearances the archetype must have been an excellent one. It is a pity that the copyist did not take greater pains. Nearly every page of the Ms. bears evidence of the haste with which the work was done, and many passages have been omitted merely through carelessness. It is worthy of note that in this Ms. the name of the original compiler is sometimes 'Nânîšô' and at times Ḥⁿnânîšô'. In the Berlin fragment it is only Ḥⁿnânîšô'. It is the mistake of ignorant scribes, writing according to ear.

We are not told by whom the Ms. was written or at what time. The only clue we have is that it was written by an inhabitant of Mâhōzâ or the neighborhood. In a grammatical Kânûn which the writer has inserted on page 60 about the use of the contracted form Δ ܕܢܗܘܢܐ for

قدم اند، he bases his use of it upon its occurrence in the Bible, 'Aprém and حاص و حتمها. 'He then adds that we inhabitants of Mâhōzâ do not make use of that form, but the inhabitants of Hirâ do. The present copy bears in some places the name K^thâb^hâ d^hlukâtê; the scribe was probably a certain Rûbîl D^ghulp^hâšan the son of Basil, who copied a number of Mss. which have come to this country.

13. On Avestan Similes. II. Similes from the Animal World; by Dr. A. V. Williams Jackson, of Columbia College, New York City.

Having discussed in a preceding paper * the general characteristics of Avestan similes, and having examined particularly the similes drawn from the realm of nature, the author now took up the second division of the subject—the similes derived from the animal world. In the same connection also he reviewed the not uninteresting passages in which some of the Avestan abstractions and divinities are represented in incarnate forms resembling various animals.

The similes from animals and their actions, it was first stated, are proportionately numerous in the Avesta and are often used with considerable effect; the fiercer beasts as well as the gentler appear before us—those which the Iranian hated as well as those which he loved. Thus we find things compared with the ravening wolf, and again with the timid sheep, with the loathsome frog (*vazagha*) and with the snake, with the beast of prey (*disu*), with the Khrafstras or noxious creatures generally, and with the fly. Resemblances are seen in the ways of birds, particularly the eagle (*saēna*), as well as indirectly in the characteristics of the vulture (*kahrkâsa*) and the fish, and likewise in the qualities of the horse, the camel, and the bull. Similes, moreover, it was found, are drawn from the dog, the guardian of the herd, and even so trifling a thing as a drop of milk affords a picturesque image.

Among the most striking, perhaps, of the similes in the Avesta, it was noted, are those in which (1) the wolf (*vehrka*) plays a rôle. This animal furnishes a likeness in three distinct passages, Vd. vii.53; Vd. xiii.8; Vd. xviii.38,44,50—the first of these being an instance of metaphor; and in a fourth, Vd. xviii.65, it appears in an indirect comparison. These passages were each commented upon and the question of metre in each case discussed. In this connection the simile at Vd. xix.33=(?) Yt. xxiv.27 in which (2) the sheep appears in direct contrast to the wolf was then taken up and parallels from the Bundeshish, iii.12 (=ix.19, Justi); xxx.18 (=lxxiv.10; Justi) were cited.

The next animal noted was (3) the frog (*vazagha*) which was looked upon by the Iranians with horror. Reasons were given for preferring so to render *vazagha* rather than by 'lizard.' The three places, Vd. v.36 = Vd. xii.22, and Vd. xviii.65, were further examined, the first two of the passages being regarded as not metrical, the last as doubtfully so.

It was then stated (4) that the snake (*azhi*) is only found once in a simile, namely in the indirect comparison, Vd. xviii.65, just spoken of, where

* See *Proceedings* for October, 1886 = *Journal*, vol. xiii., p. cxxxviii.

it figures in company with the wolf and the frog. At the same time special mention was made of the single instance of (5) a beast of prey (*disu*), Vd. xiii.47, furnishing an image to describe one of the characters of the dog. This latter passage afforded one of the rather uncommon instances of the carrying out of a parallel; although, as it was remarked, the comparison had more the nature of a description than of a regular simile. The text, besides, is unmetrical.

The brief comparisons in which (6) the *Khrafstras*, or noxious creatures in general, are found were then reviewed. The first of these, Vd. vii.2=Vd. viii.71, it was noticed, is unmetrical, owing probably to the extreme brevity of the expression; the other passage, Ys. xxxiv.9, proved interesting as giving us a simile in the *Gāthās*. The word *khrafstra* was further remarked on as used in the manner of a metaphor in Ys. xxviii.5, and probably also Ys. xxxiv.5=[Ys. xix.2].

Again in the passage Vd. viii.69,70—Vd. ix.25, where all that remains of the exorcised *Druj* is likened (7) to the wing of a fly (*mānāyēn ahē yatha makhšyāo parenem*), it was observed that the simile was more formal than real, amounting almost to an identification. The interpolated sentence in Vd. viii.22=(?) *Shāyast lā-Shāyast ix.14*, West, S.B.E. v. p. 314, and *Justi s. v. makhšī*, was likewise added and attention called at the same time to the adjective *makhšikehrpa*.

Passing then to the creatures that are used in the *Avesta* with a more agreeable association, the two images (8) from birds were taken up. With the first of these, Yt. xiii.70 (*yathanā meregho huperenō*), the simile in *Rig Veda* viii.20.10 was compared; the second, an indirect comparison, Ys. lvii.28, had practically before been treated under the head of nature. Similarly also had the likeness drawn (9) from the eagle (*saēna*), Yt. xiv.41, been previously dealt with; but here the adjective *upairisaēna*, 'higher than the eagle flies,' as probably equivalent to a simile at Ys. x.11 and (?) Yt. xix.3, was noticed. Then the description in Yt. xiv.29-33 was cited as containing implied similes to convey an idea of the sharpness of sight; and among the animals here mentioned appeared (10) the vulture (*kahrkāsa*), whose 'glance,' Yt. xiv.33=Yt. xvi.13, is used typically as we employ the 'eyes of the lynx.'

The other implied similes in the same passage, namely (11) from the *Kara* fish, Yt. xiv.29, and (12) from the horse, Yt. xiv.31, found their place here, references for the thought being made to the *Bundehish*. The horse it was shown also appears in an implied comparison, Yt. viii.24, cf. Yt. xix.68, to convey the notion of strength, and in the indirect comparison, Ys. lvii.28, already several times referred to. The direct simile from the horse, in the corrupt passage, Yt. xxiv.29, was examined, and the question as to the meaning of the adjective *aspōstaoyāo* at Yt. v.7, and Yt. viii.5,42, discussed in detail.

At this point the implied simile drawn from animal strength, Yt. viii.24 (cf. Yt. xix.68 in part), was recalled as including (13) the camel (*uštra*) and (14) the bull (*gāo*).

Next, Yt. xi.7, *yathaca pasuš-haurvāōnhō*, 'like the guardians of the flock,' although the word *spānō* is lacking, was regarded as a simile derived (15) from the dog; and further the fragmentary lines in Yt. xxiv).

44. it was thought, might be constructed into a metaphor or a simile ' [like] a mad [dog].'

The last question dealt with in regard to images from the animal world in general, was the simile (16) from the drop of milk, Ys. x.14, *yatha gāuš drafsō*, and in this matter Geldner's views, *Metrik.* p. 153, 160, were accepted.

In conclusion, the paper took up the passages where the various abstractions or divinities are given an incarnate form. These descriptions of transfigurations, as having somewhat the character of a simile, appropriately found their place here. It was mentioned as noteworthy that in far the greater part of these manifestations, the form conceived of was chosen from the animal kingdom; for example, in seven out of the ten incarnations of Verethraghna, the genius of victory, he is represented in some animal likeness. At Yt. v.61, Thraetaona appears in the shape of a vulture (*mereghahē kehṛpa kahrkāsahē*), but on the other hand Arvi Sura, Yt. v.64,78, in the semblance of a maiden (*kainīnō kehṛpa srīrayāō*). The star Tishtrya takes the form of a horse, (?) Yt. viii.8; of a youth, Yt. viii.13; of a bull, Yt. viii.16, cf. also Vd. xix.37; and again of a horse, Yt. viii.18,20,26,30,46; his opponent, the demon Apao-sha, likewise is pictured as a horse, Yt. vii.21,27. Even the fiend Druj comes in a form like a fly, Vd. vii.2, as seen above, and Ahriman again, in Yt. xv.12=Yt. xix.29, is represented as ridden in the shape of a horse. The conscience, however, Yt. xxii.9, appears in the image of a maiden; but in Yt. xix.34,36,38, the kingly glory is seen in the likeness of a bird. Finally, in Yt. xiv., Verethraghna appears in his various successive incarnations, as a wind (§2), as a bull (§7), as a horse (§9), as a camel (§11), as a boar (§15, cf. also Yt.x.70), as a youth (§17), as the bird Vāraghna (§19), as a ram (§23), as a buck (§25), and lastly as a man (§27).

14. The Afrigān Rapithwin of the Avesta, translated with comments; by Dr. A. V. Williams Jackson.

The Afrigān Rapithwin is a colloquy between Ahura Mazda and Zarathushtra, and is preceded and followed by the common Avestan formulaic prayers and ascriptions of praise. Rapithwina is the genius of the midday and of the southern quarter. For the time and circumstances appropriate to the recitation of this passage see Spiegel, *Av. Uebersetzung*, iii. p. 196. As no direct English translation has previously been published, the present attempt to solve some of the exegetical difficulties of the chapter may not be uncalled for.

A. TRANSLATION. 1. *Yathā ahū vairyo . . .* : 'As he (Zarathushtra) is the wished-for spiritual leader . . . ' 'Righteousness is the best good . . . ' 'I confess myself a worshipper of Mazda, a follower of Zarathushtra, a foe to the Daevas, a believer in Ahura; for sacrifice, praise, propitiation, and glorification unto Rapithwina the righteous and guardian lord of right; for sacrifice, praise, propitiation, and glorification unto Frādatfshu and Zañtuma, (each) righteous and the guardian of right.'

2. 'Unto Ahura Mazda radiant and glorious, unto the Amesha Speñtas, unto Asha Vahishta, and unto Ahura Mazda's [son, the] Fire,

unto all the righteous Yazatas, spiritual and material, unto the mighty, overpowering Fravashis of the righteous, unto the Fravashis of the first believers, unto the Fravashis of the next-of-kin, be propitiation for their sacrifice, their praise, propitiation, and glorification.' *Yathā ahū vairyō . . .*

3. 'Now surely spake Ahura Mazda to Spitama Zarathushtra the prayer of the guardian lord Rapithwina, (saying):

"Ask us [O righteous Z.] the questions which thou hast for us— for a question by thee is like that of the mighty— since the Ruler (Mazda) would fain make thee contented and mighty."

4. 'Zarathushtra asked Ahura Mazda :

"Ahura Mazda, spirit
most holy, righteous creator
of earthly beings!
How much does the man gain,
how much does the man merit,
how much is his reward,

5. who with the prayer of Rapithwina,
praises [the guardian lord] Rapithwina,
sacrifices to [the guardian lord] Rapithwina,
with well-washed hands,
with well-washed pressing-stones,
with out-spread Barsom,
with uplifted Haoma,
with blazing fire,
with recitation of the Ahuna [Vairya],
from (i. e. with) the tongue of one who is imbrued with Haoma,
from (i. e. with) the body of one who is subject to the law?"

6. 'Ahura Mazda answered him :

"In proportion as the wind (blowing)
from the southern region,
O Spitama Zarathushtra,
promotes and increases
all earthly life
and comes to the earth with blessing ;
so much does that man gain,
so much is his reward,

7. who with the prayer of Rapithwina,
etc., etc., etc., (as in § 5)."

8. 'Ahura Mazda pronounced to Spitama Zarathushtra the prayer of the lord Rapithwina.' 'Righteousness is the best good . . .'

9. 'Ahura Mazda's *etc. (as Afr. i.14-18).*'

10. 'As he (Zarathushtra) is the wished-for spiritual leader . . . ' 'I pray for sacrifice, praise, strength, and power for Ahura Mazda radiant and glorious, *etc. (as in § 2) . . . for the Fravashis of the next-of-kin. So may it come to pass as I pray . . .*'

B. COMMENTS. To 1. *ašahē rathwē*: see Bartholomae's remarks in his *Arische Forschungen* ii. p. 179; iii. p. 45.

To 2. *khšnaoθra* I consider a nom. like *tarōidūte* Yt. i.0, etc.; see Justi s. v. and p. 387 § 529 *fn.*; Bartholomae, *Ar. F.* ii. pp. 173, 186, *Handbuch d. Altiran. Dialekte* § 241; similarly *nemas* Ny. i.1, etc. Cf. also *ušta buyāf* Yt. x.91.

To 3. *mraoç*: 'spake the prayer.' For this use of *mrū* cf. Ys. liii.5, Geldner, *K.Z.* xxviii.191, Fragment iv.1,3, Geldner, *Drei Yasht*, p. 14, and Skt. *brū*, e. g. R.V. i.84.5. — *peresācā nāo* . . . is a quotation from Ys. xliii.10. — *thwā* . . . *émavatām*: the reading of Geldner's text at Ys. xliii.10 is here adopted, *thwā* being instrumental case. The sense, as Professor Geldner most kindly writes me, is that Ormazd is as glad to grant Zoroaster's request (*parštem thwā*), as one is to grant that of a mighty man whom one desires to place under an obligation. — *aēša* = 'contented' as in Vd. xiii.45: see further, Bartholomae, *K.Z.* xxviii.28.

To 4. *spéništa*: with the force of this epithet compare Milton, P.L. viii.492 "Creator bounteous and benign." — *evaç hō nā aihuyāitē* . . . : on this passage, see Geldner, *Studien zum Avesta*, i. p. 143 note; Bartholomae, *Altiran. Verbum*, p. 143 note. — *evaç—yathā—avaç*: *evaç* has here the idea of proportion as in Vd. ix.9, *evaç—yathā*, Vd. v.35; and similarly Vd. xvii.7 *avaç [aiçi] yathā*. Again *evaç mīzhdem—avaç mīzhdem* answer to each other in Vd. ix.43,44. The simile in the passage before us seems somewhat imperfectly expressed, as the answer to the question is not definitely given; but the general thought is, that the righteous man deserves and gains a reward as bounteous in proportion as the south wind brings growth and increase to the world—a thought which would appeal to those familiar in that country with the effect of the southern wind.

aihuyāitē, ašayēiti, mīzhdem aihāç: these words seem to be about synonymous, and merely elaborate the idea. Geldner derives *aihuyāitē* from *hu + ā*, "literally, 'sich bescheeren';" thus *aihuyāitē* is, by the familiar error, for *aihuvāitē*, Skt. *āsuwāte*. — *ašayēiti*, which answers in form to Skt. *ṛtaya-*, seems here to have the meaning 'earn a recompense by righteous action,' cf. Ys. xlv.6, *ašem šyaothanāiš debāzaiti ārmaitiš*, Ys. xlvi.15, and Bartholomae, *Ar. F.* ii. p. 139 f., 144, 161. It would thus be a denominative from *aša*, though possibly from *aši*. For a similar idea of reward resulting from sacrifice, see Ys. ix.9, *kā ahmāi ašiš ere-nāvi*, etc., and elsewhere in the Avesta. — *nairē* must be omitted on metrical grounds.

To 5. This section, judging from Yt. x.91; Ys. lxii.1; Ys. xix.6, is probably metrical; but how we are to reconstruct, it is somewhat difficult to decide. In regard to *yō rapithwinahē ratufriti*, there seems to be no better expedient than to read *friti*, considering *ratu-* here and with the following accusatives as a later interpolation, as does de Harlez, *Manuel de l'Avesta*, p. 252. Some color of probability is given to this, since each time *ratu-* directly follows *rapithwina-*. The metre of the close of the stanza is somewhat harsh, particularly *uzdātāç, çaiti haomāç*, as in Yt. x.91—see Geldner, *K. Z.* xxv. p. 525, note 127—but it seems advisable to admit for the Avesta the existence of the catalectic seven-syllabled verse as Professor Lanman, *A. O. S. Proceedings*, May, 1880, does for the Veda. For *āthraç* we may otherwise refer to Geldner, *Metrik*, p. 33; while *paiti* and *ahunāç* are read with synezesis, *vairyāç* being omitted as in Ys. xix.6.

The parallel lines *haomō-aiharštahē*, etc. make some difficulty, since *māthrō-hitahē* (m.) cannot agree with *tanvō* (f.) as we should perhaps at

first expect. Different ways of solving the difficulty might be proposed, but it is best, as Professor Geldner kindly suggests to me, to regard *hizvō* and *tanvō* as abl. in connection with *framarāiti*, *frāyazāitē*. The words of prayer come from the tongue out of the body (= person) of one who is called *haomō-aiharšta*, *māthrō-hita*. Then *harez*, when used of *haoma* and *zaothra*, will, as he further suggests, mean (1) 'to pour or strain, offer, etc.,' cf. Vsp. x.2, and (2) euphemistically 'taste, enjoy, drink:' thus Ys. lxviii.10 *dahmō-pairiṅharšta* means the offerings which were formally presented to the divinity, but in reality were enjoyed by the priest (*dahma*). The thought contained in *māthrō-hitahē tanvō* seems not unlike the New Testament idea, I. Cor. ix. 27, 20. The whole section metrically reconstructed will read:—

yō rapithwinahē [ratu-] fritti
rapithwinem [ratūm] framarāiti
rapithwinem [ratūm] frāyazāitē
frasnātaēibya zastāēibya
frasnātaēibya hāvanaēibya
frastaretāt paiti baresman
uzdātāt paiti haomāt
raociñtāt paiti āthrať
srārayamnāt paiti ahunāt [vairyāt]
haomō-aiharštahē hizvō
māthrō-hitahē tanvō.

To 6. The introductory words *paiti-šē* — *mazdāo*, I should prefer to consider not metrical. — *yatha vātō* . . : we must seek here to reconstruct the metre, since from a study of Avestan similes I believe such comparisons to be in general metrical. This fact will enable us perhaps to take liberties with the text, with more confidence than we otherwise should. First, I consider that some word qualifying *vātō* has fallen out of the text. One or two might be suggested as answering the purpose, *mazdadhātō*, Yt. xviii.5; xiv.2; Ys. xlii.3; Vsp. vii.4 (though generally in connection with *darešiš*, but cf. Yt. xiv.2), or *derezi-takethrō*, an epithet of the southern wind at Vd. iii.42 *yatha vātō derezi-takethrō*, or again quite possibly *upa-vāvō*, Yt. xxii.7.

rapithwitarāt naēmāt: these words seem undoubtedly best taken to form a line by themselves and are metrical, as Vd. xix.1; Yt. xxii.25, (in antithesis to Yt. xxii.7); Yt. xxii.42, and in other designations of place, Vd. i.19; Ys. lvii.29 = Yt. x.104. The line, however, wants one syllable as in the verse treated above. If the theory of the catalectic verse be not admitted, we might then supply the deficiency from the parallel line Yt. xxii.7 *rapithwitarāť haca naēmāt* and read in both places *rapithwitrať*, as also at times *apākhāhrem*—see Justi, s.v., and Geldner, *Studien* i.p.113—and *ātrēm* in the new edition of the Avesta. See further Bartholomae, *Ar. F.* ii.p.183. Still another view might possibly be suggested. Westergaard's reading in the passage before us is due only to "correction;" the manuscripts offer *rapithwen. tarāt* K. 25, W1,8, Lb2, Kh1; or *rapithwen. añtarāt* K19,12, P18. From this we might hazard a conjecture that the adjective is formed from *rapithwina-*, and that the true metrical reading in both places should be *rapithwinatarāt naēmāt*, with *haca* omitted as it is here and not infre-

quently, e. g. Vd. iii.42, et al. From the formulaic character of the line, however, it seems to me at present more reasonable to scan it on the theory of the catalectic verse, especially as we do not yet know what the variants at Yf. xxii.7 are.

spitama zarathuṣtra: the vocative, with the order adopted, will also form an independent line as often. But other arrangements of the above six words are possible. — *saoṣyañtica*: this ungrammatical interpolation is faulty and should be rejected as the introduction of a later hand.

aiwica . . : the ordinary text *aiwica aṣāiti jāmayēiti* can hardly be made metrical, and we must look for another reading. In the absence of better manuscript authority I would suggest, though with some misgivings, that K12 possibly comes here to the rescue. It offers *aiwi jasāiti zām yāiti*, and from this with the aid of the other variants we can make up a very good reading. The *ja* in *jasāiti* is only an error of the copyist for *ca*,—on a similar interchange of *c* and *j* see Geldner, *Drei Yasht*, p. 138, *Studien*, i. p. 72 note, and Ys. ix.15; xi.7, et al. This satisfies us that *aiwica* is correct and that *ṣāiti* not *aṣāiti* is alone the true reading, the *a* being dittography. Further, I would adopt *zām yāiti*, which gives an excellent sense and carries with it much probability, the interchange of *z* and *j* being by no means rare, cf. the variants at Ys. i.6; ii.6; viii.3,9; ix.4,8,14; x.14, etc. in the new edition. Thus *ṣāiti* will be instr. or dat. after *yāiti*, and with *aiwi*—*yāiti* compare PWb. *yū + abhi*. The text reconstructed will thus read:

yatha vātō . . .
rapithwitarāṭ naēmāṭ
spitama zarathuṣtra
vīspem ahūm astvañtem
frādhatīca veredhatīca [saoṣyañtica]
aiwica ṣāiti zām yāiti.

15. On the *Vyūha* or 'Battle-order' of the Mahābhārata; by Prof. Edward W. Hopkins, of Bryn Mawr, Penn.

The battle-order as depicted in the eighteen days' war formed the subject of this paper (enlarged from scattered references given in a paper last year). The writer had re-read the war with special attention to this point and sketched the arrays as described therein, giving some general remarks on usage in battle. The authorities upheld by the epic heroes are Bṛhaspati and Uṣanas; each is mentioned several times, the former being the inventor of the *sūci* (which is never ascribed to Manu). Attention was called to the differences between the *vyūha* given in the Epic, and the same as described by such comparatively modern works as the Kāmandakīya and Nītiprakāṣikā. With Manu the agreement is fair. More *vyūhas* are employed in the Epic than are recognized by the law-book. On the other hand some of the Manavic *vyūhas* are not (practically) recognized.

A question here in regard to this word in Manu (vii.187-192). It is commonly taken as 'order of march,' and there would thus be no reason why the *vyūha* in Manu should correspond with the battle *vyūha* of the Mbhā. Is it not possible, however, that the marching laws are finished

with the introduction of *vyūha* in Manu and that the passage cited refers (as the word does in the Epic) to 'battle-array,' *mārga* being 'maneuvers' (*yuddha mārga*), *gulma* (190) being 'squads,' *sthāne*, *yuddhe* being 'when the fighting ceases (and) in actual conflict'? This was given as a suggestion only. The use of *gulmās* for 'picket and fighting squad' was shown in the Epic.

In the Epic (except in late passages) the army is *caturbhāga*, *catur-aṅga*, 'fourfold;' in xii. and in Manu, *ṣadaṅginī*, 'sixfold.' To foot, cavalry, chariots, elephants, come *koça* and *yantra*, according to the passages of later origin.

The army arrays itself at dawn; fighting begins as soon as the hymn to the Sun is said; the armies go back to their tents the moment the sun sets. A single night is spent in fighting with torches. The chiefs go to bed as soon as they can after eating and bathing. If the commander is killed, the fight becomes a rout. The commander's position was discussed in three lights, that in respect of his king, in respect of the other generals, in respect of the whole army. He is often set aside. All his duties are taken by the king. He is superior *ex-officio* to those better born than himself. He first addresses the soldiers in a spirited speech. On his fate depends the battle of the day. A picture of the election of a commander was drawn. The king does not appoint one of himself. He is proposed in council and approved by acclamation after the king has 'entreated him' to be commander. The king's strategic position is nominally in the most protected part of the *vyūha*; often actually in mid-fight. A slight tendency was observed to praise the Pandu King as more ready to be in the van than the Kuru. The leaders had *cakra-rakṣāu*, not common soldiers, but a chariot-guard of two young high-born knights or princes.

The *vyūha* goes to pieces as soon as actual fight begins. The mass is drawn out on a fixed plan but in every case within a few minutes the 'array' breaks and all that seems left are the different forces stationed in general along a certain line, but these also soon get mixed. Championship duels are frequent. After such a rush *ante aciem* the chiefs sometimes 'return to their *vyūha*.' So complete is the disintegration of the day's *vyūha* that often another has to be made up. What is *vyūha*? Sometimes only a mass of men; sometimes a small group executing a particular maneuver; properly the whole array in a particular order.

A servile imitation of old *vyūhas* is noticed. One side does not hesitate to adopt a *vyūha* that has already proved worthless to the other side. The Pandus respect Bṛhaspati's advice and begin, being only about half as many as the Kurus, with a 'needle-shaped array.' The *makara* is employed once by the Pandus, and twice by the Kurus; the *çakaça*, twice by the Kurus, once with a beautiful *cakra* (*padma*) addition—the most complex array described. The *krāuñca* is used once by the Pandus and Kurus, once as a reserve. The *maṅḍala* is used as a complete 'circle' by the Kurus; and by the Pandus as 'half,' i. e. like *arḥacandra* or a crescent. The *çṛṅgātaka* is entirely new, used by the Pandus. The *garuḍa* and *çyena* are only used by the Kurus and the Pandus respectively. Others, as *mānuṣa*, *dāiva*, are vague, and probably only allude to numbers and appearance, not to a technical array.

Whenever a 'beast' or 'bird' *vyūha* is described, the metaphor is kept up. 'Such heroes were on his beak, such were his eyes, such on his tail and wings and fore-wings' (*prapakṣa!* the metaphor mixed with actual order). The position of allies is not always the same. They are generally in responsible but not most important positions. The Çakas, Yavanas, etc., are occasionally conspicuous.

The hypothetical numbers of different divisions were given, as interpolations. None of the technical divisions holds; *camū*, etc., never mean a limited number. To 'protect' a knight (often devolving on certain friends) is to ride not before, according to the Hindu idea, but just behind him. The warrior would be insulted if the protector got between him and his foes. The root *rakṣ* is thus generally 'support,' not 'protect.'

The 'council' and castes of fighters were incidentally discussed. All castes but the Brahman are depicted as fighting; Brahmans did of old; the usage survives in Droṇa, and especially in his son, who is 'the priest's son;' but though called 'Brahman,' he is really only a fighter and has nothing to do with the priestly caste. In the present version, the Brahmans are relegated to the praetorium and act as council at night-debates. When the army is utterly routed, the ministers run away, taking the king's harem home in wagons.

The 'agreement of war' made at the beginning between the parties (resembling in substance Mānu's chivalrous rules) is broken over and over again—in other words there was no agreement till a late interpolation made one. Significant is the fact that occasional unchivalrous behavior is not cried out against as violation of the 'agreement,' but as 'violation of eternal rule,' i. e. a few knightly rules were universally recognized, but often broken. However, when one blames Arjuna's conduct, one should not forget what provocation he had, and that the Kurus are continually fighting in the same way the Pandus do, that is, killing every one without regard to rules or order. A comparison of the four days to which the eighteen days seem critically reducible with the four days of fighting about Troy was resultless except for general images, and individual exploits.

The great chiefs can fight with any sort of weapons; the knowledge necessary for a good Senāpati is Veda and its six limbs, the *mānavī vidyā*, bow and arrows and various weapons, beside chariots. Usually even a leader of a *vyūha* keeps to one beloved weapon; his art, as shown, was chiefly, besides personal skill in 'maneuver,' directed to 'piercing' or 'surrounding.' No extensive combinations are made. The commander is in the middle van or, if he is not, the middle van (as usual) begins the fight. Occasionally it is the commander who guards the rear. No throwing out of wings first is tried, except in the 'crescent,' which must have touched the foe wing-first; but even here the fray appears to commence with the commander in the centre.

16. On Fire-Arms in Ancient India ; by Professor Hopkins.

I have in a former essay alluded to the theory of the author of 'Weapons, etc., of the Ancient Hindus,' editor of the *Nītiprakāśikā* and *Çukranīṭisāra*, which works I shall here designate as W., N., and Ç. The theory has been reviewed before. My object in this paper is to call attention to a few points in the argument as developed in the books mentioned above.

First, the confusion which the author permits himself in alluding to works of different ages under one rubric of 'ancient' can only mislead. All Hindu works that refer, or that he thinks refer, to the use of fire-arms are spoken of (apparently on that ground) as old, and any works helping to corroborate his theory belong to the 'oldest Sanskrit writings.' He refers thus to the *Kāmandakīya* (W. p. 69), though the work is really comparatively very late; he speaks of the *Nītisāra* which he edits as 'quoted in the most ancient and celebrated writings' (W. p. 34), among which the *Kāmandakīya* stands side by side with the *Mahābhārata*. Here are two faults. The *Mbhā.* does not quote this work, and, if it did, no one has a right to cite together as 'most ancient and celebrated' the epic and the work of *Kāmandakīya*. In respect to the *Mbhā.* the facts are these. A comparison with the *Kāmandakīya* shows such technical parallels that we must conclude that this work is not many centuries remote from the time that produced the presumed work of *Uçanas*, whereas the quotations given from the *Mahābhārata*, in so far as they coincide with this *Uçanas*, give us merely such general aphorisms as may be found in any legal work from the *Mbhā.* down to the present time: an *Uçanas* the Epic undoubtedly quotes, and an *Uçanas*-code; but nothing in the Epic would lead us to think that its writers knew this (modern) work. Again, using this word 'early' of all literatures alike, the writer groups with other works the *Nāīśadha* as an "undoubted (sic) early poem" (W. p. 67); a statement that, for the application he makes of 'early,' is untrue.

A second objection to the writer's method of collecting evidence is found in the loose way in which he uses text and commentary alike, as if one bore any relation to the other in respect of value for his argument. He makes no attempt to discriminate between the worth of a text and the annotator of it who lived perhaps a thousand years later. Of course the words of the commentator in any such case as that under discussion are absolutely valueless unless supported by evidence from the text itself. Still less is any division made by the writer between different parts of the same work, so that he actually quotes a phrase from the *Harivaṅça* that he might as well have taken from the Epic. As to a suggestion that the twelfth book of the Epic may be later than the rest we find nothing; yet all the real proof of his position he draws from this late portion. Indeed, so void of critical sense or so prejudiced does this writer appear, that he proposed to insert a wild *varia lectio* into the received text of *Manu*, because a late work composed at a gun-powder age has the verse altered; and instead of regarding N.vii.45 as a corruption of M.vii.90, he inverts the process, because N. would "not have dared to compose it after the text of *Manu* had been finally settled" (W. p. 71,

74, 48); drawing the result that the two works are of about the same age. Any one who can read through the Nitiprakāṣikā and our Manu together and then solemnly assert that they belong to about the same age is well fitted to draw the final conclusion that "fire-arms were known in India in the most ancient times" (W. p. 81), and "explosive powder . . . was known in India from the earliest period" (ib. p. 68).

We collect the proofs for these statements and find first some doubtful words in Vedic writings; on account of later writings our author regards these words as references to fire-arms. We come down to the later writings and find the proofs still fugitive, resting mainly on the interpretation given to these later writers by still later commentators. Having thus established gunpowder for ancient times, he reverts to our modern gunpowder-texts and carries them back to the time which produced the *smṛtis* and early Epic literature.'

I pass over many arguments that immediately present themselves against this deduction and come to the question: How does it happen that in the long and circumstantial account of the eighteen days' war there is not the slightest indication that gunpowder was known? His answer is ready: "It is most probable that the very common occurrence of gunpowder interfered with its being . . . worth mentioning" (W. p. 68). It is most probable that the guns used at the battle of Hastings were passed over by historians for the same reason.

But, jesting aside, here lies the defect that alone wrecks this argument. The writer will prove that the books he edits belong to the 'time of the early Epic.' It is not then enough for him to claim that gunpowder was known, or take refuge in its non-use on the battle-field. Indeed, as quoted above, he himself hints that it must have been so used—and so indeed, if the books are old; for they are full of minute directions in regard to small arms, and guns are assumed as not only known but in daily use.

I must confess to an ungenerous suspicion that the writer either clouded the account of the war in his own mind or was not well read in that account. He shows so few quotations that are really to the point from the period of greatest value.

Let me furnish a few references from this part of the Epic. The reader will at the same time remember that the works quoted at the head of this paper claim that *ṣaṭaghnī* is probably a rocket; *nālīka*, a gun; *yantra*, a cannon. Not that it is not admitted that they may be used otherwise. My contention is that in the cases I have noted from the early Epic they never can mean what he claims—and against the following I should like to be shown any use that justifies his argument.

But first a word on a point capable of doubt. We read "he saw *agnī-cakra* all around him," Mbhā. (vi.54.43). Is this word ever used otherwise than as a demoniac weapon of pure fire, indicating nothing but a supernatural power? No. Of the *ṣaṭaghnī* every hero makes use as a simple projectile. Bhīma meets a mass of weapons flung at him, and splits the *ṣaṭaghnī* which was among them with nine feathered arrows (vi.113.39 ff.; cf. vi.96.57 ff.). Again we read *srjanto vividhān bāṇān*

çataghniçca sakinîkinîh (viii.14.85), that is, the thing had bells attached and was flung. Çalya also cuts a *çataghni* flung by Yudhiçthira: "Nakula cast a spear at him; Sahadeva, a club; Yudhiçthira, a *çataghni*" (ix.13.32 cf. 36); the same weapon again (vii.183.44) is used with darts and other sharp weapons. It may be noted that, as respects the name, a *çakti* or spear is *ekaghni* (vii.183.2), and an *añkuçca* is *sarvaghâti* (vii.29.17), while darts are *çatrughnâh* (*khacarâh*, vii.156.132). Could *çataghni* come from *çatrughni*? *Citra* (like *dîpta*), 'bright and shining,' is used of this and other weapons (vii.188.21) as are fire-epithets generally, to denote mere brilliancy. Cf. vii.115.30 and 119.32; *agnyarikasankâçâh çarâh*; *alâtacakrapratimanâ dhanuh*.

The word *tûpâki*, 'gun,' does not of course occur. As to the word *nâlîka*, 'reed,' it is used only of darts, an important fact, as it, too, in the later language means gun. Lest any one should think that *karñi* prefixed made this word mean more, I would observe that the weapons forbidden by Manu are in common use—the *karñi*-dart is one with a barb or hook. A few quotations: *karñinâlikanârâcâiç çhâdayâm âsatad balam* (vi.106.18.); the weapons *karñinârâca*, *varâhakarña*, *nâlîka*, etc., are used as flung (vii.179.14); cf. *tam karñinâ 'tâçayad dhîdi* (vii.47.20; ib. 169.9), and the pun, *sa karñan karñinâ karñe punar vivyâdha* (ib. 48.1), with, finally, the group of *karñinâlikanârâcâs tomaraprâsaçaktayah* (viii.81.12).

Our author is in doubt whether the divine *açani* may not mean fire-arms (from Dr. von Bohlen); cf. the *açani* (made by the gods) with 'eight bells' (*açtaghançta*) flung as a missile by one man and caught by another (vii.156.157), or with eight wheels (a cannon?!) as elsewhere described (vii.175.96).

Agnicûrña, 'powder,' I do not find mention of. *Açmacûrña* is found, but it is the result of the mountaineers' *açmayuddha* (vii.121.45). As to the 'balls,' they are generally hand-missiles, used with clubs, etc. (vii.23.34); oil-balls at most are used; and nothing more are the *ayoguða* (loc. cit. et passim). As to *çara* meaning 'shot,' I have found no case that indicates such a transfer.

Yantra should, according to our writer, mean cannon. It is strange then that it means in the war almost anything but a cannon. It is a machine or contrivance of any kind, easily broken, grouped with ordinary arms, of more or less vague significance (vi.96.71); used as a drumstick (*yantrênâ 'hanyamânâh . . . mṛdañgâh*, vii.23.85); as protective armor (*visrastayantrakavacâh*, viii.98.9; *yantrabaddhâ vikavacâh*, vii.90.22; *yantranirmuktabandhanâh*, vii.93.70); it holds the flag (*papâta . . . çûraç . . . yantramukta iva dhvajâh*, vii.92.72) and—but cf. for more uses B.R. s.v. As a 'machine' it may refer to a catapult, and such is probably the meaning in the second and third *parvans* of the Epic, and the seventh chapter of Manu.

When we find *astrayantra* we ought certainly to have a cannon. Cf. the scene (ix.57.18): The two heroes engaged in a club-fight dance about each other, and perform all the maneuvers (*mârgâh*) resorted to by skilled combatants, agile as two cats (15,16), and,

*acarad Bhīmasenas tu mārgān bahuvīdhāns tathā
maṇḍalāni vicitrāṇi gatapratyāgatāni ca. 17.
astrayantrāṇi citrāṇi sthānāni vivīdhāni ca
parimokṣam praharāṇāṃ varjanam parīdhāvanam. 18.
abhidraṇam ākṣepam avasthānaṃ savīgraham
parivartanasamvartam avaplutam upaplutam. 19. Etc.*

We see that the best form of *yantra* gives no hold on 'cannon;' we see that neither here nor elsewhere do *ṣataghñī*, *nālika*, *yantra* indicate explosive powder. The same result for the whole war.

Now how is it in the twelfth book? Appealing here to adhyāyas 69 and 103, we might through the commentator be led to think of rockets and cannon. And yet there is nothing in the text to prove it, and the rest of the book has strong negative evidence against it.

In the first passage we read: 'The king must make walls with loop-holes, fill the moat with sharp stakes, crocodiles, etc.; the gates must be small; *in* (or *on*) *the gates* he must cause to be placed *massive machines* (*dvāreṣu ca gurūṇy eva yantrāṇi sthāpayet sadā*), and have the *hundred-killers* mounted' (*āropayec chataghñī*, 44). Immediately after this the king is told to go and visit stables, armories, and other public buildings; to store up in his fort oil, plants, poisoned arrows, with weapons such as spears, javelins, darts.

This represents an advance on the state of towns in the real Epic, but even here, remembering how vague is the meaning of *yantra* in the war-books and how specifically the *ṣataghñīs* are projectiles, we should hesitate to admit such an extraordinary interpretation as that of the commentator. In fact as in the "towns full of *yantra*" spoken of in the introductory books of the story we have here also no reason for assuming powder-machines, but only rams or catapults. The fact that no use is made of these in the whole tale would show that even regarded thus they were a late invention.

In the next passage (xii.103.38) the 'sixfold army' (a later division than the usual fourfold army of the Mbhā.) consists (beside horse, foot, elephants, chariots) of *koṣa* and *yantra*, treasure and 'machines'—cannon? It may be a battering ram; is there anything to indicate what it is?

Note also the fact that in a careful enumeration of methods of fighting as practiced by different nations no hint is given of this use of fire-arms already common, according to our author, and which must have been either strange to all or specially noteworthy in some: "Every man should fight according to his native usage; the Gāndhārāḥ and Sindhusāuvīrāḥ fight with knife and dart (*nakharaprāsayodhīnāḥ*); the Uçīnarāḥ are good at all weapons; the Easterners, Prācyāḥ, excel in elephant-fights (*mātaṅgayudha*), and are deceitful in fight (*kūṭayodhīnāḥ*); the Yavanāḥ and Kāmbojāḥ with those who live near Mathurā are good at boxing (*nīyuddhakuṣalāḥ*); the Southerners, Dākṣiṇātyāḥ, are swordsmen (*asipāṇayāḥ*). No fire-arms here (xii.101.1 ff.).

Our author states (W. p. 66) that he cannot find the passage referred to in Wheeler describing a fortified town, which would, he adds, be valuable evidence if found. On page 151, however, this same passage

is without compunction adduced again as the last and conclusive proof of the ancient use of gunpowder. In the attack on Dvārakā, in the ascent of Arjuna, and elsewhere, the author could have found both fortified towns and what is often translated 'cannon'. Most of these cases betray themselves as religious interpolations of a late date and certainly posterior to the 'early Epic'; but many even then will not bear the 'explosive' significance given by a too free rendering of the original.

We prefer to work backward to the ancient from the modern time, starting where we are sure. If there is no more proof than this for the use of powder in the real Epic, then the Vedic passages must stand by themselves. The Epic usage, outside of doubtful cases manifestly far later than the real poem gives no support to the idea that the Vedic period saw more fire-arms than did the Trojan. From the Vedic through the Epic there is little to make us doubt that the cities had no walls with cannon at the gate and that the soldiers had no weapon but the knife, club, bow, and primitive *astra*. The present gunpowder books seem like old texts unscrupulously handled—not in the desire to deceive Europeans but to make an antiquated old manual useful. Most of the 'fire-arms' are in the latter portion of the work of Uçanas and the work is longer than it is said to be at the outset. There are signs enough of modernness and little to show its antiquity from its contents. No Smārta can believe that it belongs to the 'time of the *smṛti* and early Epic literature.' A patriotic Hindu may be pardoned for supporting such a claim with the best Indian ingenuity: an ingenuous observer must deny it.

17. On Professor Bühler's *Manu*;* by Professor Hopkins.

Prof. Bühler's *Manu* is a long-expected and very welcome book. We find here a new translation of the *Bhṛgu Samhitā*, preceded by a valuable Introduction and followed by a most helpful Synopsis of parallel passages from a wide range of literature.

Of the translation itself it is not my purpose to speak. The fact that it was made independently of Burnell's (Books i-vii) renders of greater interest a comparison between these translations made by two of our first legal authorities. More help from commentators older than Kulūka has been had in the later rendering of the text, and the work is more valuable on that account.

It is of the Introduction that I wish particularly to speak. Every one who attacks Hindu law has a new theory to propound regarding the origin of *Manu*, the earliest metrical law-book. Prof. Bühler has advanced a fresh and very exciting theory. The views, hitherto, have been (after discarding the Hindu idea that the work was the product of an individual sage) that the code owes its origin to the prose *dharmaśūtra* of the Mānavas, a modification being, again, proposed to the effect that part of our present *śāstra* came not from the *sūtra* but from popular sayings ascribed to *Manu* for authority's sake, and incorporated with the new form of the Mānava code. The presumed date of the present redaction has embraced a period of more than a thousand years, some

* The Laws of *Manu*, translated with Extracts from seven Commentaries. It forms volume 25 of the Sacred Books of the East.

putting it as early as the time of Buddha, some as late as the sixth century A. D. There has been a more definite view advanced a few years ago (oddly enough ignored entirely by Prof. Bühler) that restricts the time, place, and origin of the work to 500 A. D. under Pulakeṣi a Cālu-kya king—a theory probably more clever than correct but deserving notice.

Prof. Bühler accepts of course the general *sūtra* origin, and, further, believes that our Saṁhitā is not the result of a gradual change but that of an ictic conversion from a *sūtra* into a *ṣāstra* (p. xcii), at which time the un-Manavic dicta were added, not by Manavic disciples, but by outsiders. He explains the self-contradictions in the text on the ground that Hindu writers often put conflicting views side by side, and thus obviates (against Prof. Jolly's view) the necessity for remodellers. Against my own view of dicta incorporated by Manavic scholars he suggests, while admitting such incorporation in some degree, that this was done by the outsiders who converted a sectarian book into a general code. In other words, Prof. Bühler supposes a legal college that, unsectarian, and composed of specialists in law, seized the old Mānava-sūtra and made it the (Bṛḥgu) Mānu-Saṁhitā of to-day.

As to the time of the (Bṛḥgu) Saṁhitā, Prof. Bühler sets the terminus a quo as "the age of the Mahābhārata;" the terminus ad quem as the dates of the metrical Smṛtis of Yājñavalkya and Nārada; though he admits that neither date is known. Narrowing down to a possible date between these limits, he gives the time for the conversion (of the *sūtra* into a metrical law-book) as about the second century A. D., concluding that the Bṛḥgu Saṁhitā certainly existed then and was "composed between that date and the second century B. C." (pp. cxiv, cxvii).

With these termini there can be no great dissatisfaction. But it seems to me that in respect of the precise date accuracy is sought where accuracy cannot exist. Is it not a little over-accurate to deduce as early a period as the second century A. D. for the date of conversion when our data give only this: (a) priority of Manu to Nārada (exact date unknown); (b) the existence of varying glosses on Manu, possibly in the sixth century; (c) the priority of Manu to the Bṛhaspati Smṛti which perhaps dates 'about 600 A. D.': (d) allusions in inscriptions (from 526 A. D. on) to Manu, vague as in the Epic, and an allusion in Bhāravi, (before 634 A. D.), to the 'path taught by Manu?'

From these data, however, the deduction is made, first, that the work must have been "much earlier" than the glosses (granted); second, that it "must have preceded it (the time of the Bṛhaspati Smṛti, 'about 600 A. D.') by several centuries" (unproven); third, that it is 'probable' that Bhāravi alludes to our Saṁhitā; and 'not improbable' that the same is true of the inscriptions. All (a + b + c + d) "are sufficient to permit the inference that the work such as we know it existed in the second century A. D." (p. cxiv).

Now I have no doubt it did exist, but I do not see that these proofs prove it. All we know about the gloss-argument is that a ninth century commentator quotes others who do not always give the same explanation of the same passage and that he calls them 'old' and 'very ancient.'

Thence is drawn the conclusion that they existed three or four centuries earlier than he (500-600 A. D.), and, because their readings or explanation are different, therefore the original text must have been much earlier still, or, by the help of Brhaspati, 'several centuries' older, i. e. "it existed in the second century." But with Brhaspati whose date is only probable we stand still "about 600 A. D." and can only guess at the time preceding.

The proof above is given to make "inevitable" the same date deduced as "not unwarrantable" from the mere fact of our Saṁhitā's precedence of Nārada whose work *probably* belongs to about "the middle of the first thousand years of our era" (p. cvii).

The difficulty I find here is that, when we start from *y* to *x*, three parallel lines of equal length lying between the two do not bring us any nearer to *x* than one of them would. We have evidence enough that the Saṁhitā existed before the sixth century, we will say, but three proofs of this do not bring us to the second century. Is it not building a good deal out of Medhātithi's old commentators to assert the number of centuries they must have preceded him and then add a specified number of centuries for the still older text? To deduce a space of just seven centuries from such proof seems at least daring. The method of proof is, moreover, in this particular not new. Dr. Burnell used the same argument, and instead of the second arrived at the fifth century. His subjective decision as to what 'old' and 'very ancient' meant happened to differ from that of Prof. Bühler.* But take away Medhātithi's 'ancients' and we have Brhaspati. Yes, but we are still at the same middle of the thousand years. So with each in turn. As to Bhāravi we find here a purely subjective decision bringing us the desired proof. Even were we sure that the Bhāravi citation does allude to our Saṁhitā (which is by no means certain), we only knew of this fact, that his fame, as Prof. Bühler says, was well established in 634 A. D., and therefore he "cannot possibly have lived later than in the beginning of the sixth century, but may be considerably older." The 'may be' cannot be attacked, but do we know that it takes more than a century to establish a poet's fame in India?

Prof. Bühler has done the best one could do with his materials. I question only whether the evidence can give us more than this, that our Saṁhitā antedates Nārada and Yājñavalkya.

For the earliest date we have 'very scant data;' the question is of course limited to some extent, very greatly according to Prof. Bühler, by the Yavana and Pahlava verse (x.43-44). "About the beginning of the second century or somewhat earlier" is Prof. Bühler's limit. The position of the Saṁhitā relative to the xii. and xiii. *parvans* of the Epic

* In 1884 Dr. Burnell's *Manu* was published. Prof. Bühler did not allude to the fact that the same argument from Medhātithi was used by Dr. Burnell. Could he have written his Introduction before this? But in it he quotes works later than that of Dr. Burnell's. I do not know whether Burnell originated the argument in detail or not. That he used it, ought, it seems to me, to have been spoken of in this work, though it is one naturally presenting itself to one who sees the '*parve,*' etc.

teaches us 'nothing definite.' Not enough force, it seems to me, is given to the fact that the late books of the Epic say nothing of *dharmasūtra* and do mention the *dharmācāstra* (of Manu). The result is drawn, notwithstanding, that the authors knew only the *dharmasūtra* (p. xcvi). The later books of the Epic seem to me to be so very much later that I cannot help protesting against such remarks as "the existing text of our Smṛti" is "younger than the Epic." Does Prof. Bühler mean that the whole Mahābhārata was completed before our present text of Manu existed? In point of fact when the Epic is quoted as a time-guide it cannot be taken as a continuous whole, unless we are handling epochs of half-thousand-years. Even the Manu-text, it seems to me, ought to be spoken of always in portions, early or late; especially uncertain in total results is the stress laid on the interpretation of one verse. In an ordinary work we are not shy of interpolations. Is it not simply because we have so little proof besides that the idea of such a verse as that cited above being an interpolation is repugnant to us?

The whole subject appears to me unsettled. Our present Saṁhitā cannot be proved to have been in existence much before the middle of the first thousand years A. D.; on the other hand, it is probable that it did exist much earlier, and may have existed in some form or other in the time of the late Epic—the *cāstra* there quoted not being our present text, but, again, by no means as yet proved to have been no metrical *cāstra* at all. As no one knows the date of the present form of the Epic, or the xii.-xiii. parvan-appendix to the Epic, the time in terms of years is unknown. I see no reason yet for not believing that a metrical Manu-*cāstra* existed in some shape before the completion of the xii.-xiii. parvans of the Epic. In respect of greater precision, *non liquet* seems to me at present a more scientific result than any *q. e. d.*

The Synopsis calls forth hearty thanks from every student of the law. The great labor of comparing the parallel passages of the Epic has been done almost exhaustively, so much so that I hesitate to add the few below lest it should seem an indication of incompleteness in the Synopsis. Let me say at once, therefore, that those noted here are but a pin added to the cushion-full collected by Prof. Bühler. Moreover, many are given not (as the Synopsis was meant) to supply verses, but to refer to passages that may be of interest to those still at work on the text. I have sometimes noted verses (like Prof. Bühler's reference to ix.213-4-5) that are not really identical, so that marks of equality (=), 'like,' and 'cf.' are used to point out respectively identical words, equivalent verses, and general similarity. The likeness in pith is, historically, often more instructive than that in the outer form.

In the First Book of Manu: Note the set formula of the Epic in introducing religious and philosophical talk; thus, with Manu i.1, cf. Mbhā. xii.303.8, and xii.36.2-3, "of Manu:" with 5, cf. xii.166.11, and 182.6, "of Bhṛgu;" with 12-13, cf. xii.312.1-5 and observe the same order of verses; with 34-44, cf. xii.166.16-24; with 35, cf. i.65.10 ff.; with 52-57, cf. xii.313.1-7, and with 80, cf. ib. 10 and 2; with 78, cf. xii.302.14 ff., ib. 309.3; 85, like ib. 261.8. Manu i.99 (*anu* for *adhi*)=xii.72.6.

Book Two : With 2, cf. xii.167.11 ff., 29; 12, like xii.260.3; 59, cf. (differs) xiii.104.104; with 83, cf. xii.361.10, and xiii.7.14; 94=i.75.50 and ib. 85.12: 110(a)=xii.288.35(a), and (b) nearly like (b); 114=i.3.91, and xii.328.51(b) 52(a), (a) almost=51(b), b=52(a); 145 like xiii.105.14(b)15(a) but note only 'ten'; 159(b) like xii.288.18(a); 161, cf. *triṣṭubh* xiii.104.31; with 159,179, cf. xii.104.32,30; with 178-179, cf. xii.270.24-25.

Book Three : With 4,7,8, cf. xiii.104.123 and 131 ff.; 17(a)=xiii.47.9(a); 48 like xiii.87.10 ff.; 85, cf. xiii.92.3 ff.; 92,102,108,116,117,119 like and in part=xiii.97.15 ff., while 101(a)=v.36.34(a) and (b) nearly=(b); 130(a) except pl.=xiii.90.53(b); 131 like ib. 54; 150 ff. all like a parody of xiii.90 adhy.; 158(a) ('prisoner' should be 'poisoner' in translation; to *kunḍāci*, cf. NR. here and at xiii.143.24)=v.35.46(a); 168=xiii.90.45 (except *crād-dham*); with (153 and) 173, cf. xii.84.2 ff.; 258 like xiii.93.7,8; 273-274, add xiii.126.35-36; 278=xiii.87.19 (with 276-278, cf. ib. 18); 285 (and iv.5), cf. xiii.93.15.

Book Four : With 39 cf. loosely xii.193.8; with 52-53, cf. parts of xii. 193.24,17; with 56, cf. xii.193.3, and, in general, ib. 283.54; 71(a)=xii.193. 13(a); 76, add to citation from xii. that the rule xii.193.7 is in part ascribed to Nārada; 78 like xiii.104.58(a); 83(a) almost=xiii.104.67(b), and (b) very like ib. 70(a); 85 almost the same as xiii.125.9; with 88, cf. xii.322.29 ff.; 143 like xiii.104.58; with 189-190 cf. images at xii.36.40, and with 195 cf. loosely xiii.163.56 ff.; with 215, cf. xii.295.5,6.

Book Five : With 31, cf. xiii.115.53 'rule made by Manu'; with 55, cf. same derivation xiii.116.35; with 56 (*prarṣṭi*), cf. xii.199.40 and xiii.115. 85.

Book Six : With 1 and 2, cf. similar xii.245.4; with 5, cf. for gods xiii. 104.41; with 6, cf. the like xii.304.20; with 5,12,14,54, cf. xiii.91.38 ff.; with 17,18 (and Manu iv.7), cf. similar xii.245.2,9; with 20, cf. ib. 12(b),13 (a) (and with ff., cf. ff.); with 33, cf. xii.246.4(b); with 41, cf. xii.279.3, and (b)=(b); 56(a)=xii.279.9(a); with 58, cf. ib. 11 (with 56,57, cf. also in general xii.287.14); with 60, cf. xii.246.19; with 63, cf. xii.304.44; 66 like in sense (*liṅgāni utpathabhūtāni*) xii.321.47; with 76, cf. xii.298.14; 90=xii.296.39 (except (b) *evam*); with 95-96, cf. xii.160.29.

Book Seven : 8(b)=xii.68.40(b); with 41, cf. xii.60.39 (Çūdraḥ Pāijavana); with 50, cf. ii.68.20; iii.13.7; xii.59.60; xiii.157.33; with 91, cf. xii. 96.3; with 178-9, cf. v.39.55; with 182, cf. xii.100.9 ff.; 191, add vi.19.4 and cf. the rule practised in ib. 43.102.

Book Eight : 44 like xii.182.21; with 85, cf. xiii.163.56; with 86, cf. xii. 322.55; with 351, proverb, cf. xii.84.19; ib. 56.30; ib. 15.55; iii.29.27; 377, for *kaṭāgni*, cf. xii.97.22; 416 like ii.71.1 (B. omits one before), repeated i.82.22 (*bhāryā dāsaḥ sutaḥ; yat te*, etc.), and v.33.64.

Book Nine : 14 like xiii.38.17; with 26, cf. v.38.11; with 85, cf. (expressly "from Manu's çāstra") xiii.47.35 (the ref. on vs. 87 is adhy. 47, not 46); 150-156 like loc. cit. (Synop. s. vs. 150), viz. xiii.47.11-16, and note 154(b)=ib. 21(b) with slight changes; with 160 ff., cf. loosely xiii. 49.12 ff.; with 295-298, cf. xii.321.154-155; 301 like xii.91.6; with 303, cf. xii.68.41 ff., and ib. 139.103 ff.

Book Ten : with 3, cf. i.11.16; (4, cf. xiii.47, not 46); with 8 ff., cf. xiii.48.5 ff., and with 10,16,17,41,46, cf. xiii.49.5; with 63, cf. in general xii.297.23-24; with 126-127, cf. xii.297.25-29,33-34.

Book Eleven : 56 like v.40.3, and (b) like xiii.22.20(b); with 83, cf. xii.152.30; with 104-105, cf. xii.35.20; with 147, cf. xii.165.34; with 179, cf. *tristubh* xii.165.29.

Book Twelve : with 12 and 14, cf. xii.219.40(b); 27 ff. like xii.248.20-25, and ib. 286.29-31; 78 like xiii.116.28-29; 81 like xii.206.4 (Manu i.28) and xv.34.18; with 82-84, cf. xiii.113.1 ff.

After the usual vote of thanks to the American Academy for the use of its assembly-room, the Society adjourned to meet again on Wednesday, October 26, 1887.

Proceedings at Baltimore, October 26th and 27th, 1887.

THE Society assembled at 3 o'clock, Wednesday afternoon, in Hopkins Hall of the Johns Hopkins University. In the absence of the President, Professor Whitney, the conduct of proceedings was assumed by the Vice-President, Rev. Dr. Ward, of New York.

On motion, Professor Bloomfield, of Baltimore, was called to perform the duties of the Recording Secretary, Professor Lyon of Cambridge. The minutes of the May meeting were read and approved. For the Committee of Arrangements, President Gilman announced that the Society would continue in session until 5.30 P. M.; that the Thursday morning session would begin at 9.30 A. M.: and that the Directors had accepted for the Society an invitation to meet socially at his house in the evening (Wednesday), at 8 o'clock.

On behalf of the Directors, Professor Lanman, the Corresponding Secretary, gave notice that the next meeting would be held at Boston, on Wednesday, May 2, 1888, and that the Recording and Corresponding Secretaries would serve as a Committee of Arrangements.

On recommendation of the Directors, the following persons were elected :

As Honorary Members—

Professor Rāmkrishna Gopāl Bhāndārkar, of the Dekkan College, Poona, Bombay ;

Professor Georg Bühler, of the University of Vienna ;

Professor Franz Kielhorn, of the University of Göttingen ;

Bābū Rājendralāla Mitra, C. I. E., LL.D., of Calcutta ;

Raol Sahib Shankar Pāndurang Pandit, Official Interpreter to Government for the Bombay Presidency ;

Major-General Sir Henry C. Rawlinson, of London, Director of the Royal Asiatic Society ;

Professor Eduard Sachau, of the University of Berlin ;

Colonel Henry Yule, C. B., of London, Vice-President of the Royal Asiatic Society.

As Corresponding Member—

Dastur Jamaspji Minocheherji Jamasp Asana, of Bombay ;

And as Corporate Members—

- Mr. William M. Arnolt, Johns Hopkins University, Baltimore, Md.;
Rev. Dr. Aaron S. Bettelheim, of the Hebrew Congregation of Baltimore;
Mr. George C. Howland, Irving Park, Chicago, Illinois;
Rev. Dr. Marcus Jastrow, Philadelphia, Pa.;
Mr. Herbert W. Magoun, Johns Hopkins University, Baltimore, Md.;
Professor Ira M. Price, Morgan Park, Illinois;
Rev. Dr. Benjamin Szold, Baltimore, Md.;
Mr. William Cleveland Thayer, Baltimore, Md.;
Dr. Edward Freeman Underwood, Bombay Fort, Bombay.

The Corresponding Secretary laid before the Society some of the letters of the half-year. Mr. Rockhill, of the American Legation at Peking, writes under date of Sept. 8, 1887, enclosing a paper on the historical and commercial relations of Korea with China. He says: "While acting as U. S. Chargé d'Affaires in Korea in the latter part of last year and the early part of this, my attention was frequently called to the peculiar relations existing between the two countries and to the explanation given me of them by high Korean officials. On my return to China, I read what books I could find in Chinese on the subject, and the general results are in the paper I send you. . . . I am going off in a week to Wu t'ai shan and the Loess country on a month's trip. I hope I may see or hear of something which may prove of interest. Quite a number of books for the study of Chinese (Northern Mandarin) have appeared this year. The last, a new edition of Sir Thomas Wade's famous *Tzu-ehi chi*, is of course by far the best and will be the most generally used." He also encloses a clipping from the North China Daily News of Shanghai giving the results of the recent census, translated from a document emanating from the board of revenue. The total for fifteen provinces in 1885 is given as 319,383,500. And there were five provinces whose returns had not been received, but whose population cannot be much short of sixty millions. Mr. Rockhill thinks, however, that a grand total of 380 millions is considerably above the true figure.

Shankar P. Pandit writes from Mahābaleshvar, May 23, 1887, and sends a copy of his edition of the *Gaṇḍvaho*, a Prakrit poem by Vākpati, who lived in the last part of the seventh and the first part of the eighth centuries. The poem celebrates the glory of King Yaśovarman of Kanauj. The text is preceded by an elaborate critical and historical introduction. The editor writes again from Poona, Aug. 23, 1887, sending advance sheets of his quarto edition of the Atharva-veda, in the *saṁhitā* and *pada-pāthas*, and accompanied by the commentary of Sāyana. The printed sheets go to page 704, including nearly to the end of the fourth *Kāṇḍa*. Sāyana's quotations of the *Kāuṣika-sūtra* are often from memory or from a version different from ours,

Dr. A. V. Williams Jackson gives a pleasing report of the progress of the edition of the Avesta, which his teacher, Professor Geldner of Halle, is now publishing. The entire Yasna has already appeared. The fourth fascicle, containing Yashts 1-4, is ready; and the fifth fascicle, going to Yasht 10, is in type. The editor is now collating the MSS. in the Vendīdād.

Professor Lindner of Leipzig, after completing the translation of the Kāushitaki-brāhmaṇa, recently edited in the original by him, proposes to write a manual of the history of religions.

Professor Adolf Holtzmann of Freiburg in Baden writes that he is at work upon an introduction to the Mahā-bhārata. We may add that such a guide to the study of the vast poem is very much needed, and that in this task the author may be sure of the best wishes of his colleagues.

Professor I. H. Hall writes from New York that the pressing work of the Museum does not permit his attending the meeting. Apropos of the frequent mistakes in citing the name of the author of the work so indispensable to Syriac scholars, the "Bibliotheca Orientalis Clementino-Vaticana," Professor Hall writes in substance as follows: It was compiled by a Maronite monk named Joseph Simon Assemāni. The As-Semāni (or Is-Semāni) stands for Al-Semāni (or Il-Semāni). The literary Arabic form is Il-Semāniyū and means 'The Simeonite.' The full name, then, means 'Joseph Simon, of the family of Simeon.' Complete and consistent latinization would require us to write in the nominative Josephus Simon Assemanius (with only one *n*), as the English scholars sometimes do, or Assemanus, as he himself did. The form Assemani is at once the genitive of his latinized name and also the transcription of his name in Arabic.

President Gilman brought before the Society photographic copies of the manuscript of the "Teaching of the Apostles," recently sent to the Johns Hopkins University by the Patriarch of Jerusalem. The original MS. has been carried from Constantinople to Jerusalem, where it is now treasured. Fac-similes of the photographs will soon be published, with notes, under the editorial supervision of Professor J. Rendel Harris.

He also referred to a visit which he had recently made to the St. Ignatius mission in Montana, and called the Society's attention to a Dictionary (in two parts and more than a thousand pages) of the "Kalispel or Flathead Indian Language," printed at the mission by the Jesuit Fathers, between 1877 and 1879.

The following communications were presented.

1. On the significance of the Gāthās in the Avestā. Yasna 55.; by Dr. A. V. Williams Jackson (of Columbia College, New York City), now at the University of Halle, Germany; presented by the Corresponding Secretary.

In considering the importance of the Gāthās and their relative position with reference to the rest of the Avesta, there arises the question of their age in comparison with the other portions of the book sacred

to the Zoroastrians; for the age of these hymns as well as their character would have much to do with the estimation in which they were held.

It has been argued by some that the Gāthās are younger or at least not older than the great body of the Avesta (see de Harlez, *Av. trad.* Introd. p. 183 ff.; Spiegel, *Z.D.M.G.* xxxiii. 315); that Zoroaster was a mythical personage, and the Gāthās a priestly work of after times. The error of such a view has previously on different occasions been sufficiently proved, and it is not necessary now to speak of the means that have been employed to establish the antiquity of these hymns; nor is there opportunity just here to show the influence which the Gāthās have had upon the rest of the Avesta, an influence which pervades the whole; for in almost countless instances are found not quotations alone from these old anthems, but close imitations in phrases and words. This latter question will, it is hoped, be dealt with at some future time, as it will play an important part in overthrowing the argument advanced by some that such citations and references are due to interpolation. There is no need, moreover, now to recall the many arguments connected with the fact that in such passages the Gāthās are always spoken of with the reverence that age and merit had given them, a sanctity which showed how significant they had become to the followers of Zoroaster's teachings.

Sufficient it is to say that the main proof will be found within these hymns themselves. For if one will read in general aright the spirit that illuminates these compositions, the life that is there pictured, the personality and reality of Zoroaster as he moves among the people, there will then remain not a moment of doubt as to the Gāthās being anterior to all other parts of the Avesta and removed at considerable distance in time. The personal Zoroaster, the composer of these hymns, the founder of the religion, struggling to make his belief accepted, is a person far different from the being that in the Yashts had already become shadowy, almost enveloped with the cloud of myth, and far different again from the deified priestly functionary who in the Vendīdād, in portions of the Yasna, and in the remainder of the Avesta, appears before us at the head of the religion there inculcated—a religion fully formed and which had long possessed its power. The Zoroaster of the Gāthās, the subjective hymns, is the true one; the Zoroaster of all other portions of the literature, the idealized development. It was time alone that had thrown the halo about him—such is ever the tendency, not the reverse.

Thus all the other parts of the literature, the objective parts we might say, in which the ideal Zoroaster plays the rôle, though their subject-matter may be older, must themselves necessarily be younger, far younger, than the Gāthās. It is in the Gāthās, then, and in the personal Zoroaster that we must look for the origin of the religion, and hence the importance of these old hymns, and the importance which they had for the Zoroastrians. To show further the estimation in which they were held in the Avesta, one prayer, Yasna lv., inserted after the last Gāthā, will be sufficient. It describes the true worth that characterizes the Gāthās, their significance to the worshippers of Mazda.

YASNA IV. A. TRANSLATION. 1. 'Our whole selves, our bodies, life and limb, our forms and forces, our consciousness, our soul and Fravashi, we offer and present; and we offer and present them to the holy sacred Gāthās which have the power of Ratus.

2. 'The Gāthās which exist for us as guardians and protectors and as spiritual sustenance, and which exist for our soul as food and raiment,—these Gāthās are for us both guardians and protectors and spiritual sustenance, these are for our soul both food and raiment. May they be to us givers of good reward, rich reward, of the reward of Asha, for the life beyond the present after the separation of body and soul.

3. 'May these, the Staota Yesnya, Hymns of Worship, come to us with might and victory, come to us with health and healing, come with increase and with growth, with welfare and with mighty help, with goodness and with righteousness, come with concord and with love; as the most bounteous Mazda victorious, who furthers his beings, has produced them for protecting the beings of Asha, for guarding the beings of Asha, who are to be saved and who will save, and for guarding and protecting the whole existence of the righteous man.

4. 'Every righteous man that comes making his absolution with this in a benediction, mayest Thou (O Asha) credit with good thoughts, good words, good deeds.

5. 'We worship (therefore) Asha and Vohu Mano, we worship the holy sacred Gāthās which have the power of Ratus.

6. 'The Staota Yesnya we worship, which are the precepts for the first life; which are memorized and put in use, which are learned and taught, which are kept in memory and practised, which are thought to one's self and recited aloud, which are worshipped, and which bring mankind in unity with Thy will.

7. 'The Chapter of the Staota Yesnya we worship, we worship the intoning, recital, singing, and sacrificial worship of the Staota Yesnya.' *Yēihē hātām . . .*

B. COMMENTS. To 1. *gaēthaōs*, as derived from *g/ji* 'live' (compare Skt. *gaya*, Av. *gaya*, 1 *ji*) denotes 'beings, living creatures, family, household, possessions,' cf. Germ. 'Wesen, Anwesen.' Here *vīspaō gaēthaō* means 'our whole beings, ourselves,' and is distributed physically and spiritually in what follows. With *gaēthaōsca tanvasca . . . pairica dademahī ūca vādhayamahī*, compare the words of our Prayer Book: 'And here we offer and present . . . ourselves, our souls and bodies.' —*azdebīš* is here, as in Vd. vi.49, the instrumental plural neuter used as a general plural case. So also *nāmēniš*, Yt. i.11, 18, 19, *īmaō nāmēniš dreñjayō framrava* 'these names after murmuring them pronounce:' and *asēbiš* in Yt. xiii.38, *khṛūmaō asēbiš*

frazañta | *dānundām baēvare-paitinām* ‘cruelly are plundered (cf. Skt. *ḥyā, jīnāti*) the abodes of the Danus who have fallen by myriads.’ See also Bartholomæ, *Arische Forschungen* i. p. 14; ii. p. 112; Geldner, *Drei Yasht* p. 136; *K.Z.* xxv. 585; xxvii. 225. — *uštānds*, in whatever way we may render it, can only mean ‘the vital principle,’ whether it be ‘life,’ or ‘soul’ in the sense of ‘the breath of life;’ it is the vital power, the physical life inherent in the body and lost at death (Vd. v. 9 et al.), in opposition to the immortal part of man. In one half of the total number of passages in which the word occurs, it is found in connection with *ast-*, lit. ‘bone,’ both being taken together to denote the human being. In the instance before us, the two mean ‘life and limb;’ of course in the original both words are in the plural and the order is reversed. In the same way we may render Ys. xii. 3 *nōiŋ astō nōiŋ uštānahē cinmānō* ‘attempts (acc. pl.) upon neither life nor limb;’ and Vd. v. 9 *ātars̄ hañdazhaiti asca uštānemca* ‘the fire consumes both life and limb.’ In comparison with the offering in our present passage, see Ys. xiii. 4 = xiv. 2 = Vsp. v. 2 *pairi-dadhāmi tanvasciŋ hvahyaō uštānem* ‘I give the life out of my very (*ciŋ*) body.’ — *baodhas, urvānem, fravašim*: these are three of the five elements of the soul which the faith of the Parsis acknowledges; the other two, *ahu* and *daēna*, completing the list, are found Ys. xxvi. 4 = Yt. xiii. 149. From the above we may, after Professor Geldner, construct the organism of man about as in the scheme tabulated on page ccxiv. In ordinary life, however, these concepts were not sharply distinguished; it should be remarked that Ahura Mazda has a *kerefš*, Ys. i. 1.

ratukhšathrābyō: this adjective, like the other compounds of *khšathra* (compare especially Vsp. xi. 1 *ahurāi mazdāi . . hu-khšathrāi . . ratukhšathrāi*) must mean ‘having *ratu*-power, having the quality of Ratus;’ the Gāthās being in Afr. ii. 3 and elsewhere each separately invoked as ‘chiefs, Ratus.’ Such is the meaning of the word also in Vd. xix. 38; Ys. lxxi. 11; Afr. ii. 1; and such, likewise, must be its signification in Yt. xxii. 18; Gāh iv. 9; Vsp. iii. 4. Thus Gāh iv. 9 *nāirikāmca [ašaonīm] yazamaidē frāyō-humatām frāyō-hūktām frāyō-hvarštām huš-hām-sāstām ratukhšathrām ašaonīm; yām ārmaitīm speñtām yaōsca tē ghenao ahura mazda* ‘we worship the righteous woman who ever [*Skt. prāyas*] thinks well, speaks well, does well, who is well-principled, who has the quality of a ‘*ratu*;’ (we worship) Speñta Armaiti and the women that are thine, O Mazda.’ The idea in this is that the righteous woman had the same merit and spiritual quality as a Ratu; for, as we see in this Gāh referred to, each of the preceding beings, men or youths, and objects, is especially invoked as *ašahē ratūm*.^{*} The same meaning applies in Vsp. iii. 4 and Yt. xxii. 18. The traditional rendering ‘obedient to her husband’—as Mills, S.B.E. xxxi. p. 342 note, seems already to have noticed—gives no satisfactory explanation of the compound; and moreover *ratu* is always the spiritual guide, whether in heaven or on earth, and not husband. It is proper here to add that to this latter statement Vd. xv. 9 is no exception, as *kaininem . . stātō-ratūm vā astātō-ratūm vā paradātām vā aparadātām vā* is ‘a maiden who has or has not been brought to the Ratu, whether already con-

firm (?) or not confirmed (?), *stātō-ratu* ('brought to the Ratu') evidently referring to an initiation into the religion something like a confirmation. In the Parsi faith this was and is the assuming of the Kosti. Spiegel, *Uebersetzung* ii. Introd. p. 22, expressly says 'von der Zeit an, wo das Kind den Kosti trägt, muss es sich auch einen *Schutzpatron* unter den *Yazatas* und einen *geistlichen Rathgeber* unter den *Destürs* aussuchen.' For our passage this is the whole story. On the custom, further, compare also Doshabhai Framji Karaka's *History of the Parsis*, Vol. i. pp. 122, 165, 166; and in support of *ratukhšathra* for the holy women of Mazdeism, see Yt. xiii. 139-142, 144.

To 2. *harethravaitiš*, *pāthravaitiš*: these two words receive an explanation in general from many other parts of the Avesta; see what is said also of the *Staota Yesnya* below, § 3, *yatha hūš frādathaŋ mazdāō . . . pāthraī . . . harethraī ašahē gaēthanām*. —*ašō-mizhdāō*: 'accompanied by the reward of Asha' or Righteousness here personified, i. e. the reward of Heaven; for Asha is the overseer of the realm of Truth and of the Law and so also of Paradise. He is the joint assessor of Ormazd himself, cf. Ys. xxix. 2; xlvi. 9, 10, and often: his opponent is Druj, Ys. xlvi. 11; xlix. 11; xlvi. 1: xlv. 13, 14; his creatures are *ašahē gaēthanām*, "the household of Faith," almost. —*parō-asnāi*: compounded of *parō* + *azan* 'beyond the day, beyond the present,' a general expression for the future. With this form compare Skt. *parōkṣa* 'beyond the eye, invisible;' and see Whitney. *Sanskrit Grammar*, 1310a.

To 3. *tā*: as Geldner—see *K.Z.* xxviii. 404, *B.B.* xii. 95—has pointed out, *tā* must belong not to *gāthaō* but to *staota yesnya* that follows. Exactly what the *Staota Yesnya* were, it would be hard to say; they were not identical with the *Gāthās*, for they are mentioned by the side of *gāthaō* in Ys. lxxi. 6, 7, 18; liv. 2; lv. 5, 6. The term seems to be a broader designation under which the *Gāthās* were included with other hymns. This is shown by the frequent epithets *hañdāta*, *haurvām hañdūtīm*, which could apply only to a rather extended collection, and this should be kept in mind when *Shāyast lā-Shāyast* xiii. 1—S. B. E. v. p. 353—is commented upon. The theory, further, that *Staota Yesnya* = Ys. lvii—lxxii, gives no satisfactory answer to the question. Perhaps the key is to be looked for in the various selections enumerated in detail in *Vsp.* i. 3-9: this seems plausible. Among other passages see *Ny.* iv. 8; *Vsp.* ix. 7; xxiii. 1; Ys. lix. 33; Yt. xxiv. 28; x. 124; and *Fragm.* i. 1 *staotem vacō yēsñim*, Ys. xxi. 1 *yēsñim vacō*.

havañha: see Geldner, *Drei Yasht* p. 27, 109. —*aiwyāvañha*: the meaning of this word is hard to decide, for over the *ἀπ. λεγ.* we have no control. I have made it conjecturally a compound of *aiwi* + *avañh*, with intensive meaning, like *aiwi-aojañh*, *aiwi-thūra*, etc. With the form *aiwyāvañh* compare *aiwyāma* (*aiwi* + *ama*) 'having excessive might,' and *aiwyākḥstar* (*aiwi* + *akhš*). —*frārāiti*, *vidišē*: these two words are found only together. The latter word, as Professor Geldner personally tells me, must mean 'friendship, love,' and we may expect later from him an explanation of the word. The former,

frārditi—as Geldner, *K.Z.* xxvii.288; xxvii.405, has shown—belongs, together with *rāiti* and *rāna*, to *vrā* (cf. also *ārmaiti*), and denotes ‘harmony, concord, unanimity, obedience, religious obedience;’ with it is to be connected also the adjective *frārañha*, *Yt.* v.8, see below. The two meanings thus found will render with admirable force *Vsp.* xxi.8, *frārditi vīdīšē yazamaidē yaṭ asti añtare hvādaēnāiš ašaonīš* ‘the concord and love which exists among the righteous of our religion.’ —*suyamnandm*, *saošyañtām*: from *vsu* in sense of ‘promote, help, (in a religious sense) save;’ so here save from Hell when the final event comes. The Saoshyants are those who at the latter judgment—perhaps the Frashakard—will save others from the eternal damnation. In *Yt.* xi.22 *ahmākem saošyañtām yaṭ bipaitištānām ašaonām*, the Saoshyants are the priests, i. e. the later Dasturs, and each holds out that he will save his people from Hell. —*stōiš*, as weakest form from *vas* ‘be,’ denotes the ‘being, existence,’ and *vispayaō stōiš* is the entire existence. In *Vsp.* xviii.1, 2. *paoiryām ašaonō stīm* ‘the first existence of the righteous,’ i. e. on earth, is opposed to *vīspāyūm uštātātem* ‘the everlasting blessedness,’ hereafter. Further, in *Ys.* xix.9 *vispām ašaonō stīm haitīmca bavaiñtīmca būšyēñtīmca* ‘the whole existence that now is and is to be and shall be still;’ for *haitīm* can mean nothing but the actual present, *bavaiñtīm*, the coming, *būšyēñtīm*, the life which shall then be afterwards, perhaps in the new order of things. See also *Ys.* xxxv.1. Yet see *Yt.* xiii.21. It may be added that in *Yt.* xi.22 *stōiš* is almost personified.

To 4. *aya ratufrita*: * these words are difficult, as they cannot go together, for *ratufrita* is certainly a locative as it stands (cf. for the form *vacastaštā*, *Ys.* lviii.8, Bartholomae, *Handbuch* § 223); while we can hardly allow that *aya* is a form of the locative, as would Spiegel, *Commentar* ad loc. and *Grammatik* § 182 fin. We must first take up *ratufriti*, which in all passages—*Vsp.* xi.5, 6, 20; *Ys.* xxv.3; iii.4; *Vsp.* ix.6, 7; iv.2; v.1; xii.5; *Afr.* iii.5; i.6—can mean little more than ‘the propitiation of a Ratu or religious spiritual chief, especially by a benediction, prayer;’ cf. also *āfriti*, *usefriti*, *fryō* (*Ys.* lxxv.9), *āfrītar*, *āfrīna*, *āfrīvana*. This is shown, moreover, by the connection in which the word always stands, and particularly by *Afr.* i.6, which gives the key-note to the signification, for there *ratufritiṣ* refers to the preceding ascription of praise to Ormazd; thus, *dātō hē myazdō ratufritiṣ* ‘the benediction (just mentioned) is the offering given to him,’ i. e. to the

* Since the above was in type. I have received notes from Dr. Jackson, in substance as follows: “It now seems better to take both *aya* and *ratufrita* as instrumentals, and together, in the sense ‘with this benediction.’ This interpretation is supported by most convincing parallels. At *Yt.* x.71, all good MSS. read *hathra nairiyaya hāmvarēta* (sic) ‘with manly courage.’ With a like interpretation *Ys.* xlii.1 (cited below) becomes clear: *yazamaidē vé . . . hañdata* ‘we worship you, O Amesha Spentas, with the entire collection of the Yasna Haptañhaiti.’ Likewise *Vsp.* xxii.1, *aya aibigara aya aibijareta*; and *Vd.* xxii.5, *dahma afrita* (so very good Persian MSS.).”—Corresp. Sec’y.

priest. This meaning suits in all passages : see especially Afr. iii. 5, where *ratufrita* is again the best reading, thus : *yō rapithwinahē ratufrita rapithwinem ratūm framarāiti rapithwinem ratūm frāyazāitē* 'whoso in the way of a ratufriti (loc.) of Rapithwina' recites the Rapithwina Ratu (see note on §6 below), and worships the R. R.'

Next *aya* : this is instr. fem. (compare for the form the advl. *ayā* found in the Rig-Veda); here it may be taken in the sense of 'with this chapter,' i. e. supply *baghaya*, as it should be particularly noted that in paragraph 7 below our section is entitled *bdgha staotanām yēsnyandm*, so to be inferred from the close of Ys. xix, xx, xxi, and the Pahlavi superscription to Ys. xix. The whole idea of the passage is the hope that in benediction of a Ratu (*ratufrita*) one may make his absolution (*hvāvayānhem*) by means of this prayer (*aya*); and the composer prays that it may count as a meritorious action in the world above. He wishes thus also to enhance the value of his work by giving it a certain sanctity. As to the form *ratufrita*, once more, it is worthy of note that the inferior MSS, both in our passage and in Afr. iii.5, furnish the variant *ratufriti*, and *aya ratufriti* would be easy; but the best manuscripts and the lectio difficilior have been adhered to. It is interesting to add, however, that in Ys. xix.15 *aya aūtareukhti* 'with this interdict' we have the variants in *-ta* : can our *aya ratufrita* be parallel?

hvāvayānhem : adjective from *avayāh-* 'absolution,' cf. Ys. lxviii.1 *avayām*, and Geldner, *K.Z.* xxviii.407. Thus the Avestan *hva-avayāñh-em* : *avayām* (from *avayāh-*) : : Skt. *su-medhas-am* : Av. *mazdām* (from *mazdāh-*). In quite the same way is the adjective above mentioned, *frārañha* Yt. v.8, from substantive **frārāh-*, as *hvāvayāñha* from *avayāh-*. —*jaseñtem* : compare with *hvāvayāñhem jaseñtem* the use of *jas* also in Vd. iv.44 *yēzi nāiri-cinañhō jasn* 'if they come seeking a wife,' and Vd. xiii.22; i.15. —*paiti-barāhi* . . . *hvarštāiš* : 'mayest thou (O Asha, cf. § 5 and Westergaard's ed. p.319b) score the reciter of this chapter up with good thoughts, etc.' The idea of the account kept by Asha is to be found again in Afr. i.7*, Westergaard's edition, p. 319, foot note, *hātām cinmānē yaṭ ašahē vahištahē* 'Asha Vahishta's record of mankind;' and this thought of thus 'laying up treasures in Heaven' occurs elsewhere in the Avesta, cf. Yt. x.32 *hām hīš cinmānē baraiuha | nī hīš dasva garō nmānē* 'put these sacrifices (O Mithra) to our account, lay them up in Garo Nmana. So also, and with *paiti-bar* moreover, in Yt. xix.33 *para ahmāt yaṭ hem aēm | draogem vācem aihaithim | cinmānē paiti-barata* 'until he put to his account lying untrue speech.' Observe the middle voice in *paiti-barata*. According to the Avesta, therefore, a record was kept much as in the 'book of life,' Revelation xxii.19.

To 6. *dātā aihēuš paouryēhyā* : one of the testimonies to the value and estimation attributed to the Staota Yesnya; they contain all the rules (*dātā*) necessary for the life in this world, cf. further *frašem vasna ahūm dathānū*, below. —*maremna*, *verezimna*, etc.: refer to different kinds of recitation—cf. Ys. xix.6, 7, 21—and to determine precisely is somewhat difficult. But *maremna* is in all passages the memorizing, committing to memory, and recalling; while *verezimna* refers to the act

of applying the knowledge on all proper occasions: thus, Vd. xviii.5 *amarō everezyō* 'without recalling, without putting to use the sacred learning;' cf. Vsp. xii.3 and often. —*paitišāna*: 'practised,' as in Ys. lvii.13 *paitišata mazdayāsna* | *sraośahē aśyēhē yasnem* 'practise diligently, ye Mazdayasnians, the worship of Sraosha.' —*paitišmaremna*: the 'thinking to one's self,' as opposed to *framaremna*, 'aloud, i. e. reciting. This is shown by Yt. v.11, where *narem paitišmaremna* 'thinking of a man' is elaborated by the parallel *manaihu mainimna* 'musing in thought.' —*framaremna*, as we should expect from *mar* above, is in all places the expression of what is in the mind, 'reciting,' perhaps 'lispings' or something similar. See again Ys. xix.6. So also *framaretar*, *framarethra* § 7 below, and *framereti*, especially Vsp. xv.2. This rendering is appropriate also in Afr. iii.5 *yō rapithwinem ratūm fram-arāiti rapithwinem ratūm frāyazātē* 'whoso recites the Rapithwina Ratu,' i. e. the Rapithwina chapter—the prayer being named from the presiding Ratu; for *rapithwina ratu* is nothing more than the title of the selection and corresponds to the Pazand designation Afrīngān Rapithwin. The chapters must have had their titles in Avesta as much as in Pazand; we know this also from *dahma āfritiš*, *fraoreitīš hātīš*, and numerous others. The meanings thus given apply equally in Ys. lxxi.1 *kaṣ asti rathwām frameretiš* 'what is (i. e. is equivalent to) the recitation of the Ratu prayers,' cf. Ys. xix.5; Fragm. vii.1; also Vsp. ii.5 *rathwām framaretārem* 'the reciter of the Ratu prayers;' again Vsp. v.1.

frāyazemna: what the exact force of this word is can hardly be said, as it is technical in its character. It is found not merely alone but often also by the side of the un-compounded form of *yaz* cf. Yt. v.90, etc.; it seems therefore to have denoted some additional kind of worship by way of conclusion, accompanied perhaps by ceremonies of which we know little or nothing; for Yt. viii.15; x.91; v.90, 91; xiii.50 do not answer the question. It is probably, however, thus best taken literally, as also *frāyastīm* in § 7, and *hufrāyasta* in Vsp. xiv.1, etc.; it was common, after finishing a prayer, to worship it. Compare for example Ys. liv.2, and all the closing formulas to the chapters. Yet on the other hand comes the possibility that *frāyazemna* may mean 'brought as an offering,' for the simple verb, it seems, is found so used with two accusatives, one of the person and the other of the hymn offered; see Ys. xlii.1 *yazamaidē vē amēšā spentā yasnahē haptanhātōiš hañdātā* 'we bring to you as an offering the collection of the Yasna Haptanhaiti.' Or could *hañdātā* be there a derivative from *hañdāiti* and be compared with the suggestions as to *ratufrita* and *añtarokhta* above? Elsewhere we have the instrumental; cf. often *kana thwām yasna yazānē*. If, however, as is generally accepted, *hañdātā* should be acc. pl., we may then compare Vd. xviii.43 *yēhē hātām frāyazātē* 'offers the Y.H. prayer as a sacrifice;' cf. further Afr. iii.5 *rapithwinem ratūm frāyazātē*, already cited above. But see below § 7 note.

To 7. *baghām staotanām yēsnyanām*: this apparently can only mean the section of the Staota Yesnya, perhaps §§ 3 ff. That the piece is so entitled is to be inferred not only from this, but also from the use of

bagha at the ends of each of the chapters Ys. xix ; xx ; xxi. Cf. also Ys. xix.3, 5. —*frasraothrem, framarethem, fragāthrem, frāyastīm* : cf. the explanation above, and for the method of recitation refer also to Ys. xix.6 *marāt—frā-dreñjayāt—frā-srāvayāt—frā-yazāitē*, ‘has in mind, murmurs, intones, worships.’ See particularly, moreover, on the four-fold recital, Ys. ix.14, ‘thou didst intone the Ahuna Vairya four times, marking the divisions, and each succeeding time with louder intonation.’ Perhaps we might infer from this that *frā-yaz*, which closes every series of this kind, refers not to the appended *yazamaidē* formulas, but to the last and loudest and most ceremonial recital of worship ; possibly *tem yazāi suruvata yasna* is to be compared. But we should for the present prefer to leave the whole question as to *frā-yazemna* an open one.

MAN

A. The earthly part which was given up at death (*gaetha*, the entire earthly existence being)

B. The immortal imperishable part

a. The corporeal material portion

a. The immaterial part, *ushtana*, life, which was lost at death (Vd. v. 9)

b. The corporeal material *keresh* (cf. Yt. xlii. 61) which continues material after the resurrection

β. The immaterial

tanu, the entire body *ast*, the bones, frame

terishi, the physical forces *baodhi*, the consciousness *urvan*, soul, spirit

The heavenly image

or reflex, *fravashi*, his angel in heaven, his faith (cf. *frararane*) personified

2. On the *jāyānyu*-charm, AV.vii.76.3-5, and the *apacit*-hymns (vi.83 ; vii.74.1-2 ; vii.76.1-2) of the Atharva-Veda ; by Prof. Maurice Bloomfield, of the Johns Hopkins University, Baltimore.¹

The charm directed against the *jāyānya*, AV.vii.76.3 fg. is, in difficulty of explanation, not surpassed by any hymn of the AV. The Pet. Lex. and Böhtlingk in the abridged lexicon of the Petersburg Academy, gloss the word simply by ‘eine bestimmte krankheit.’ Adalbert Kuhn in Kuhn’s Zeitschrift für vergleichende Sprachforschung xiii.

¹The author of this and the next article has published previously contributions to the exegesis of the Atharva-Veda, as follows: In the Proceedings of the American Oriental Society for May, 1885 (Journal, vol. xliii., p. xliii. fg.), for May, 1886 (ibid. p. cxii. fg.), and for October, 1886 (ibid. p. cxxxii. fg.); furthermore in the American Journal of Philology, vol. vii., No. 4, pp. 466-488.

155, and Zimmer, *Altindisches Leben*, p. 377, regard it as identical with a disease called *jāyēnya* in TS.ii.3.5.1-3; 5.6.4-5; the *jāyēnya* is there mentioned in connection with diseases called *yakṣma* (*rājayakṣma*, *pāpayakṣma*, etc.), which are currently believed to be designations of consumption. Ludwig, *Der Rig-Veda* iii. pp. 342, 500, explains it as being directed against poisonous insects. In translating the hymn, I shall for the present leave *jāyānya* untranslated, as also the second half of stanza 4, which contains the word *akṣita*, which has hitherto been misunderstood by the translators.

3. 'The *jāyānya*, which crushes the ribs, which penetrates the *talīḍya* (according to the lexicons, 'some part of the body'), also whatever one is fixed upon the head, every one is driven out.'

5. 'We know, O *jāyānya*, thy origin, whence thou didst spring; how canst thou strike here, in whose house we offer oblations?'

The fourth verse begins: 'The *jāyānya*, furnished with wings, flies, he settles down upon man;' the second half of the stanza reads: *tād ākṣitasya bheṣajām ubhāyoh sūkṣatasya ca*. The Petersburg lexicons, and Whitney in the Index, read *ākṣitasya* without emending; the former translate the word by 'unverletzt,' which yields no clear meaning, when applied to the passage: 'this is the remedy for him who is not injured (?) and also for him who is injured.' Both Zimmer and Ludwig recognize the antithetical character of *ā-kṣitasya* and *sū-kṣatasya*, and they emend each in a different direction: Ludwig reads *sūkṣitasya* to correspond to *ākṣitasya*, Zimmer *ākṣatasya* to correspond to *sūkṣatasya*. Ludwig then translates: 'das ist das mittel gegen den nicht festsitzenden, und auch gegen den festsitzenden.' Zimmer finds support for his reading *ākṣatasya*, and at the same time for his theory that the charm is directed against a kind of consumption, in the word *kṣata*, which is reported by Wise in his 'Commentary on the Hindu system of medicine', p. 321, to have the special value of 'rupture, or ulcer of the respiratory organs.' Zimmer translates accordingly: 'hier habe ich ein heilmittel für den menschen, der den *kṣata* noch nicht hat und den, der schwer an ihm erkrankt ist.'

The ritual offers us a suggestion which points in a very different direction. In the *Kāuṣika-sūtra* 31. 11, and in Dārila's comment to *Kāuṣ.* 32. 11, 13, we find mention of a disease called *akṣata*. The phrase *akṣatabhāiṣajyam*, which Dārila employs, can have but one value, that of 'remedy for *akṣata*.' Moreover, the passage 32.11 fg., which is entitled by Dārila *akṣatabhāiṣajyam*, describes the ritual connected with the charm under discussion. We are left, however, to find the real character of the disease by implication from the practices reported in the ritual. The clearest passage is *Kāuṣ.* 31.11 fg.:

11. *idam id vā ity akṣatam mūtraphenenā bhryudya*.

Dārila: *mānuṣamūtraphenena arumḍuṁ (?) kledayati* 'with the hymn AV.vi.57 he moistens the *akṣata* with the urine of a human being.'

² So if *nirāstam* of the vulgate text is emended with Whitney, Index Verborum to the AV., to *nirastam*. Ludwig, *ibid.*, p. 500, emends to *nirāsthām*, translating 'I have driven out.'

12. *prakṣipati*. Dārila : *tato mūtram prakṣipati pāṇinā* 'he throws the urine with his hand (upon the *akṣata*).'

13. *dantarajasā 'vadegdhi*. Dārila : *dantamalinā* " *līmpaty akṣatam* 'he smears the *akṣata* with the scourings from teeth.'

Much less simple and clear is the ritual connected with the *jāyānya*-charm, Kāuṣ. 32.11 fg.:

11. *yaḥ kīkasā iti piṣṭlavīṇātantrīm badhnāti*. Dārila : *piṣṭlavīṇā tasyās tantrīm badhnāti, akṣatabhāṣajyam*.

12. *tantryā kṣitikām*. Dārila : *tasyā* (Cod. *tarasyā*) *viṇāyāḥ kṣitikāmtayāi 'va tantryā badhnāti kṣitikārabhasyopari tṛṇaḍamkha-* (! for *-khaṇḍa-*?) *rohyādanārthaḥ* (f).

13. *vīriṇavadhrīm svayammlānam triḥ samasya*. Dārila : *badhnāti, akṣatabhāṣajyam*.

The practice described in Kāuṣ. 31.11 fg. is clear in one regard : it refers to some external trouble ; and we are certainly not too bold if we allow the obvious etymology of *akṣata* 'not cut, not wounded,' to guide us. The assumption that *akṣata* means 'a tumor, boil,' or the like, not caused by a weapon, seems almost unavoidable as far as the ritual is concerned.

The same result, in a less severely technical form, must be applied to the passage of the AV. under discussion. It is to be translated as follows, after emending *ākṣitasya* to *ākṣatasya* :

'Here is a remedy both for (boils or sores) not caused by cutting, as well as for wounds sharply cut.' And there seems to be no ground to doubt the intelligence of the Sūtra, when it states that the hymn was directed against such a disease as tumors. We are thus led to identify *jāyānya* with *ākṣata* : or at least we are justified in believing that the *jāyānya* refers to some external skin disease.

Ludwig's interpretation of the *jāyānya*-charm, as being directed against an obnoxious insect of that name, evidently rests upon two grounds. First, the statement in the fourth verse : *pakṣī jāyānyah patati sū ā viçati pīruṣam*, which he translates 'der vogel Jāyānya fliegt, und komt in den menschen hinein.'

The sentence has been translated above more literally, 'the *jāyānya*, furnished with wings, flies, he settles down upon man ;' and it is evident that a disease which manifests itself externally may easily have been conceived as having flown on to the body. It will appear below that similar expressions have given rise to what I cannot but regard as an erroneous explanation of the *apacit*-hymns.

An absolutely certain case in which disease, not insects, is conceived as flying forth when it leaves the body, is contained in RV.x.97.18 : *sākāṁ yakṣma prā pata cāṣeṇa kīkidivīnā sākāṁ vātasya dhrāḥjyā* 'O *yakṣma*, fly forth, fly with the blue jay, fly with the current of the wind'; cf. KZ. xiii. 70.

Secondly, the first part of the hymn is actually devoted to a charm against the *apacit*, which Ludwig, together with all other interpreters, also believes to refer to noxious insects. This brings us to the second part of our enquiry.

The AV. contains three charms against *apacit*: vi.83; vii.74.1,2; and vii.76.1,2, the first part of the hymn just discussed. Aside from these passages the word *apacit* is referred to incidentally in vi.25; it does not occur in any other Saṁhitā in this form. The two Petersburg lexicons, Kuhn in KZ.xiii.155, Ludwig in Rig-Veda iii. 342, 500, Zimmer in Altindisches Leben 54, 97, and Florenz in Bezzenberger's Beiträge xii. 280, regard the *apacit* as a certain noxious insect. The internal evidence of the hymns, which seems at first sight to make for such an interpretation, is as follows. In vi.83. the *apacit* are called upon to fly away: vi. 83.1, *āpacitāḥ prā patata suparṇò vasatér iva*, 'fly away, O ye *apacit*, as a bird from its nest;' vi.83.2, *asūtikā rāmāyaṇy āpacit prā paṭiṣyati glāur itāḥ prā paṭiṣyati*, 'the *apacit*, the daughter of the black one, without bearing offspring, shall fly away; the *glāu* (Pet. Lexicons and Zimmer, 'the boil; Ludwig, 'the owl') shall fly away.' It is to be noted that these passages regard *apacit* from a point of view, converse to that from which *jāyānya* is viewed in vii.76.4: 'the *jāyānya*, winged, flies, he settles down upon man.' The *jāyānya* is depicted in the act of coming on before the exorcism has been performed: the *apacit*, as going away after the potent influences have been set to work. Ludwig consistently regards one and the other as referring to insects; Zimmer sees insects in the *apacit*, consumption in the *jāyānya*.

Aside from these passages, there is but one phrase, not at all free from obscurity, in vi.25, which can be employed to support this view of the *apacit*:

1. *Pāñca ca yāḥ pañcācāc ca saṁyānti mānyā abhi,*
itās tāḥ sīrvā naçyantu vākā apacitām iva.

2. *Sāpta ca yāḥ saptaṭiç ca saṁyānti grāvya abhi, itās tāḥ, etc.*

3. *Nāva ca yā navatiç ca saṁyānti skāndhya abhi, itās tāḥ, etc.*

'The five and fifty which assemble upon the back of the head, let them pass away from here *vākā apacitām iva*.'

Kuhn, in KZ.xiii.130, translates: 'wie die schwärme der *apacits*.' The Petersburg lexicons, and Florenz *ibid.* translate: 'as the buzzing of the *apacits*,' a translation supported only by the supposed etymology of the word (root *vac*), aside from the preconceived notion that the *apacit* are insects. The stem *vākā* occurs nowhere else in the meaning 'buzzing;' it means 'formula, recitation,' and the like.

Against this feeble testimony, the remaining context of the hymns themselves protests most emphatically. I claim for *apacit* the meaning of 'sore, pustule, boil,' or the like. AV.vii.76.1,2 is to be translated somewhat as follows:

1. 'The *apacit*, which are more evil than the evil ones (i. e. the most virulent), those which are drier than the *sehu* (an obscure designation for a part of the human body, mentioned in the Kāṭhakaśaṁhitā 34. 12 along with the spleen, *sehuç ca plihā ca*: Ludwig translates it by 'harz'), those which are moister than salt, these fall off more easily than the easily falling one (i. e. fall off most easily; read perhaps, in accordance with the demands of the metre, *ā sustāsaḥ susrastarāḥ* ?).

2. 'The *apacit* which are upon the neck, and those which are upon the breast, and those which are upon the *vijāman* (Ludwig, 'knöchel:')

Pet. Lex., 'members of the body which are in pairs'), fall off by themselves.'

The implication in both verses is, that the *apacit* will fall off easily owing to the potency of the charm. Surely there can be no insects implied; difficult as it may be to imagine that there are insects which are drier than the *sehu* and moister than salt, the applicability of such adjectives to sores or boils is very palpable. The subdivision of flying insects into such as belong to the neck, to the breast, etc., is also extremely doubtful, but most natural in the case of different phases of some skin-disease.

AV. vii.74.1,2 may be translated as follows:

1. 'We have heard it said that the mother of the black *apacit* is red; with the root found by the divine sage do I strike all these.
2. 'I strike the foremost one of them, and I strike also the middle-most one of them; this hindmost one I cut off like (i. e. as easily as) a bunch of hair.'

And AV. vi.88:

1. 'Fly away, O ye *apacit*, as a bird from the nest; may the sun effect a remedy; may the moon shine you away.
2. 'One is variegated, one is white, one is black, and two are red; I have caught the names of all of them. Go away, ye slayers of men.
3. 'The *apacit*, the daughter of the black one, without bearing offspring, will fly away; the boil will fly away, the *galunta* (swelling?)¹ will perish.'

Here the manifestation of a certain kind of insect in so many different colors is improbable; at the best it would be necessary to see in the name *apacit* a very generic term for insects. On the other hand, the emphatic mention of different colors—black, red, white, variegated—is a likely product of even superficial observation in the case of skin-diseases, and is paralleled by i.23, a charm directed against *kūlāsa*, leprosy or the like:

1. 'By night thou didst grow, o plant, thou sable one, dark one, black one; do thou, who art full of color, stain the leprous, gray spot?
2. 'Drive away from here what is leprous and gray, and also what is variegated; may your own color settle down upon you, and cause the white spots to fly away.'

In the ritual to 1.23 and 24 (Kāuç. 26.22 fg.), after dung has been rubbed upon the discolored spot until it becomes red, the sores are cut off: 22. *naktahjātā suparṇo jāta iti mantroktam* (Dārila: *çvitraṁ*, Cod. *svitraṁ*) *çakrā ā lohitaṁ* (Dār. *yāval lohitaṁ çvitrasthānam* [Cod. *svitra-*] *āgatam*) *praghṛṣyā "limpati*. 23. *palitāny āchidyā*. With this last phrase we may compare directly the pāda *ā chinadmī stūkām iva* in the *apacit*-hymn (vii.74.2^d).

We are not favored by the ritualistic writings of the AV. with a distinct explanation of the term *apacit*. But an unbiased application of

¹ Wise, p. 311, has, "*Gūlin*. The swelling in this disease is like the swelling of a plum, not painful, but hard; and is produced by diseased phlegm, and blood." Or is this rather *gūlayu* 'a hard boil in the throat'? see Pet. Lex. sub voce.

the statement of the sūtra will not fail to corroborate the interpretation which is here advanced. Kāuç. 31.16 fg. rubricates two of the *apacit*-hymns : 16. *apacita a susrasa iti kinstyādini* 'with the two hymns vi.83 and vii.76 he applies the performances which begin with the use of the shell.' Kāuç. 30.16 tells what these performances are : *kinstyā-çrajam-bilo*-'*dakarakṣikā-maçakādibhyām* (!) *dañçayati*. 'He rubs (the place) with (moisture from a) shell (Dārila : *kinstyāḥ çañkah*, . . . *kinsty-enā* "*lepanam*), smears it with the saliva of a dog, then subjects it to the bite of leeches, gnats, etc. (? Dārila : *udakarakṣikā jalūkādigrhakotikā*). Kāuç. 31.17 continues : *lohitalavaṇam sañksudyā* '*bhinīṣṭhivati*. Dārila : *sāindhavalavaṇam cūrṇakṛtyā* '*paciti kṛtvā tam abhimukhe niṣṭhivet*. 'Having ground up rock-salt, having placed it upon the *apacit*, he spits against that (salt).'

The entire treatment seems to be in accordance with modern ideas of therapeutics. The boil is softened by mucous applications, then leeches are applied, after which a sort of poultice of ground rock-salt, rendered soft and pulpy by saliva, is placed upon the opening, for astringent purposes.

The ritual which the Sūtras present for vii.74 is less pointed, but certainly contains nothing which militates against our view. The passage is Kāuç. 32.8 fg : 8. *apacitām iti vāiṇavena dārbhyūṣeṇa* (var.-*ūṣeṇa*) *kṛṣṇornāḥjyena kālabundāi stukāgrāir iti mantroktam*. Dārila : *dhanuṣadorbhyuṣaṇa* (! for *dhanuṣ dārbhyuṣeṇa* ?) *darbhavikārā darbhiraḥjūḥ* . . . *kṛṣṇornā jyā yasya tasya tat* . . . *tena dhanuṣā kālabundāir bundā iṣavaḥ tāiḥ kṛṣṇavarṇāiḥ stukāgrāiḥ, ūrṇastukāgrāi stukā jaṭo* '*cyate tāir mantroktam vidhyati, apacitam ity arthaḥ*.

9. *caturthyā* '*bhinīdhāyā* '*bhividhyati*.

10. *jyāstukājvalena*. Dārila : *jyāyā stukayā* '*vajvālah* . . . *tena avasiñcati apacitam*.

Here the practice is rather symbolical than therapeutical. With black arrows, which have flakes of wool tied to their points (cf. vii.74. 2^d : *chinadmi stukām iva*) and which are shot from a bow made of reed, furnished with a *dārbhyūṣa* (? *darbhiraḥjūḥ*) and with a bow-string made of black wool, he strikes the *apacit* (cf. vii.74.2 : *vidhyāmy āsām prathamām* etc.). With the fourth (verse of the hymn ?), having laid on (an arrow ?), he hits against the *apacit*. Finally he washes it off with a lotion produced by heating the bow-string and dipping it into water, which is thus made warm ; cf. Kāuç. 27 29 and 33.

In support of this explanation I am fortunately able to bring the authority of the medical Çāstras, which seems to have escaped the eyes of the earlier interpreters of *apacit*. Wise in his digest of Hindu medicine—a work whose value would be increased manifold, if it were provided with an index of its countless names of diseases, plants, and remedies—has a most significant passage bearing upon this point on p. 315 :

“ Scrofulous swellings (Gandamālā).

“ When many small tumors like plums appear in the axilla, neck, back, and groins (!), they are produced by diseased fat and phlegm. They

suppurate slowly, and continue to appear and suppurate for a long period, when it is called *Apachi* (!)."

Some of the features of the treatment are worthy of notice :

"Different *fomentations* . . . and *poultices* are applied, and when they (i. e. the tumors) suppurate, open, and discharge the matter, wash the wound with a decoction of *bilwa*, etc. . . . A poultice made of *tila*, and the leaves of the castor-oil tree *mixed with salt*, and applied to the part (!) . . . When the disease is produced by bile, *apply leeches*."

After this exposition of the nature of the disease, we need hardly beg indulgence for the following etymology. Kuhn, KZ. xiii.155, explains the word as 'die abmagernden (sc. insecten).' The first value of root *ci* with *apa* in the Pet. Lex. is 'ablesen,' 'pick off.' The disease seems to be viewed as 'an act of scaling or paring off' the foreign excrescences on the body. We may compare semasiologically Lat. *scabies*, *scabere*, Germ. *die schabe*, *schaben*, Engl. *scab*.

At VS. xii.97 we find mention of the disease *upacit* in juxtaposition with *balāsa*, *arças*, etc. I make no doubt that this is the same disease with its name altered by a popular etymology, which is probably felt correctly by Mahīdhara, when he glosses thus : *upacinvanti çarīraṃ vardhayanāti* 'ty *upacitāḥ* ' (they are called) *upacit*, because they cover over the body and cause it to swell.'

Returning now to the hymn AV. vi.25, in which the *apacit* are mentioned incidentally, we find that the translators have failed to define its purpose sufficiently. Kuhn, KZ. xiii.128, treats the hymn under the head of 'Sieben und siebzigerlei krankheit ;' he compares it with Germanic formulas directed against fever and other diseases, which are often described as being of seventy-seven varieties. Florenz, in Bezz. Beitrage xii.281, does not feel quite certain that the charm is directed against disease at all, but thinks it possible that some febrile disease, accompanied by eruptions, is in question. There is however no indication, either in the hymn or in its ritual, of the presence of fever in connection with the disease. The hymn simply states that the fifty-five which are upon the back of the head, and the seventy-seven which are upon the neck, and the ninety-nine which are upon the shoulders, shall pass away. The ritual is clearly directed against a disease similar to the *apacit*, a kind of boil or tumor. Kāuç. 30.14 fg. is as follows :

14. *pañca ca yā iti pañca pañcāçatam paraçuparṇān kāṣṭhāir ādīpāyati*. 'With AV. vi.25 he kindles by means of pieces of wood fifty-five palāca-leaves, which have the form of an axe.'

15. *kapāle praçrtaṃ* (Dār. *parṇarasam*) *kāṣṭhenā* 'limpati. 'The sap of the leaves which has boiled forth from the leaves he smears upon the tumor.'

16. Continues with the same process which figures prominently in the treatment of the *apacit*, the smearing with the fluid from a shell etc. as described above.

Neither the sūtras nor Dārila however report anything directly about the symptoms or the name of the disease. I believe however that a part of the deficiency can be supplied from the Çāstras. Wise, *ibid.* p. 316, reads as follows :

"Tumors of the neck (*Manskunder*).

“Is a variety of the Gandamālā or scrofulous swellings. They are hard and large, and when they suppurate they should be opened. After which the cavity is to be cleaned with astringent washes.”

The suggestion that ‘*manskunder*’ veils the words *mānyā* and *skāndhyā* contained in this hymn will scarcely fail to gain assent. It would seem perhaps too that we must supply with the words *mānyā*, *grāvīyā*, *skāndhyā* some word having the meaning of ‘tumor’ or the like, not ‘sinews’ or ‘muscles,’ as the previous translations have done. To such a construction points also the statement of the Anukramaṇī, *pañca ca yū iti mantroktamānyāvīṇāṇadevatyaṃ*.

The word *vākā* in the refrain, *vākā apacitām iva*, is translated by Kuhn as ‘swarms (of *apacit*)’; by the Pet. Lexicons and Florenz, as ‘buzzing.’ With the change of attitude towards the hymn which is here recommended, neither of these translations is acceptable. As it seems impossible to retain the word, we may perhaps resort to an emendation based upon the well-known confusion in the MSS. of *r* and *p*: we read *pākā apacitām iva* ‘may they (the tumors) pass away like the pustules of the *apacit*.’ The implication would then be that the tumors in question are ‘hard and large’ (Wise *ibid.*), and that the *apacit* are more easily brought to the point of breaking open.

3. On the so-called fire-ordeal hymn, Atharva-Veda ii.12; by Prof. Bloomfield.

This hymn has been invested in the past with quite unusual interest, because it has been translated no less than five times, aside from many chance references to it, and because it has been considered very generally as an incantation accompanying a fire ordeal, pronounced by the person undergoing the ordeal against his accusers. It was, moreover, thus rendered prominent as containing the earliest intimation of the existence of ordeals in general, and furthermore the only distinct allusion to ordeals in the Vedic Sāṃhitās.

So far as the existence in the Vedic period of the fire-ordeal in a germinal form at least is concerned, we have the distinct report of the Pañcaviṅṣa-brāhmaṇa (xiv.6.6). Two brahmins of the race of Kaṇva, Vatsa and Medhātithi by name, are disputing, and in the course of the dispute Medhātithi accuses Vatsa of not being a brahman, his mother having been a çūdra-woman. Vatsa proposes an ordeal of fire to decide which one of them be the one more versed in brahmanical knowledge. Vatsa entered the fire singing the *Vātsa sāman*, i.e. a *sāman*-song of his own composition, and not a hair on his head was burned (*tasya na loma canāu*”*gat*). This, and a passage in the Chāndogya-Upaniṣad (6.16) in which the guilt or innocence of a thief is determined by letting him carry in his hands a red-hot axe, are genuine Vedic (in the wider sense) instances of the existence of ordeals in general, and fire-ordeals in particular. The later law books furthermore are quite explicit in their treatment of various other ordeals—they recognize nine altogether—such as licking a red-hot plough-share, getting a metal coin from a kettle of hot melted butter, immersion into water, administering of poison, etc.

Standing upon such ground, the supposition that a Vedic hymn might be found which accompanied this religious and judicial act was very natural. It was accordingly made for this hymn, first by Emil Schlagintweit in an address before the Royal Bavarian Academy on the occasion of the 170th anniversary of its foundation, in March, 1866, entitled 'Die Gottesurtheile der Indier.' In 1873 Albrecht Weber translated the hymn a second time in his *Indische Studien*. xiii.p.164 fg., supporting in all essentials Schlagintweit's view. Later Zimmer, *Altindisches Leben* p.184, and Ludwig, *Rig-Veda* iii.p.445, also gave in their adhesion to this interpretation. Still more recently Kaegi in his excellent treatise entitled *Alter und Herkunft des germanischen Gottesurtheils* (*Festschrift zur Begrüssung der xxxix. Versammlung deutscher Philologen und Schulmänner in Zürich; September. 1887*) p. 51, has characterized the eighth verse of the same hymn as an utterance spoken over one about to pass through a fire-ordeal. Against this authority there has been but one dissenting voice. J. Grill, a disciple of Roth, has translated the hymn in his 'Hundert Lieder des Atharva-Veda' p.16, and cautiously places it, along with a number of other hymns, under the heading 'Feinde;' i.e. he supposes it to be directed against enemies. In his notes he expresses himself as not altogether convinced that the view of his predecessors is incorrect, but he cites an oral statement of Prof. Roth to the effect that he finds himself unable to detect anything pertaining to a fire-ordeal in the hymn.

I believe that the character of this hymn can be settled definitely by considering its treatment in the *Kāuṣika*, which a literal unprejudiced translation of the hymn itself will exhibit as perfectly intelligent; in all probability the ritual application and the diaskeuasis, which united the somewhat variegated materials of which the hymn consists, sprung up at the same time and as the result of the same ideas and needs. It is a fierce imprecation against an enemy who is thwarting some pious work with unholy practices. Accordingly it is treated in the sixth book of that treatise, which professes in its opening sūtra that it is devoted to *abhicāra*, witchcraft and incantation. In such practices our hymn must have held a very prominent position, as it has a special and very significant name, which is the privilege of only a few favored and commonly employed hymns. It is called (*Kāuṣ.47.12*) *bharadvāja-pravraska* 'the hewer or cleaver of Bharadvāja' (who is the author; cf. ii.12.3). The passage in question is a *paribhāṣā-sūtra* introductory to the sixth book, and reads as follows: *bharadvājapavraskenā āṅgirasam daṇḍam vṛçcati*. Dārila glosses: *dyāvāpṛthivī urv antarikṣam iti sūktam bharadvāja(pra)vrasakam bharadvājasampratyaṅārtham*. A literal translation of the sūtra is: 'With the cleaver of Bharadvāja (i.e. with the hymn AV.ii.12) he cuts a staff for practices pertaining to witchcraft.' The real value of the passage is as follows: 'When in the course of rites described in the following book (the sixth, devoted to *abhicāra*) a staff for witchcraft¹ is needed, then this staff is to be cut

¹ My authority for translating *āṅgirasa* rather freely by 'pertaining to witchcraft' is *Kāuṣ.47.2* (also a *paribhāṣā-sūtra* of the sixth book): *dakṣiṇataḥ sambhā-*

with the hymn called the 'cleaver of Bharadvāja,' i. e. ii.12. Cf. especially verse 2nd : *vṛṣāmi tām kūtīgene 'va vṛkṣāni yó asmākam māna idām hindāsti* 'I cut him, who interferes with this our plan, as one cuts a tree with an axe.' A staff so procured is then employed variously in Kāuç. 47.14,16,18 ; 48.22. In 47.16, the function of this staff is sketched clearly as follows : *vajro 'si sapatnahā tvayā 'dya vṛtram sāksīya . . . iti danḍam ādatte*, the person about to practice with such a staff takes it up with the verse : 'Thou art a thunderbolt, a slayer of rivals, with thee may I to-day overcome an enemy, etc.' In 47.18 the staff is employed actively in connection with the dire imprecation AV. vi.134 : *ayam vajra iti bāhyato danḍam ūrdhvam avāgrāṇi tisṛbhīr anṛcaṇi nihanti*, reciting the hymn AV. vi.134 ('May this thunderbolt, satiate itself in *ṛtam* ; may it overthrow the empire and destroy the life of this one. May it break necks and crush skulls, as the Lord of might (Indra) crushed [the neck and skull] of Vṛtra, etc.) he stands outside holding the staff high in the air, the point downward, and strikes it into (the ground) three times, once after each verse of the hymn.'

Equally clear is the direct ritual application of the hymn. It is rubricated in Kāuç. 47.25 fg.'

25. *dyāvāpṛthivī urv iti paraṣṇpalāṣena dakṣiṇā dhāvataḥ padam vṛçati.*

Dār. *paraṣṇḥ kuṭhārah palāṣaṇi kuṭhāramukhaṇi dakṣiṇāyām diçi dhāvataḥ dveṣyasya padam padasthānaṇi chinatti.*

'One cuts the foot (i. e. breaks the foot-support) of his enemy, as he runs in a southerly direction, with the blade of an axe, while reciting the hymn ii.12.'

26. *anvak tris tiryak triḥ.*

Dār: *chedanavidhim āhu : anupadarekhābhīḥ* (Cod. *anvupa-*) . . . *triḥ pṛthutvena tribhūḥ* (!).

'He cuts three (lines) along (the course of the running enemy) and three (lines) across (the same).'

27. *akṣṇayā* (thus emended : two MSS. *akṣṇayām* ; five others *ayakṣṇayām*) *saṁsthāpya.*

Dār. *akṣṇaḥ koṇaḥ koṇe na samāpanaṇi koṇa dritvā* (! for *koṇe chittvā?*) *dvayo rekhaḥ kriyā pratirekhaṇi* (Cod. *-reṣaṇi*) *sūktāvṛttih, saṁsthāpye 'ti vacanaṇi prativraçcanagrahaṇam mā bhūt.*

Further on, sūtra 28 and 29 describe a method of testing the efficacy² of this hostile practice :

28. *āvraskāṇyāñçān² palāṣam* (var. *palāṣa*) *upanathya bhraṣṭre* (var. *bhraṣṭe*) ' *bhyasyati* (var. *nyasyati*).

ram āharaty āṅgīrasaṇi, 'utensils for the practice of witchcraft are brought on from a southerly direction.' Dārila's gloss is: *ghoraḍravayāṇāṇi āharaṇāṇi vidhānāḥ*. Cf. also the three names of one of the five so-called *kalpas* of the Atharva-Veda: *āṅgīrasa-kalpa*, *abhicāra-kalpa*, or *vidhana-kalpa* (J. A. O. S. xi.378). In the ritual of the Atharvan the word *āṅgīrasa* generally means 'pertaining to witchcraft.' Cf. also Rīg-vidhāna iv.6.4.

² Four MSS. *āvraskāṇpāñçān*; one *-pāçān*.

Dār. *vṛçcitā adanyāñçūn* (! for *vṛçcitādanyā-*?) *gṛhitvā badhakaparṇe baddhvā* (Cod. *vadhvā*) *bhraṣṭe* (!) *lokaprasiddhe kṣipati*.

'He ties shoots (of grass?) which have grown upon places where other grass has been torn off (?) into a leaf of the palāça-tree, and throws it into a frying-pan.'

29. *sphoṭatsu sṛtaḥ*.³

Dār. *çabda aṅguṣṭu mṛto dveṣya iti jñeyam*.

'If the shoots sizzle (in the pan) then (the enemy) has been overthrown.'

The sūtra then proceeds to prescribe still more elaborate and potent charms for the purpose of bringing the enemy down. But these do not cast any additional light upon the hymn.

In considering the hymn itself the first verse may be left aside for the present, as it is peculiarly the one upon which the explanation as a fire ordeal has sprung up. The translation of the remaining verses is as follows :

2. 'Hear this, O ye revered gods! Bharadvāja sings praises to you for me. May he who injures this our plan be bound in fetters and joined to misfortune.'

Schlagintweit translates the pāda *yó asmākam māna idām hindsti* by 'der disen (unsern) geist beschädigt (d. i. schwur bezweifelt),' a translation and exposition absolutely arbitrary. Weber: 'Wer diesen meinen sinn beschädigt, d. i. meinen schwur antastet, mein wort bezweifelt.' Ludwig: 'der disen meinen sinn anklagt (verläumdet).'

3. 'Hear, O soma-drinking Indra, what with eager heart I clamor for. I cleave, as one cleaves a tree with an axe, him who injures this our plan.'

4. 'With the aid of thrice eighty sāman-singers, with the aid of the Adityas, Vasus, and Angirases—may the bliss of the (departed) fathers refresh us—do I seize this one with fateful grasp.'

Schlagintweit supplies 'firebrand' in the last pāda, and translates: 'nehme ich jenen (feuerbrand) an mich mit göttlicher inbrunst.' Weber, in still more direct adherence to the hypothesis of a fire-ordeal, supplies 'glühendes beil' with *amum*, and translates 'mit göttlicher gluth nehme ich diesen an mich.' Ludwig: 'jenen (den verläumder) erfasse ich mit der göttlichen glut.' Zimmer: 'halte ich jenen (? feuerbrand ? ax) mit göttlichem griff.' Grill: 'mit göttlich mächtigem griff erfass ich diesen.'

5. 'Heaven and earth kindle after me, may all gods assist me. O ye Angirases, O ye fathers delighting in soma, may he who does harm enter into misfortune.'

6. 'O ye Maruts, he who despises us, he who abuses the holy work that is being done (by us), may (our) zealous deeds be destructive for him, may the heavens burn the one hostile to holy acts.'

Then the poet takes the offensive; the metre changes. The passage is unmistakably employed in the sense claimed for the preceding verses

³ So two MSS; three *sṛtaḥ*; one *sṛtaḥ*; one *srutaḥ*; one *smṛtaḥ*.

by the diaskeuasts of the Atharvan, whatever the original purpose of its composition may have been.

7. 'I cut with my prayer your sevenfold breaths, your eightfold marrow; go to the seat of Yama, fitly prepared with Agni as guide.'

8. 'I set your foot-step upon the kindled fire. May Agni surround your body, may your voice go to the spirits.'

Schlagintweit translates pādas 3 and 4, doing violence to the sense by supplying two conjunctions not in the text, '(entweder) soll das Feuer in deinen Leib einkehren. (oder) deine Rede gehe zu leben.' The sense he imagines to be: 'If the word of the accuser is true, then he shall remain unharmed; if not, he shall be injured by fire.' Essentially in the same spirit are Weber's, Zimmer's, and Kaegi's renderings; while Ludwig, though he regards the hymn as a fire-ordeal, translates: 'Agni umhülle deinen Leib, selbst die Stimme geh.'

In an essay entitled Seven hymns of the Atharva-Veda, American Journal of Philology, vol. vii. p. 476 (p. 11 of the reprint), I have previously expressed my conviction that the last two verses of this hymn are verses adapted for this imprecation from the funeral ritual. Grill had previously expressed the same view on p. 50 of the work cited above, and this view is supported by certain other instances quoted in my article, in which the secondary employment of verses belonging to the burial service may be assumed with some degree of certainty.

The first verse is to be translated as follows: 'Heaven and earth and the broad mid-air, the goddess of the field and the wonderful (Viṣṇu), far-stepping one: the broad mid-air, guarded by the wind: may these be inflamed when I am inflamed (with fury).'

Schlagintweit: 'May these be burned here, if I am burned.' So also Weber, Ludwig, and Zimmer. Grill correctly: 'Die sollen glühen wenn mich Glut verzehret.' The appeal to heaven and earth and the misinterpreted fourth pāda are really the sole cause of the hypothesis of a fire ordeal. The appeal to heaven and earth is in western minds strongly associated with asseverations of innocence. A similar construction of it for India is clearly unwarranted: at least this is certainly true so far as this hymn is concerned.

We must finally not ignore the negative evidence of the Kāuṣika so far as ordeals in general are concerned. Though the book is perhaps the most comprehensive encyclopædia of the manners and customs of India which we possess, there appears in it, as far as I am aware, no instance of an ordeal. There is mention however of a *prāyaścitta*-ceremony, which is performed for a person over whom an accusation or evil reports are pending. The passage is Kāuṣ. 46.1-3:

1. *utā 'mṛtāsuh' cīvās ta ity abhyākhyātāya prayacchati.* Dārila: *pratiṣiddhakarmakarṭṭvenā 'bhīṣastah abhyākhyātah tasmāi manthādanāu* (? Cod. *manthanāu*) *prayacchati prāyaścittam* 'with AV. v.1.7 and vii.43.1 (etc.) one gives (a stirred drink and a porridge?) to the person accused (of the performance of forbidden deed), as a propitiatory act.'

2. *drughanaṣiro rajjvā badhnāti* 'one ties the head of an axe with a rope (to the accused person).'

8. *pratirūpam palācāyolohahiranyām*. Dārila: *drughanaçiraḥsadrçah pālāçah* (!) *prasiddhaḥ, ayaḥ kṣṣaloham, tāmraḥ hiraṇyaḥ suvarṇam etebhyaḥ drughanaçira iva kṛtvā badhnāti, aḥhyākhyātaprāyaçcittam* ' (that is) the image of an axe prepared out of palāça-wood, iron, copper, or gold is tied to the accused, as a propitiatory act.'

The entire performance seems to be undertaken for the purpose of reestablishing a soiled reputation. The amulet in the form of the head of an axe is perhaps intended to symbolize the act of cutting away or warding off the evil reports circulating about the person.

4. Notes on Part IV. of Schröder's edition of the *Māitrāyaṇī-Saṁhitā*, by Prof. W. D. Whitney, of New Haven; presented by the Corresponding Secretary.

It was one of the notable matters connected with the bringing to light of the *Māitrāyaṇī-Saṁhitā* that there was found in it, for the first (and only) time in the whole Sanskrit literature, forms of the root *stigh*—a root catalogued by the Hindu grammarians, and vouched for as genuine by corresponding words in the other languages of the family. In the concluding part (1886) of Schröder's extremely valuable and scholarly edition of this treatise, he thinks to find yet another of the missing thousand or more of Hindu roots, in the following passage (iv. 1. 9; p. 12, l. 2 ff.): *té vāi devās tān nā 'vindan yāsmīn yajñāsya krūrām ārkṣyāmahā iti: sò 'gnir abravīd ahām vas tān janayisyāmi yāsmīn yajñāsya krūrām ārkṣyādhvā iti*; in the two verbs here he sees the root *rkṣ*, to which the value 'harm' is given in the root-lists. It would seem hardly necessary to call in such a root, with a sense so little adapted to the connection: the forms in question might be forced out of one of the familiar roots *rc* or *arc*, *ṛç*, or *ṛş*. But it is also clear that the text needs only a very slight amendment to yield a far more acceptable meaning. By supplying in each case a missing *anusvāra*-dot, we get *krūrām mārṣ-*, or future forms of the root *mṛj*, middle voice; and the passage means: 'The gods did not find one "on whom," as they said, "we shall wipe off the cruelty of the sacrifice." Agni said: "I will produce for you one on whom ye shall wipe off the cruelty of the sacrifice;"' and he goes on to produce successively Ekata, Dvita, and Trita. The legend is not distinctly followed out in the passage here; but a verse of the Atharva-Veda (vi. 113.1) says: *tritē devā amṛjatāi 'tād enaḥ* 'the gods wiped off that guilt on Trita'; and the analogy between the two passages establishes beyond question the readings *mārṣyāmahe, mārṣyādhive* in the former (futures of this form from *mṛj* occur also elsewhere), and guides us in the understanding of the sequel of the paragraph.

The text of the *Māitrāyaṇī* in this book especially is in a rather unsatisfactory condition, needing to be bettered at many points: as is testified by the considerable list of corrections and conjectural emendations (some of them venturesome) furnished (partly by Roth) at the end of the volume. A few more may be here suggested.

At 87.1 (for convenience, references are made to page and line), the

imperfect *anudyanta* is not to be tolerated; no Brāhmaṇa would co-ordinate it with the preceding aorist *ādhuksata*: read instead *anutsata*, which is even rather nearer to what the MSS. give. So at 101.2, in the apodosis of a sentence having an optative in its protasis, we must absolutely have the optative *ricyeta*: there is no exception in the older language to the rule that the mode, whether optative or subjunctive or conditional, is the same in both members of such a sentence. Perhaps, indeed, in this passage *ricyate* is a misprint for *ricyeta*. In a like case at 89.8, *abhipadyata* is doubtless a misprint for *-dyeta*. At 23.3, we must amend *satyād* to *sasyād*: 'but he should keep awake till sunrise; if he should fall asleep, he would meet with mishap.' The reading of part of the MSS., to be sure, given in the margin, would suggest the equivalent *svapyād* instead of *sasyād*; perhaps this was also Roth's emendation, misprinted as *svapnād* in the errata. At 138.6, *arātsyam* must be made *arātsam*, aorist, as one of the MSS. reads. At 136.5, *bruvāma* is no form; read *bravāma* (with part of the MSS.): though *brūyāma* would suit the context still better. At 122.10, *prādur* is inadmissible; *prā dur* would answer grammatically; but the sense seems rather to call for *pārā dur*. At 3.11, *mārṣan* should doubtless be *mā riṣan*: compare such passages as AV. ii. 6.2; confusions of *;* with *ri* etc. are, as every one knows, common and persistent in the MSS. So for *hryāte* at 115.15, which is no form, *hriyāte* should of course be read; nor can it be questioned that at 185.2 we ought to have *hradām* instead of *hṛdām*. For the impossible *surāmṇām*, at 191.2, we must read, with TB. in the corresponding passage (ii. 6.11¹⁰), *suṭrāmānam*. So at 77.3, *adhṛṣṇuvat* is no form; read *adhṛṣṇuvant*, 'they did not venture to fall upon him' (the alteration of *tām nā* to *tān nā* in the errata is a mistake). And a little above, at 77.1, *ny ākāmayata* should be changed to *-yanta*. At 31.7, *tēna* is to be divided and accented *tē nā*; and at 27.4 and 29.14, *nāme* is rather *nā me* (cf. Āpast. xiii. 7.13; where, instead of the anomalous *dambhiṣar*, we have the equally strange *dambhiṣag*). At 36.15, the sequel plainly shows that *srāvātā bhūtīm* should be *srāvātā 'bhūtīm*. At 44.1, it was wrong to change *samūhya* of the MSS. into *samāhya*, since *-ūhya* is repeatedly met with as gerund of *√ūh*. There can be little question that at 30.4.7 the true reading is *āiḍō* and *āiḍī*, instead of *dāiḍō* and *dāiḍī*. At 112.11, read *ēti* for *iti*. At 49.14, the reading *asī rājū pūnyah* seems impossible; the MSS. authority favors rather *āsīd* for *asī*; and this might pass. At 22.9, the double punctuation mark after *juhuyāt* breaks the sense. At 2.6, *pretvariyā* cannot be right; if not *pretvarī* simply, it may be *pretvarī vā* (for *val*). At 97.18, must we not emend to *mithunām vā agnīc ca pātnī ca* ? and, at 25.16, *vāsu* for *vāsur* ? At 23.12 *tvadānī* is, of course, a misprint for *tvadānīm*: it is very curious to find *tvadānīm* . . . *tvadānīm* unaccented, as *tvat* . . . *tvat* would be. Other misprints are *randhāyamāṇa* for *-māna* (57.8); *-rājānāms* for *-rājānām* (62.2); *ādāyād ātha* for *ādāyādā 'tha* (85.2); *dogdhavyām* for *dogdhavyām* (5.5); *tātvā* for *tatvā* (6.1); *krīto* for *krītō* (27.12; cf. *krītō* in l. 16); *caturthē* for *caturthe* (101.12: second time); *metavyāḥ* for *metavyāḥ* (105.7); *īṣa* for *īṣe* (107.11); *svaḥ* for *svāḥ*

(109.1); *sahsādyamānāya* for *-sādyām-* (180.4). Finally, the rules as to the accent of verbs are in general so well and consistently followed that we are justified in removing by emendation the occasional violations of them that appear. Thus, we may venture to read *visrjante* for *visrjānte* at 8.5, 6; *īṭe* for *īṭe* at 25.14; *bhavanti* for *bhāvanti* at 32.1; *anūpanamati* for *anūpanamati* ib.; *abhavat* for *ābhavat* at 35.9; *bhavati* for *bhāvati* at 46.14; *abhiṣiñcati* for *abhiṣiñcāti* at 53.17; *niravadayate* for *niravadāyate* at 54.9; *īṣāte* for *īṣāte* at 64.16; *pratitiṣṭhanti* for *prātiṣṭhanti* at 73.10; *mathyate* for *mathyāte* at 81.10; *grhṇāti* for *grhṇāti* at 84.8; *ṛchet* for *ṛchet* at 87.19; *syāt* for *syāt* at 93.5; *bhānti* for *bhānti* at 96.16; *āstām* for *āstām* at 106.8; *gamayati* for *gamāyati* at 114.18. In some of these cases, an error of the press is by no means unlikely.

5. An explanation; by Prof. Edward W. Hopkins, of Bryn Mawr, Penn.

In regard to a note on p. 1 of the last Proceedings,* in which Mr. Hopkins suggested that Prof. Bühler ought to have mentioned the name of Dr. Burnell in connection with his argument on the date of the early commentators of Manu, the following explanation of the facts was presented: 'I have received a note from Professor Bühler, explaining that his statement as to not having read the Translation of Burnell was misinterpreted by me so as to exclude Burnell's Introduction to the Translation, and I therefore gladly admit that Prof. Bühler, having no knowledge of Burnell's use of the argument based on *pūrve*, etc., was fully entitled to present it as his own.'

6. On Proverb-literature; by Prof. Hopkins.

Three Sanskrit proverbs were quoted as of possible interest to those engaged on the general literature of proverbs. The first was the Epic version (MBh. vii.11.50-51) of our 'Man proposes, God disposes,' and runs as follows :

anyathā cintitā hy arthā narāis tāta manasvibhiḥ
anyathāiva prapadyante dāivād iti matir mama.

'Wise men plan affairs in one way, but they are disposed of by the power divine in quite another way.' Similarly, Hitopadeṣa ii.12 or 13,

karotu nāma nītiṅno vyavasāyam itas tataḥ
phalam punas tad evāsya yad vidher manasi sthitam.

Our 'Golden Rule' finds its negative equivalent in the words (MBh. v.39.72-3):

na tat parasya saṁdadhyaṭ prātikūlaṁ yad ātmanaḥ
saṁgraheṇāṣa dharmāḥ syāt (kāmād anyāḥ pravartate).

'To express the whole law in one word: do not do to another what is displeasing to thyself.'

* Page 1 of Proceedings for May, 1887, = Journal, vol. xiii. p. cc.

Another version (Pañcatantra, iii.103 or 104) slightly differs: 'Hear the whole essence of the law: do not practice on others what is displeasing to thyself' (*ātmanah pratikūlāni pareṣān na samācaret*). See Böhlingk's *Indische Sprüche*², no's 3258 and 6579.

The most interesting case of accidental similarity was found in the Sanskrit almost verbal equivalent of the Greek proverb given by the Scholiast to Antig. 620, and which (Vell. Paterc. ii.118, Publ. Syr. 490; cf. Frg. Lykurg. adv. Leok. §92) ultimately reaches us in the familiar *Quos deus perdere vult dementat prius*. The Scholiast's version is more elaborate:

ὅταν δ' ὁ δαίμων ἀνδρὶ ποροίην κακὰ
τὸν νοῦν ἐβλάψῃ πρῶτον (ὧ βουλεύεται).

Cf. MBh. ii.81.8:

*yasmāi devāḥ prayacchanti puruṣāya parābhavam
buddhiṁ tasyāpakarṣanti (so 'vācīnāni paṣyati).*

Greek: 'When the divinity prepares evil for any man, he is wont (aor.) to injure first the understanding of him (against whom he plots).' Sanskrit: 'If the divinities prepare destruction for any man, they are wont (pres.) to remove the mind of him (and he beholds things inverted, thinks crookedly).'

The correspondence in sense, arrangement, and word was shown; and, as exhibiting the meaning of the last clause in the Sanskrit version, another version in Sanskrit (MBh. vi.98.17) was quoted. (Bhīṣma is speaking to Duryodhana.)

*mumūrṣur hi naraḥ sarvān vṛkṣān paṣyati kāñcanān
tathā tvam api (gāndhāre) viparītāni paṣyasi.*

'A man who is about to die thinks every tree golden: so thou too thinkest crookedly (art about to perish).' Evidently proverbial, as the like passages in Theognis and elsewhere show this κλεινὸν ἔπος to have been in Greece.

7. Recovery and publication of Tatian's Diatessaron; by Prof. A. L. Frothingham, Jr., of the College of New Jersey, Princeton, N. J.

Tatian, the friend and pupil of Justin, on joining the ranks of the Gnostics, returned to Syria, his native land, about 166 A. D., and there wrote a Gospel-harmony or *Εὐαγγέλιον διὰ τεσσάρων*. This work, which doubtless supplied a much-felt want, soon became extremely popular in that part of the East, coming into general private and public use, and being read in the churches in place of the Gospels themselves. This is shown in a well-known passage in Theodoret, who reports that he had confiscated about 200 copies of it in his diocese. S. Ephraem's commentary on the Diatessaron shows that its popularity had lasted from the second until well into the fourth century. The learned Maronite, Assemani, who did so much for the formation of the Oriental department of manuscripts at the Vatican, brought back from Egypt,

early in the last century, a MS. containing the Arabic version of a Gospel harmony that claimed to be the Diatessaron; this lay unnoticed until attention was called to it about four years ago by a learned Roman Orientalist, Padre Agostino Ciasca, especially known for his publications of Coptic and Tibetan texts. Doubts were expressed in Germany as to the genuineness of the work for two reasons. Tatian's Diatessaron is known to have omitted the genealogy of Christ, for Gnostical reasons, and to have commenced with the Gospel of John; now the Vatican Arabic MS. contained the genealogies, and commenced not with John but Matthew. These doubts have, however, been dissipated by the discovery in Egypt, about a year ago, of a second MS., now in Prof. Ciasca's hands, which, while otherwise according with the first Vatican codex, complies with the conditions, as it does not contain the genealogies, and gives the first place to St. John. This fact and the various readings show that these two manuscripts were copied, both at nearly the same period, XIV.-XV. century, in Egypt, from different originals. The original of the first Vatican codex was probably later and had suffered from interpolations; that of the former had better preserved the status of the Diatessaron. Professor Ciasca expects to publish in Rome, during the winter, the Arabic text with a Latin translation, and has granted me the privilege of issuing, contemporaneously, an English version.

It is not easy to ascertain when the Syriac original of the Diatessaron was lost. Bar Salibi was probably familiar with it in the XII. century, but Ebed-yeshu, in his catalogue, confounds it with a harmony attributed to Ammonius of Alexandria, and Bar-ebraia evidently spoke of it on hearsay. For the Latin harmony attributed to Tatian by Victor of Capua, a writer of the V. century, see this writer's *Præfat. ad Anonymi Harmoniam Evangelicam*. Only a careful comparison can prove what it is most probable to suppose—that the original of Victor of Capua's harmony is the same as that of this Arabic version.

8. On a Syriac manuscript of *The Order of Obsequies*, with a translated extract therefrom; by Prof. I. H. Hall, of the Metropolitan Museum of Art, New York City.

This MS. is on paper, in original binding of thick boards covered with leather, now somewhat dilapidated; it contains 148 leaves (296 pages), written in beautiful Nestorian, pretty well rubricated and somewhat ornamented here and there, about 19 lines to the page, lines running clear across. Size of written page, $6 \times 4\frac{1}{2}$ inches: of book, $9 \times 7 \times 2\frac{1}{4}$. The contents may be given in the words of the Colophon: Finished, by the help of our Lord, the *Order of Obsequies of Every Sort*. Men, Women, Youths, and all ages and all conditions—in the goodness of his mercy. Yea and Amen. This book was completed and brought to an end with exactness in the year of the blessed Greeks 2046, on the 5th day of the month Ab, on the 4th Tuesday of Summer [i. e. Tuesday, 5th August, A. D. 1735]. And it was written and brought to an end in the blessed region of Targawar, in the blessed village of Darband . . . by Priest Warda, son of the late Lazarus, one of the sons of Mar John, bishop

of Adorbigan.' The MS. is one of those recently acquired by the Union Theological Seminary, New York.

'In the name of Him who liveth and dieth not, we write the Ritual of Washing the Departed.

'First they set the face of him who has departed towards the East, and when they are about to wash him they sign him between the eyes [idiomatic for 'on his forehead'] with the sign of the cross. And next they wash his head and his face, and his whole neck as far as the spine, according to the redemptive word [this refers to ritual formulas explained in other parts of the MS.]. And next they wash his right hand as far as the elbow, and in like manner also the left hand. And then they make him sit up, and they throw water upon his right shoulder, and wash his whole side as far as his knees; and in like manner also his left side. And next they lay him upon the spine of his back, and wash his bed [if the scribe has not made a mistake of one letter, which would make it read 'belly'] and all his members. And next they lay him upon his face, and wash his feet, from his knees downward. And next they make him sit up, and they take water in a platter, and dash it upon his head three times, and clothe him in white garments, as in the days of his wedding [the wedding lasts from 7 to 14 days].

'But if he be a monk, they do not so, but they wash first from his head down to his spine; and then they wash his right hand as far as to its elbow, and his left hand in like manner. But they do not strip off his [monk's] garment from his body, but they throw water upon the garment, outside; and the one who washes him rubs his garment upon his body, on all sides, until the water runs off quite clear. And then they wash his feet downward from his knees. And then those who are present go out, and one who is familiarly associated with him remains with him in his place; and after his fellows have gone out, he strips off his clothing and puts other garments on him. But it is not right for him to bring in a cross with him, not at all, by no means; that he may not follow the fashion of those who covered up our Lord's cross [i. e., the worldly hypocrites].

'And know this, too, that in the rank in which he used to go to the altar while living, in that they should bring him to the grave. If he was a monk who had no grades by which to go to the altar, let them bring him in thus according to the rank of his monkhood. But if he be one distinguished above the multitude, a light, as he used to stand in the service of the church, in that manner let them bring him to the grave.

'And when they wash the departed, whoever he be, let them say over him the service of the washing, in the house of the departed or upon the roof; or if there be no place there, perform it in the church, as it is written in the rubric of the departed. And when they carry him out, begin the *Qala* of the way; and let his head go foremost, as it were leaving peace to the people of the house. And when they have gone outside of the village, put him on a bier in a pure place, and finish three dirges. And then take him up and carry him, with *Qala* and responses, the priests and the people preceding him, until they come

beside the grave. And when they begin the *Qala* of the approach, *Maran atha*, let pass the bier first, and the priests and the people after the bier, until they come to the grave. And put the dead on the right-hand side of the grave, and the priests keeping his feet and their faces toward the grave. And when they have finished the three prescribed dirges, lower the departed into the grave. And when the prescribed order is finished, let the priest throw a little dust into the grave; but not in the form of a cross, as foolish people do; and let them bury completely the dead, and pray for the sinner.'

It is worthy of remark, however, that the church canons, given in sundry places (e. g. in Lagarde's *Reliquiae Juris Ecclesiastici Antiquissimae*, C. Kayser's *Die Canones Jacob's von Edessa*), say that washing the dead is not very proper.

9. On certain Babylonian objects; by Rev. Dr. William Hayes Ward, of New York City.

One of the objects shown was a sardonyx disk twenty-two millimeters in diameter, so cut as to expose an outer circle of white, within that a circle of light brown, and in the center a circle of darker brown, the whole resembling the cornea, iris, and pupil of the eye. Very delicately cut in the iris is an inscription stating that Nebuchadnezzar dedicated it to his god Nebo. This was, then, the eye of an idol of Nebo, set up by Nebuchadnezzar. A few such objects are known in continental museums, notably one which was for sometime supposed to contain a cameo head of Nebuchadnezzar, but which Menant showed had come into the possession of a Greek artist, who had utilized the convenient stone to cut a cameo head within the earlier inscription dedicating the eye to Merodach.

A second object exhibited was in bronze, and shaped as a pendant, about four centimeters in length by three in width. On one side is figured a goddess holding a ring, seated in a chair over a griffin. Before her is a bearded worshiper. On the other side are two griffins rampant, and above them the familiar seven dots, or stars.

Photographs were also presented of a copper object now offered for sale in Constantinople, which is one of the most ambitious forgeries yet produced in the East. It takes the form of a small altar, or table. It is not more than three inches long by two and a half wide and an inch thick, and is supported on four legs of oxen. From each of the two opposite longer sides there project two heads of oxen. The top and two ends not occupied by the oxen's heads are filled with scenes in relief, precisely like those produced on a flat cast taken from a Babylonian or Assyrian cylinder. The photograph allows us distinctly to recognize the two scenes on the top of the altar. The upper one is Assyrian in style, and shows Gisdubar holding up with each hand a griffin by the hind leg. The forgery instantly appears in the fact that the elaborate Assyrian sacred tree is divided exactly longitudinally through the middle, so that half of it appears at each end of the scene, as if it were an architectural ornament. An inscription declares this to be the 'seal' (*kunuk*) of the owner Zabri. The date of this sea

would be about the time of Sargon. Below it is a characteristic Babylonian scene, representing Gisdubar and other heroes fighting wild beasts, of a period a thousand years older than the Assyrian one. The two cylinders from which these forgeries were copied can fortunately be identified. They are both now in the possession of the Rev. Henry Fairbanks, of St. Johnsbury, Vt., for whom the very fine Assyrian one was bought only four years ago, from the head-dress of a woman in Urfa. Rubbings, after the Turkish style, which would easily divide the sacred tree, were sent to a man in Constantinople, who pretended to read the inscription, and pronounced it of fabulous value.

10. On the meaning of the design on the stone tablet of Abu-Habba; by Rev. Dr. Ward. •

This famous tablet contains, above a long inscription, the figure of a god, under a canopy. Before him is an altar, or table, with a large disk of the Sun upon it, held upright by cords in the hands of two small figures above. A man is led into the presence of the god, and is followed by a beardless personage. Three epigraphs describe the scene. One of these, in the vacant space to the left, tells us that this is 'the image (*Salam*) of the Sun-god, the great lord, dwelling (or sitting, *ashib*) in Ebara, which is within Sippara.' If the word *Salam* can refer only to an image in the human form, and not to the great disk upon the table, then this epigraph refers especially to the seated god, or, rather, to the whole scene, of which he is the chief object. Under the whole scene is a stream, or sea of water, with four circles in it figured with the conventional representations of Venus. Above the canopy, or shrine, is an epigraph not yet satisfactorily read, but which may possibly be explained by comparison with the objects figured. First is mentioned 'the Moon-god, the Sun-god, and Istar.' These refer, of course, to the three common symbols of Sin, Shamash, and Ishtar immediately under this epigraph. Next come the words *ina pûtu apsu*, of which the word *apsu*, abyss, or ocean, is clear. This must be the water at the bottom of the design. The second line has the words *ina birit Siru timeru mesrit* (?). Here Siru is the great Serpent-god. He ought to be represented, and I think he is to be identified with the covering of the shrine. It rises from the waters behind the seated Sun-god, bends over his head, and reaches to the top of the column. It seems to have the head of a serpent clearly drawn, though not hitherto noticed. May the *timeru* mentioned afterwards be the palm-tree (Heb. *tamar*) column in front of the god? The word *timeru* is applied in Assyrian to a column of smoke. Here the serpent, forming a canopy about the god, will be the same world- and ocean-encircling serpent that appears encompassing the bowl of Palestrina. Within the shrine, and over the god's hand, is a small epigraph, of which the first line reads *Agu* (D P) *Shamash*. This I would translate 'Circle (ring, disk) of Shamash.' This cannot refer to his tiara, but only, I think, to the ring which he holds in his hand. The second line is not easy to translate. It seems to read *mushshi* II, and is translated by Pinches 'the two attendants.' The two vertical wedges I would not make a

numeral, but the sign for *ditto*, and I suppose it repeats the *Shamash* of the line above, which there was not room to write out again in full. It would then denote 'the *mushshi* of *Shamash*,' and the object indicated is probably the divining rod, scepter, or whatever the stick is, which the Sun-god holds in the same hand with the ring.

Large stone disks, to be compared with that figured on the table, have been described by Prof. J. A. Paine as existing in Moab. The third of the three figures approaching the altar is Aa, the wife of Shamash. The wife of a deity, if she have not, like Ishtar, any marked character to distinguish her, is generally represented, in Babylonian art, as dressed in a long goat's-hair garment, often flounced, with a divine head-dress, and with both hands lifted in an attitude of respect. A human worshiper generally lifts but one hand.

11. On the Babylonian inscribed tablets at Harvard University; by Prof. D. G. Lyon, of Cambridge, Mass.; presented by the Corresponding Secretary.

This paper gave an account of some tablets and fragments recently acquired by Harvard University. They are all of the class usually known as contract or commercial tablets, giving accounts of sale, barter, loans, etc., of the ancient Babylonians. The only other collection of the kind in America is the one in the Metropolitan Museum, in New York, part of which was acquired from England some years ago, but most of which was brought home by the American exploring party in 1885. The British Museum contains many thousand, and Dr. Strassmaier is now engaged in publishing about 900 from the times of Nabonidus. The study of tablets of this class has been much neglected; but here it is that the material is found for reconstructing the private and social life of the people. The newly acquired Harvard tablets are from the reigns of Nebuchadnezzar, Evil-Merodach, Neriglissar, Nabonidus, Cyrus, Cambyses, and Darius.

12. On a study-collection of casts of Assyrian and Babylonian antiquities in the National Museum at Washington; by Dr. Cyrus Adler, of the Johns Hopkins University, Baltimore, Md.

The National Museum at Washington has undertaken the formation of a study-collection of casts of Assyrian and Babylonian antiquities, in association with the Johns Hopkins University of Baltimore. The Museum stands ready to make fac-similes and casts of Assyrian and Babylonian antiquities. An attempt is being made to first obtain copies of the Assyrian antiquities, preserved in this country. The Johns Hopkins University will attend to the proper arrangement and cataloguing of the Assyrian collection in the National Museum, under the supervision of Dr. Paul Haupt, Professor of Shemitic languages, and Dr. Cyrus Adler, Assistant in the Shemitic courses, who will also cooperate in the work of forming the collection and of securing the loan of objects to be copied. Three sets of fac-similes and casts will be made in each case, the first to be preserved in the National Museum at Washington; the second to be transferred to the Shemitic Library of the Johns Hopkins University; and the third to be presented to the owners of objects loaned.

13. On the death of Sennacherib and the accession of Esarhaddon; by Dr. Cyrus Adler.

In 2 Kings xix.³⁷ the following account is given of the death of Sennacherib: "And he was worshiping in the house of Nisroch¹ his God; and Adrammelech and Sharezer [his sons] smote him with the sword; and they escaped to the land of Ararat; and Esarhaddon his son reigned in his stead." Isaiah xxxvii.³⁸ is a repetition of this sentence. while 2 Chronicles xxxii.²¹ less accurately says that after the destruction of Sennacherib's army before Jerusalem "he returned in shame to his land, and he entered the house of his God, and those who came out of his bowels cast him down with the sword." Professor Friedrich Delitzsch in the article on Sennacherib in the *Calwer Bibellexikon* also refers to Nahum's prophecy (i. 14) against Nineveh, where we read "And the Lord hath given a commandment concerning thee that no more of thy name be sown; out of the house of thy Gods will I cut off the graven image and the molten image; I will make thy grave, for thou art vile." But it is by no means clear that the passage cited has any relation either to this period or to the death of Sennacherib.

Josephus, on the authority of Berossus, gives a statement in agreement with 2 Kings: "He was treacherously assaulted, and died by the hands of his elder sons Adrammelech and Seraser, and was slain in his own temple which was called Araske."² Polyhistor asserts that "Sennacherim . . . reigned 18 years, and was cut off by a conspiracy which had been formed against his life by his son Ardu-Musanus."³

The account of Abydenus differs materially from all of these. He says "next in order after him (Sennacherib) reigned Nergilus, who was assassinated by his son Adramelus; and he also was slain by Axerdes, his brother by the same father but of a different mother, who pursued his army and shut it up in the city of the Byzantines. Axerdes was the first that levied mercenary soldiers, one of whom was Pythagoras, a follower of the wisdom of the Chaldeans; he also reduced under his dominion Egypt."⁴

As a matter of curiosity, since of course no historical importance attaches to them, the accounts in the apocryphal Book of Tobit, whose scene is laid at this period, may be mentioned. Tobit gives in the different versions somewhat varying accounts of the affair. The Chaldee

¹ No deity named Nisroch has been found in the Assyro-Babylonian pantheon. Joseph Halévy has suggested (*Mélanges de critique et d'histoire relatifs aux peuples sémitiques*, p. 177) that we should read instead of נִסְרוֹךְ corresponding to the name of the Babylonian God Nusku, constr. *Nusuk* נִסְוֹךְ. See also Haupt, *Andover Review*, July, 1884, p. 93; Lagarde, *Mittheilungen*, i. 230; Tiele, 325.

² Antiquities of the Jews, x. 1. 5. The Greek MSS. give the name of the god in various forms as Asarac, Mesoroc, Nasaroc (see Dean Stanley, *History of the Jewish Church*, ii. 531. 6), a diversity which lends support to Halévy's emendation.

³ Eusebius, *Armen. Chron.*, 42. Cory's *Ancient Fragments* (London, 1876), p. 87.

⁴ Euseb., *Armen. Chron.*, 52. Cory, *Ancient Frag.*, 89. It is difficult to get at the real meaning of this confused statement; Schrader KAT.² 330.

Version (ed. Neubauer, Oxford, '78) reads "But he hid before him five and forty days, until that Adrammelech and Sharezer his sons killed him with the sword, and they fled in to the land of Kardu (so too the Targum Jonathan), and Esarhaddon his son reigned in his stead." The Hebrew version gives a reason for the parricide. "The God of Israel delivered him into the hand of his two sons, and they slew him with the sword. For he asked his counsellors and his elders why the Holy One (blessed be he) had been jealous for Israel and Jerusalem, and the angel of the Lord had destroyed the host of Pharaoh, and all the first-born of Egypt, and the young men by whose hand the Lord always gave them salvation. And his wise men and his counsellors said unto him, Abraham, the father of Israel, led forth his son to slay him, peradventure he might thereby obtain the favor of the Lord his God; therefore hath he been jealous for his children and hath executed vengeance upon thy servants. Then the king said, I will slay my two sons for the Lord's sake, peradventure I may obtain by them God's favor, and he will help me. And the saying came to Adrammelech and Sharezer his sons, and they lay in wait for him, and killed him with the sword, at the hour when he went in to pray before his idol Dagon, as it is said, etc." The Itala reads: *et contigit dum laterem post dies quadraginta quinque occiderunt regem illum duo filii sui, et fugerunt in montem Ararath.*"

Until recently this was all the information we possessed concerning the death of Sennacherib. About three years ago there was discovered in the British Museum a series of interesting tablets appropriately called the Babylonian Chronicle, which furnished brief statements concerning the kings of Babylonia and Assyria from about 747 to 667 B.C. The Babylonian Chronicle was known only in a paraphrase published by Mr. T. G. Pinches (Proceedings of the Society of Biblical Archaeology, May 6, 1884) until last spring, when Dr. Hugo Winckler published the text with transliteration and translation in the *Journal of Assyriology* (II ZA 157).⁵ Col. iii.34 we read, *Arah Tebētu umu XX Sinaherba šar Aššûr aptu-šu ina sihi idûk šanāti Sinaherba šarrût Aššûr epuš.* 'On the twentieth day of the month Teth Sennacherib, king of Assyria, was killed by his son in an insurrection; . . . years Sennacherib exercised the government of Assyria.'

So much then is settled; Sennacherib was murdered, and by one sprung from his own loins⁶ (2 Chronicles). As against the statement in 2 Kings that he was murdered by his two sons (confirmed by Berossus

⁵ Now published again by Pinches, *Journal of the Royal Asiatic Society*, New Series, xix.655.

⁶ It is characteristic of the way in which some Assyriologists work that Dr. Winckler did not seem to notice the force of this nor of the following statements in the Chronicle, nor does he seem to have recognized the name of Samaria in the text (see Delitzsch, review of the German edition of Sayce's *Fresh Light from the Ancient Monuments* in the *Literarisches Centralblatt*, Sept. 17, 1887). I shall notice Dr. Winckler's remarks on these points made in the September number of the Munich *Journal of Assyriology* (just received), in the April number of *Hebraica*.

in Josephus), we have first Polyhistor (who mentions but one son, Ardu-Musanus), the rather confused account of Abydenus, and finally the Babylonian Chronicle. If compelled to choose between the two names, it would be difficult to say where the weight of evidence lies.

Column iii. line 36 of the Babylonian Chronicle continues: *istū ūmu XX ša arah Tebētu adī ūmu II ša arah Adaru sihu ina Aššūr sadir*, 'From the twentieth day of the month Tebeth (December-January) till the second day of the month Adar (February) there was an organized insurrection in Assyria.'

Although before the discovery of the Babylonian Chronicle there never existed any direct cuneiform evidence of the murder of Sennacherib, yet there were two texts which were connected with this event. First, the so-called will of Sennacherib,⁷ in which he made a special bequest to Esarhaddon, thus designating him as his favorite and thereby arousing the jealousy of his elder brothers; and secondly, the beginning of the Prism inscription of Esarhaddon,⁸ the opening lines of which are unfortunately lost, which has generally been considered an account of the triumph of Esarhaddon over the murderer or murderers of his father. In this inscription the impetuosity of Esarhaddon is expressed in the phrases: *isten ūmi šinā ūme ul uqqī, pān šābē'a ul adgul, arkā ul ūmur piqitti sise šimitti niri ul unūt tahāzī'u ul ašūr šūdit girrī'a ul ašpuk raggu kuššu^{8a} arah S'abāfi dannat kušši ul ādur*, 'One day, two days, I did not wait. The front of my soldiers I did not look at; the rear I did not see; the attendance of the horses, the harnessing of the chariots, the implements of battle I did not inspect. Provision for my campaign I did not heap up. The furious storm of Shebat (January-February), the rage of the tempest I did not fear.'

The course of events, then, seems to have been as follows: On the twentieth of Tebeth (December-January) Sennacherib was murdered. In the month of Shebat (January-February) Esarhaddon marched against the rebels. What the government of Assyria was during that time we do not know, though we are informed that the disturbance lasted until the second of Adar (February-March). Esarhaddon, according to the inscription, had a very easy time in overcoming the rebels. *Istar belit qabal tahāzi rā'imat šangūtī'a idā'u tāziz-ma qašatsunu tašbir tahāzā šunu rakšu tapfur-ma ina puhrišunu iqbū unma annū šarrāni*, 'Istar, Lady of the battle field, who loves my sacerdotal royalty, stood at my side and broke their bows. She broke through their compact battle-array, and they cried with one voice "This is our king." Yet according to the Babylonian Chronicle, he did not accede until the eighth of Sivan (May-June):⁹ *Arah Simānu ūmu VIII Ašurahiddina ina Aššūr ina*

⁷ Cf. III. R. 16; Budge, *Hist. of Esarhaddon*, p. 4: [Tiele, p. 311, n. 4].

⁸ Cf. III R. 15; AL³ 117 No. 7. [^{8a}. See the Vienna ZKM. I, 199.]

⁹ Mr. Pinches (JRAS. l. c.), it is true, reads Adar for Sivan: but I have no hesitation, in view of other confirmatory facts, in accepting Winckler's reading. For the ideogram with phonetic complement rendered by *ittāšab*, Pinches puts the strange form *ūšab*. He is more accurate, however, in reading *kussī* for Winckler's *kussā*. [For *ūšab*, cf. Zimmern, pp. 54, 117.]

kussi ittāšab (iii.38). This would take the accession of Esarhaddon over to the year 680, though his father was murdered in the year 681. Moreover the Babylonian Chronicle expressly states that Esarhaddon reigned but twelve years : *XII šanāti Ašurahiddina šarrāt Aššur epuš* (iv.32). [Cf. Tiele's *Geschichte*, pp. 343, 615.]

From these statements we infer, first, that the account in the Bible and other ancient authors concerning the murder of Sennacherib is correct ; and, second, that although Sennacherib was murdered in the year 681, his son Esarhaddon did not accede until the following year, 680.¹⁰ The absence of any evidence for these statements in the Assyrian Eponym Canon and their presence in the Babylonian Chronicle is explainable as an instance of the unwillingness of the Assyrians to put on record any statement showing disasters to their dynasties or breaks in the succession.

14. On the views of the Babylonians concerning life after death ; by Dr. Cyrus Adler.

Among the vast series of facts which the excavation and decipherment of the cuneiform monuments brought to light, none were more eagerly awaited, and none have proved more fruitful from the point of view of culture-history and comparative mythology, than the information we have been enabled to glean concerning the religion of ancient Babylonia. Studies in religious history are always made with difficulty. The dogmatical statements of a church, the theoretical expoundings of the schools, and the form which these two assume under the influence of popular belief and popular superstition, must all be taken into account. Nor is the problem by any means simplified when we have, as in Babylonia, two distinct systems, of two distinct races, contending for mastery, or at all events but inharmoniously blended. As is well known, the entire religion of the ancient Egyptians has been unfolded by a careful study of their funeral rites and mortuary remains. And it is indeed a canon of Anthropology that investigators should pay especial attention, in studying the culture-history of any newly discovered people, to their funeral rites, and their views of life after death.¹ For no people, however degraded, have ever been discovered anywhere who have not indulged in some speculation upon this subject. Almost as soon as the decipherment of the Semitic cuneiform inscriptions was firmly laid, students commenced to search for the religious statements which they must needs reveal, a search which was materially aided by the discovery of a large number of distinctively religious texts in the so-called library of Assurbanipal (668-626 B. C.).

¹⁰ This agrees with the date required by the Canon of Ptolemy, and has been so given by Boscawen PSBA. IV. 86. Budge, *Hist. of Esarhaddon*, p. 5. Pinches, PSBA. May 6, 1884, p. 198. Schrader, *Die keilinschriftliche babylonische Königtum* in the *Sitzungsberichte der Akademie der Wissenschaften zu Berlin*, June 23, 1887, p. 29. It might be well to add that the Assyro-Babylonian year, as shown by the list of months (ASKT. 64), begins with Nisan.

¹ Cf. Reports of the Director of the Bureau of Ethnology, vol. ii., pp. 89-199.

As early as 1871 Mr. H. Fox Talbot remarked:² "It is a question which I believe has hitherto not received any satisfactory answer, whether or not the Assyrians believed in the immortality of the soul and a future state of happiness? There is nothing, so far as I am aware, in the historical inscriptions which throws any light upon this subject, but on the clay tablets of the British Museum I have found two passages which I think indicate their belief with sufficient certainty. They are both prayers for the happiness of the king, first upon earth and afterwards in a future life." And later on, the same scholar thought that he had deduced the notion of the future punishment of the wicked. Both Mr. Talbot's assertions concerning the historical annals and his deductions from the liturgical texts were unfounded, yet they are here cited as the first expressions of opinion on the subject. To these statements Mr. W. St. Chad Boscawen lent considerable support by a discussion of the twelfth tablet of the Nimrod Epic and the Descent of Istar to Hades.³ And the historical works and manuals have in the main relied on the facts thus adduced. Dr. Alfred Jeremias, a pupil of Professor Friedrich Delitzsch, has recently, however, placed this whole matter on a sound basis.⁴ As was already recognized by Boscawen in 1875, the first great source for our knowledge of the Babylonian Hades is furnished by the text of the Descent of Istar. The connection in which this story is related is as follows: A man was in distress at the death of his sister, and longed for her release from Hades. He accordingly betook himself to a magician, who, to show him that his desire was not unattainable, told him the story of the descent of Istar: how Istar went down to obtain the release of her dead lover Tammuz; how she threatened to "smash the door-posts and pull out the doors" if she were denied admittance; how the keeper of the under-world takes her name to Allat, who is at first enraged but finally agrees to admit her, stipulating however, that she shall be stripped "according to the ancient rules." At each one of the seven gates Istar loses a garment or ornament, until finally she stands naked in the presence of Allat. To her Istar is indiscreet in her greeting, and by way of punishment is smitten with various diseases. But the effect of the absence of the goddess of love was disastrous to the upper world. All the processes of generation ceased. Ea, the god of unfathomable wisdom, created a being Udušunamir who was sent to Hades to procure the release of Istar. After some difficulty this was accomplished. Istar was sprinkled with the water of life and taken through the seven gates of Hades, her various garments and ornaments being restored to her as they passed through the respective gates. Accordingly the petitioner was advised to make a libation of pure water and precious oils to Tammuz. The same pur-

² PSBA., vol. ii, pp. 29 and 346.

³ TSBA., iv. 267.

⁴ *Die Babylonisch-Assyrischen Vorstellungen vom Leben nach dem Tode*, nach den Quellen mit Berücksichtigung der alttestamentlichen Parallelen dargestellt von Dr. Alfred Jeremias, Leipzig, J. C. Hinrichs'sche Buchhandlung, 1887.

pose furnishes the occasion for the most interesting tablet of the Nimrod-Epic, the eleventh tablet, containing the Babylonian account of the Deluge.

In the fifth and sixth tablets we learn how Nimrod freed Erech and ascended the throne; how Istar was inflamed with love for the hero, and how she, when rejected, applied to her father Anu to avenge her disgrace; how Nimrod was cursed by Istar, and how his friend Ea-bani, who cast further indignity upon the goddess, was at the request of the enraged Istar smitten with a fatal disease. The ninth table opens with the lament of Nimrod over Ea-bani, and his resolve to seek out his ancestor S'amaš-napištim to obtain the resurrection of his friend and immortality for himself. But he has an arduous task before him. After many difficulties the mountain of Mâš is reached. In the historical inscriptions this name appears as the designation of the Syro-Arabian desert,⁵ but in the ancient period of which the poem treats it seems still to have been a *terra incognita*.

Next the adventures of the road are set forth, though unfortunately this portion is very much mutilated. In the last lines of col. v., Nimrod finds himself in a land of magnificent trees, and at the end of the sixth column he has arrived at the sea, where a new obstacle presents itself. And the obstacle at first seems insurmountable, for Nimrod says, "If it be possible I will cross the sea; and if it be not possible, I will stretch myself on the ground (in despair)." Sabit, the keeper of the waters, answered this appeal as follows: "Nimrod, there never has been a passage, and no one has ever been permitted to cross the sea. S'amaš the hero has crossed the sea, but beside S'amaš who can cross it? Hard is the passage, most difficult is its course, and closed are the waters of the dead which are placed around (like a moat). Why, O Nimrod, wouldst thou cross the sea? When thou approachest the waters of the dead, what wilt thou do then?" Nimrod, there is Arad-Ea, the ferryman of S'amaš-napištim.⁷ . . . If possible, cross with him; if not, after him." After a long passage over the river they come to the ocean, where is Arad-Ea's stopping place. Nimrod relates to Arad-Ea his woes, and begs the ferryman to take him across. Arad-Ea then gives Nimrod directions for the journey. For more than a month they cruise about in the waters of the dead. Then the real danger begins. Finally they approach the shore of the regions of the blessed. S'amaš-napištim gazes

⁵ Cf. V. R. viii. 87, 108; Delitzsch's *Paradies*, p. 242.

⁶ Izdubar is the provisional reading of the name of the hero. Most Assyriologists have followed George Smith in identifying him with Nimrod. There is no cuneiform evidence however for the reading *Namradu*. Comp. *Proceedings* of our Society, May, 1887, p. xii.

⁷ Dr. Jeremias always reads this name *Pir-napištim*, following Delitzsch and Zimmern (cf. the latter's *Babylonische Busspsalmen*, p. 26: 1). To show the possibility of the reading *S'amaš-napištim* it will suffice to refer to II. R. 44, 5a, where the character *ut* without the determinative of divine names occurs as the equivalent of the Sun, followed by the ideogram of the air-god Rimmon. Cf. Strassm. No. 7895.

at them in astonishment as they near his abode. Nimrod again relates his woes, tells of the countries, mountains and seas he has traversed, and questions him how it happened that he obtained immortality and access to the region of the blessed. Then S'amaš-napištim tells the "hidden story" of the great flood, how he alone was saved in universal destruction. After the close of the story of the deluge, S'amaš-napištim begins the cure of Nimrod, who was smitten with ulcers at the request of Istar. And the hero recovers his strength through a magical food and a magical sleep. After Nimrod is purified, the wife of S'amaš-napištim inquires, "What wilt thou give that he may return to his land." Thereupon S'amaš-napištim reveals the "secret and command of the gods," and shows the hero a plant which appears on the high trees and cliffs of the island. The name of this plant *šibu i šuhir ame'u*, indicates its magical power, 'which restores to a man already old his youth.' With this Nimrod could regain his former strength. But this boon was too precious, and on the return a lion-like demon snatched the plant out of his hand and carried it off to the sea.

So much for the legendary and possibly early views. In the prayers, on the other hand, scattered through the royal inscriptions, we find no indication of any longing after immortality. The blessings asked always pertain to this life. Tiglath-pileser I. (c. 1120-1110 B. C.) says of his grandfather Ašur-dân: "The work of his hands and the offering of his sacrifices pleased the gods, so that he arrived at the highest old age." Nabonidus, the last king of Babylon, asked for long life and preservation from sin for himself and his son Belshazzar. Nebuchadnezzar prays for "length of days and victories." The punishments involved, too, always pertained to this world: "Whoso fears not his god, like a reed shall be cut off;" "The god Rimmon commanded that he should not live a single day;" "May his name be blotted out and his seed be destroyed;" "In distress and famine may they end their lives."

What the Assyrians did with their dead is a question by no means easy to answer. So far no graves or cemeteries have been found in the northern kingdom, though a special search was instituted by Layard, Loftus, Place, and Rassam. In fact, Place was driven to the assertion that possibly the Assyrians committed their corpses to the river, like the modern Hindus. Later, however, it was found that graves abounded in lower Chaldea, and so Mr. Loftus conjectured that lower Chaldea, and lower Chaldea only, was used as a burial place for the entire Mesopotamian empire. Recently doubt has been cast upon this theory, the age of the remains at Mugheir, Warka, and Tel-loh having been questioned. However that may be, the fact that the Babylonians and Assyrians did bury their dead is established beyond all doubt. Denial of burial, moreover, was considered a great misfortune. Against his rebellious vassal, the king of Lydia, Assurbanipal (668-626 B. C.) directs the curse, "May his corpse be cast before his enemies, may they drag away his bones." To Nabû-bel-zikre, who had cast himself upon his own sword, he

⁸ Borsippa Inscription (I. R. 51), Col. II., l. 25.

“did not grant burial.” The Bellino Cylinder of Sennacherib plainly speaks of cemeteries and mausoleums. Moreover Sennacherib as well as Assurbanipal went to the trouble of disinterring the bones of the ancestors of their conquered enemies. But the whole matter is clearly put at the close of the Nimrod-Epic :

On a couch he reclineth drinking pure water,
 He who was killed in battle—
 (As thou hast (often) seen it (and) I (too) have seen it—
 His father and mother support his head,
 And his wife standeth by his side.
 But he whose corpse was left upon the field—
 As thou hast seen it and I have seen it—
 His shade findeth no rest in the earth.
 Whose shade hath none that careth for him—
 As thou hast seen it and I have seen it—
 He is consumed in gnawing hunger,
 (In vain) he craveth food,
 What is cast in the street, he eateth.⁹

Of the funeral ceremonies, too, we have some inkling. Hired mourners and music accompanied the corpse to the grave, spices were placed on the bier, and libations were offered to the shades of the departed, while in agreement with the Israelitish custom the mourners wore torn garments. Epitaphs have not yet been found, though such existed, if we may credit the statement of Arrian that he saw cuneiform writing on the tomb of Sardanapalus (cf. Arrian II.5.3; Strabo XIV. 672; Athenæus XII. 529 E).

What is generally recognized to be a pictorial representation of Hades is found on a bronze plaque acquired by M. Péretié at Hama in Northern Syria. Clermont-Ganneau was the first to assert that it represented the four divisions into which the Assyrians divided the Universe: heaven, atmosphere, earth, and Hades.¹⁰

The principal deities of the under-world¹¹ were Allat and Nergal,¹² and a host of demons, their satellites; the favorite messengers of Allat being *Namtâr* ‘plague’ and *Asakku* ‘consumption (?)’

The inferences to be drawn, then, seem to be as follows: The Assyro-Babylonians believed in a future life. Reward and punishment, however, were as a rule awarded in the flesh. Death was the great leveler,

⁹ This passage, which was left untranslated by Dr. Jeremias and his predecessors, will be explained in Prof. Haupt's paper on the 12th tablet of the Nimrod-Epic in the first number of the *Beiträge zur Assyriologie und vergleichenden semitischen Sprachwissenschaft*.

¹⁰ See further Chipiez and Perrot, *History of Art in Chaldea and Assyria*, p. 357.

¹¹ The chief designations for the under-world in the Babylonian texts are *Aralû Ekur*, *S'u'ûtu* (Sheol), Delitzsch *Prolegomena* 145: 2 *Qabru* (the grave), *Kâtu* (because Nergal was divinity of both Cutha and Hades), *bît mâti*, ‘the house of the dead.’ *Kur-nu-gia*, Assyr. *eršil lâ târat*, ‘land whence none return,’ etc.

¹² Akkadian *ne-uru-gal*, ‘lord of the great city,’ i. e. Hades.

and all went to the same place, a damp, dark, and uncomfortable abode. Even this, however, was denied those whose remains did not receive proper burial. For some few of the favorites of the gods, on the other hand, a happier fate was reserved. They were translated to the isles of the blessed, and seem to have continued enjoying the same sort of existence as they had in the upper world. The spirits of Hades "were clad like birds, in feathered garments;"¹³ but when Nimrod sees his ancestor, S'amaš-napištim, he remarks:

"Thy appearance¹⁴ is not changed; like me art thou.

And thou thyself art not changed; like me art thou."¹⁵

This life in the fields of the blessed was, however, a very exceptional thing. - It is awarded in the poems to but a very few heroes, and is arrogated in an incantation to the priests, enchanters, and magicians. Resurrection was known. Istar was granted life, and Tammuz her lover annually burst the bonds of death. Moreover "the earth opened and the soul of Ea-bani came forth like a zephyr." And this possibility of resurrection furnished, as was remarked above, the occasion of the relation of the Descent of Istar and a portion of the Nimrod-Epic. It was but sparingly employed, however, and seems to have vested finally in Allat, the queen of the under-world, though the other gods were continually endeavoring to break her spell.

To attempt to trace the historical development of these somewhat contradictory views of the Babylonians concerning life after death, as set forth above, would in the present state of our knowledge concerning the date of the religious texts be a useless task, leading to no results which could in any way be considered certain.¹⁶

15. On a new system of transliteration for the Semitic sounds, based upon phonetic principles; by Mr. Edgar P. Allen, University Fellow in Semitic, Johns Hopkins University, Baltimore, Md.

Mr. Allen presented an abstract of his phonetic studies in connection with Prof. Paul Haupt's new system of transliteration for Semitic sounds. The distinctive features of this system are the following: All spirants are expressed by the corresponding stop-consonants with underscored line. This method, which has long and fitly been used with regard to the Arabic *ث* and *ذ*, may well serve to call to mind the Heb. *raphé* and its function. But the Arabic *غ*, hitherto rendered by *g*, *gh*, or *g'*, is also a spirant: viz. the voiced variety of the guttural spirant *خ*, and only a deeper variety of raphated *ج*; it must, therefore, for uniformity's sake, also be rendered by the corresponding stop with underscored line.

¹³ Descent of Istar, Col. I, l. 10.

¹⁴ Assyrian *mindtu*, pl. to *מין*; cf. Hebrew *תמונה* (Haupt).

¹⁵ Deluge (AL³ 101), lines 3 and 4.

¹⁶ See, however, Prof. A. H. Sayce's Hibbert Lectures, 1887, pp. 357-367.

An important matter is the transliteration of the so-called *emphatic consonants*, an expression which, doubtless, conveys to but few persons any very clear idea. These have been rendered variously, but, as a rule, by the corresponding simple consonant with a dot beneath. The peculiarity of these sounds is a combination of glottal catch with the mouth position. The glottal catch may follow the mouth position or may be simultaneous with it. There is a difference in different dialects and with different sounds. Since the sign of the glottal catch (or \aleph) is the so-called *spiritus lenis*, the best method of expressing the emphatic sounds is by the simple consonant with *spiritus lenis* or *çedilla* beneath. If the present Arabic pronunciation of the \aleph differing from \aleph only in that its position is further back in the mouth and in the modification of a following vowel,—if that pronunciation be taken as the original, then the combination with glottal catch would be impossible; but the Jews pronounce the \aleph as an *affricata ts*, as do also the Abyssinians. And in such case the glottal catch might follow the simple consonant explosion. This seems to have been the original pronunciation; and therefore \aleph or \aleph should be indicated by *s* with *çedilla*, or better by ζ , which sign has the advantage of at once classing the \aleph in the right category and of indicating its present pronunciation. The \aleph is to be treated in the same way, since it was originally as now but the voiced variety of the \aleph . This subject of \aleph and \aleph , however, deserves further study and investigation.

The unpointed \aleph has heretofore been rendered by *h*, and has thus been classed with the emphatic consonants, from which it is entirely different. It is a *laryngeal*, and may be considered as a stronger variety of the aspirate *h*. As such it is best rendered by the double *spiritus asper*, or by *h* with *spiritus asper* beneath, which amounts to the same thing and is to be preferred for clearness' sake.

The \aleph again is totally unlike both \aleph and *h*. It is the deeper variety of the ordinary German *ach-laut* and is best rendered by the sign *x*, which is commonly used for the purpose by Indo-European philologists.

Mr. Allen's phonetic studies will be published in full in a future number of the American Journal of Philology.

16. Announcement of a new Assyrian-English Glossary; presented on behalf of the Semitic Seminary of the Johns Hopkins University, by Mr. Edgar P. Allen.

At the last meeting of the Oriental Society, Prof. Lyon took occasion to discuss the first part, recently published, of Prof. Delitzsch's great Assyrian Dictionary, which had been announced as early as 1879, and since then eagerly expected by all who are interested in Semitic studies and especially by all Assyriologists. Since its appearance, the first fascicle has been much reviewed and commented on from all sides, with qualified praise sometimes, and sometimes with unqualified condemnation. There is a long step from the standpoint of Delitzsch's admirers to that of his adversaries—between the opinion, on the one

hand, that "for the preparation of such a work no one is so well qualified as the professor of Assyriology at Leipzig," and the opinion, on the other hand, that "he is quite unqualified for the task he has undertaken." However, even in the eulogy of so enthusiastic a follower of Delitzsch as is Prof. Lyon, a sober critic may read here and there between the lines signs of a slight disappointment. Without calling in question for a moment the undoubted merits of Delitzsch's work, it is here our purpose to speak merely of the points in which it seems not quite to meet all the expectations and requirements of Assyrian students. Some of the objections raised will no doubt be disposed of in subsequent parts of the Lexicon. It may be that we do not fully understand the principles which have guided Delitzsch in his great work, especially as, so far, he has not published a preface. But even if Delitzsch should make all possible concessions to his critics and fellow-workers, he would hardly be able to conform with their wishes in the following particulars:

1. It must be admitted that the publisher cannot be expected to place at a lower figure the price of so expensive a publication; but, nevertheless, the price is too high. Although subscribers are to receive a liberal discount, the completed work will cost at least a hundred dollars, and thus these valuable stores of learning will be placed out of the reach of the majority of students.

2. Delitzsch himself says, in his suggestive Prolegomena to a new Hebrew and Aramean Lexicon of the Old Testament (§ 2), that "perspicuity is the fundamental principle of all lexicography." Delitzsch certainly has a just claim on our admiration, inasmuch as, to publish the work with all attainable correctness, he did not shrink from undertaking the laborious task of autographing more than "sixteen hundred large quarto pages;" but an autographic reproduction, be it ever so carefully and beautifully executed, can never present as clear and pleasing an appearance as a printed page. And this inevitable lack of perspicuity is further increased by Delitzsch's attempt, most praiseworthy in itself, to employ his space to the utmost advantage, by making a limited use of paragraph divisions. Lengthy observations, moreover, and extensive reproductions of unpublished texts are interspersed throughout, thus increasing the bulk and necessarily detracting from the perspicuity. We freely grant that these valuable additions are, absolutely indispensable; but it would certainly be better to make of them a separate publication.

3. The internal arrangement might also call forth dissenting opinions. Delitzsch no doubt endeavored to be as scientific as possible, but we venture to say that his disposition of the material is hardly the most practical. Nor will all students of Assyrian subscribe to his opinion that it would have been a waste of space to mention in every case the corresponding forms of the cognate languages. Finally, while it is most gratifying to learn that Delitzsch entertains the idea of appending printed notes in which due credit will be given to each of his predecessors and fellow-workers in the field of Assyrian lexicography, still it might have been

more advisable to embody these notes in the main work, at least as far as recent Assyriological publications are concerned.¹

Bearing these various points in mind, no one will be surprised that the first part of Delitzsch's work has not met with general approval. The severe criticisms, however, and savage attacks published in recent journals are altogether unjustified. On the other hand, even the warmest friends of Delitzsch cannot deny that the first fascicle does not fully meet all the wants of Assyrian students, especially of beginners. Consequently it is not unlikely that other Assyriologists will publish their lexicographical collections hitherto withheld owing to the announcement of an Assyrian Thesaurus compiled by the famous Leipzig cuneiformist. Every Assyriologist has, of course, some collection of words and forms. Even the beginner must commence a compilation for his own use. There is small doubt that several Assyrian glossaries would have been published before now, had not everyone been awaiting the long announced work of Delitzsch. It is hardly necessary to state that we have not the slightest intention of taking sides with Delitzsch's opponents, such as "Bél-ibnî" and other anonymous critics. Nor have we any desire to supersede Delitzsch's grand Thesaurus; still we believe that there is room for another lexicographical work, more serviceable and more within reach of the average student, though less ambitious in its aim.

The Semitic Seminary of the Johns Hopkins University, therefore, proposes to compile an Assyrian-English Glossary, the distinctive features of which will be as follows:

(a) It shall not exceed a certain limited bulk, about that, say, of the Davies-Mitchell Hebrew-English Lexicon, a volume which in point of convenient size and clear print can serve as a model.

(b) The price will be as small as possible, at most five dollars. It will thus be within the reach of every student of Assyrian.

(c) In order to keep within these limits, a system of abbreviations will be used, so that references to authors and works will occupy the least possible space, discussions of doubtful words or readings being reserved for special papers.

(d) Prof. Haupt has repeatedly remarked that Assyriologists should as soon as possible remove the cause of the reproach, not unjustly brought forward by Prof. Paul de Lagarde, of the "unhistorical" character of cuneiform research.² Many words whose stems or meanings later scholars fancy that they have determined were already well known and established by older men, such as Hincks and his contemporaries. For instance, the correspondence between Syriac *madattâ* and Assyrian *madattu*, 'tribute,' was first established by Hincks in his paper on the Khorsabad Inscriptions, published as early as the year

¹ Under *igaru*, e. g., p. 113 Delitzsch ought to have cited Sayce's and Pinches' remarks, ZK. ii. pp. 257 and 346.

² Cf. *Hebraica*, vol. iii. p. 269, and Lagarde, *Mittheilungen*, i. 63 (Göttingen, 1884).

1850.³ The compilers will, therefore, make a special point of giving full references to Assyriological publications.

This, of course, necessitates a division of labor. Dr. Cyrus Adler will give particular attention to recent literature, and Mr. Edgar P. Allen will make the historical development of Assyrian lexicography his special study. The whole work, it is needless to say, will be carried on under the direction of Prof. Paul Haupt, whose lexicographical collections will form the basis of the undertaking.

(e) In all cases where indubitable connection with sister idioms can be established, the corresponding forms will be given, to help beginners in Assyrian, and at the same time to furnish specialists in the cognate languages with a certain control over the statements made in the glossary.

(f) The arrangement of the material will be both as practical and as scientific as possible. All derivatives will be treated of under their respective stems. The verbal stems will be placed first, followed by verbal derivatives, then by nominal derivatives, first the *formae nudee*, i. e., forms made by internal vocalic change, without addition of formative elements; and second, *formae auctae*, i. e., forms made by prefix, by infix, by affix, and by prefix and affix together. But, in order to facilitate the finding of words, especially of derivatives from feeble stems, all words, as also the more frequently used conjugational forms, will be cited also in alphabetical order, with appended references to their stems. This arrangement has two advantages: a survey will thereby be obtained of classes of words formed by the same prefix, and also an idea of the relative frequency of certain formations; it will, besides, be especially convenient for words whose stems are a matter of doubt.

The stems will be expressed in Hebrew letters. There will be no cuneiform characters used; Hebrew and Syriac words cited will be written in Hebrew; while Arabic and Ethiopic, as well, of course, as Assyrian, will be transliterated in Roman characters.

The abbreviations spoken of above will be printed in bold-face and in black-letter type, the former for grammatical terms and the latter for references to authors and their works. The greatest possible clearness will thus be insured.

(g) The arrangement of consonants will be according to the system first indicated by Prof. Haupt, and followed by Delitzsch in his Dictionary: that is, all initial gutturals will be cited under **Ḥ**, distinguished as **Ḥ₁**, **Ḥ₂**, **Ḥ₃**, **Ḥ₄**, and **Ḥ₅**. There is no evidence that the Assyrian language had any other guttural than **Ḥ**. For example, words like *abu*, 'father,' *aláku*, 'to go,' *alību*, 'milk,' *agrabu*, 'scorpion,' and *áribu*,

³ See *On the Khorsabad Inscriptions* by the Rev. Edward Hincks, D.D. (from the *Transactions of the Royal Irish Academy*, vol. xxii., Part II.—Polite literature), Dublin, 1850, p. 42, foot-note. •

'raven,' which begin in Arabic with five different consonants, appear in Assyrian under one—the **N**.⁴

Although by this arrangement the number of words treated of under the first consonant will constitute about one-fourth of the whole glossary, this disproportion⁵ is unavoidable, since any other arrangement would be unscientific.

In one respect the arrangement will differ from that followed by Delitzsch. Though Prof. Haupt was the first to point out the reasons for putting initial **ḡ** and **ʿ** under **ḡ** and **ʿ** in their respective places according to the order of the Hebrew alphabet,⁶ he has since come to the conclusion that these reasons, subsequently adopted by all Assyriologists, do not hold good, and consequently initial **ḡ** and **ʿ** will be placed under **N**, distinguished as **N_g** and **N_ʿ**. There is no evidence that consonantal **ḡ** and **ʿ** existed in primitive Shemitic. Their development in *anlaut*, as opposed to **N**, may be secondary. (Cf. ZA. ii. 279.)

There must also be an **N_m**, corresponding to original *m*, and **N_n**, corresponding to original *n*, as in *itaplusu* for *nitaplusu*.

We hope to further the work as energetically and as rapidly as possible. The preparing of the manuscript for publication will form a principal part of the work of the Semitic Seminary of the Johns Hopkins University during the coming session. The first edition will, of course, in a manner be tentative—a basis for fuller and more complete work which we may expect to embody, in the course of time, in a larger second edition.

We may say that the Baltimore Assyriologists are in good position to do their work—so far, at least, as material is concerned. The Johns Hopkins University has lately purchased a very important Assyriological collection, belonging to the library of one of the most distinguished Oriental scholars in Europe, consisting in early Assyriological publications, pamphlets, and even newspaper clippings of considerable value and now almost inaccessible at any other place. Whatever, again, may be wanting in the University library will be made up by the large private collection of Prof. Haupt. In addition to this, Dr. Wm. Hayes Ward, one of the pioneer Assyriologists of America, has kindly offered to place at our disposal his unique collection of early Assyriological publications.

The usefulness of such a glossary as we propose is obvious, and the need of it is pressing. Even if Delitzsch or some other Assyriologist in Germany should supplement his Thesaurus by a glossary compiled according to our principles set forth above, the Johns Hopkins glossary would still better commend itself to English speaking students, who must

⁴ Cf. Haupt, SFG., 10; 20, 3; KAT² 492 and 522; Francis Brown, *American Journal of Philology*, vol. iv, p. 343.

⁵ This seems to militate against the opinion that the **N** in Assyrian instead of the Arabic **ن** **ح** **ع** **ه** is more primitive.

⁶ Cf. Haupt, *Sumerische Familiengesetze*, p. 48, n. 3.

much prefer to study Assyrian through the medium of their own language, rather than through a foreign medium like German, especially as the language of certain German Assyriologists is more obscure than the cuneiform hieroglyphics themselves, and sometimes only to be understood by referring to the original texts.

17. *Prolegomena to a Comparative Assyrian Grammar*; by Prof. Paul Haupt, of the Johns Hopkins University, Baltimore, Md.

§ 1. Assyrian, or more accurately speaking Assyro-Babylonian, is the name of the Semitic language found on the cuneiform tablets of Nineveh and Babylon, as well as in the trilingual Achæmænian inscriptions of Persepolis, Behistûn, Hamadân, etc.

§ 2. The inscriptions of the Achæmænian kings (Darius, Xerxes, and Artaxerxes, I.-III.) are composed in three different languages :

a. The first place is occupied by the official language of the Persian empire, the so-called *Old Persian*, whose decipherment by Geo. F. Grotefend, in 1802, laid the foundation of all cuneiform research.

b. Then comes the so-called (*Scythian* or) *Susian* version in the agglutinative idiom of Susiana (called also Elamitic, Median, Anzanian, and Amardian), and said to be related to Georgian.

c. And finally, the *Babylonian* version in the Semitic language of the ancient Mesopotamian empire.

§ 3. Also in the cuneiform tablets disinterred in the valley of the Euphrates and Tigris we find a variety of languages ; several of these texts exhibit, alongside of Assyrian, a non-Semitic idiom, apparently the language of the pre-Semitic aborigines of Chaldea, who founded the civilization of Western Asia, and invented the cuneiform system of writing.

This so-called *Proto-Chaldean* has come down to us in two distinct forms : in one of them, chiefly magical formulæ and incantations are composed ; in the other, hymns and penitential psalms. The latter is designated, in the ancient cuneiform vocabularies of the Assyrian national grammarians, by the technical term *eme sal*, generally rendered 'female language,' or 'woman's language.' Some Assyriologists are of the opinion that the so-called "woman's language" was the dialect of Shumer (the biblical שִׁנְאָר *Shinar*), or South Babylonia ; the idiom of the incantations, on the other hand, being the dialect of Akkad (mentioned in the genealogical tablet, Gen. x.10)¹ or North Babylonia. Others consider the incantations South Babylonian or Sumerian, and the penitential psalms Akkadian or North Babylonian. And recently the view has been advanced that these two species of Proto-Chaldean do not represent a local but a temporal variation. Accordingly, what we have been accustomed to term Sumerian and Akkadian is now spoken of as Neo-Sumerian and Old Sumerian, the so-called woman's language being regarded as a later development of the idiom of the incantations (ZA. II. 200.1).² We cannot boast, therefore, of our investi-

gations in that line having yielded any results which have met with general acceptance. Even the existence of a non-Semitic idiom beside the Assyro-Babylonian is denied by several distinguished cuneiformists. It seems to me, however, that the theory of a pre-Semitic population in Chaldea is established beyond all doubt.³

Whatever the relations of the various forms of the Proto-Chaldean language may be, they certainly have no direct bearing on Assyrian grammar. Nor need we consider the controversy concerning the alleged affinity of Sumero-Akkadian and the Ural-Altai languages (JRAS. vol. xviii., part 3). In the following remarks we will briefly designate the non-Semitic idiom of the Mesopotamian cuneiform texts as Akkadian, just as we comprise the Semitic language of both the Babylonian and Assyrian inscriptions under the name Assyrian.

§ 4. The literature of Assyrian embraces a period of forty centuries. The latest cuneiform inscription is a small terra-cotta tablet, preserved in the Zurich Museum, containing a bond dated Babylon, in the month of Kislev, 3d day, 5th year of Piḥariš, king of Persia, i. e., according to Jules Oppert (RP. xi. 105), Pacorus II. (Πάκορος), a contemporary of the emperors Titus and Domitian. Pacorus' accession to the throne took place in the year 77 after Christ. Accordingly the date given on the tablet corresponds to December, 81, of our era.⁴

The test inscription of any length is a terra-cotta barrel-cylinder of Antiochus I., Σωτήρ (born 323, †261 B. C.), son of Σίλευκος ὁ Νικάτωρ and the Sogdianian princess Apama. It was discovered at the Birs Nimrûd, and contains in two columns fifty-nine lines of archaic Babylonian writing. The opening of this interesting inscription reads as follows: Anti'ukusu, šarru rabû, šarru dannu, šar kiššati, šar Bâbîli, šar mâtâtî, zânin Esagil u Ezida, aplu ašaridu ša Silûku, šarri, Mâkadunâ'a, šar Bâbîli, anâku, which means, "Antiochus, the great king, the mighty king, king of the universe, king of Babylon, king of the provinces, embellisher of (the temples) *Esagil* and *Ezida*, first-born of King Seleukos, the Macedonian, king of Babylon, am I." Also Antiochus' step-mother and consort, Queen Στρατωνίκη, cuneiform As-ta-ar-tu-ni-ik-ku, i. e., Astar-tunîku, and their son, Seleukos, are mentioned at the end of the inscription.⁵

§ 5. The earliest known cuneiform text, in Semitic Assyro-Babylonian, is a short votive inscription of King Sargon, of Agade (i. e., אַכַּד), who reigned about 3800 B. C. The inscription is carved on a small egg-shaped piece of marble, pierced lengthwise, brought to light by Hormuzd Rassam at Abu-Habba, the site of the ancient Sippar (סַפְּרַיִם).⁶ According to Mr. Pinches it is the oldest object in the collection of the British Museum. The legend reads as follows: Šargâni, šar âli, šar Agade, ana il šamaš in Sipar amûru, i. e., "I, Sargon, the king of the city, king of Agade, have dedicated (this) to the Sun-god of Sippar."⁷ The date 3800 is derived from the famous cylinder of

Nabonidus, found by Hormuzd Rassam in the ruins of Sippara (Abu-Habba) in the year 1882, now published V R. 64. Nabonidus tells us there that, at the restoration of the ancient temple of the Sun, in Sippar, he searched for the original foundation stone. He had the earth excavated to a depth of eighteen cubits; and there, says the king, Šamaš (the Sun-god) showed me the original foundation stone of Sargon's son, Narâm-Sin, which none of my royal predecessors had seen for 3200 years. Nabonidus, the last king of Babylon, and father of Belshazzar, reigned from 555-538 B. C. Consequently we obtain for Narâm-Sin the date 3750 B. C., and for Sargon, his father, about 3800 (PSBA., v, 12; ZK. II, 358). The latter is the same prince of whom it is related, on a tablet preserved in a Neo-Assyrian copy, that his mother exposed him on the banks of the Euphrates in a basket of bulrushes pitched with asphalt.⁸ This interesting autobiographical sketch is, as I remarked, handed down to us only in a later copy; the short votive inscription on the marble oval, however, is an original contemporary document, written at the time of Sargon I., about 3800 B. C.—the oldest monument of Semitic speech.

§ 6. The king mentioned under the same name in the Old Testament (סַרְגֹּן, Isa. xx.1) is Sargon II., Assyr. Šarrakenu arkû, the conqueror of Samaria⁹ and father of Sennacherib, grandfather of Esarhaddon. He reigned about 3000 years later, from 722-705 B. C.

While the votive inscription of Sargon I. represents the oldest monument of Assyrian speech, the accession of Sargon II. inaugurates what may be called the golden age of Assyrian literature. The reign of the Sargonid dynasty—Sargon, Sennacherib, Esarhaddon,¹⁰ and Sardanapalus—from the accession of Sargon II., in the year 722, down to the fall of Nineveh, in the year 606, is the most flourishing period of Assyrian literature. Most of the cuneiform monuments which have come down to us belong to this time. Especially under the last great Assyrian king, Sardanapalus (mentioned as אַסְנַפֵּר, Ezra iv.10), particular attention was paid to literature: ancient tablets in Assyria and Babylonia were carefully collected, copied, transcribed, translated, and explained, and formed into a great library in the palace at Nineveh, which Hormuzd Rassam, under the auspices of Sir A. H. Layard, rescued from the ruins of ages. The majority of the Assyrian literary monuments thus far brought to light, especially non-historical inscriptions, owe their origin to this source.

§ 7. The correctness of the chronological statement in the inscription of Nabonidus, concerning the date of Sargon's son, Narâm-Sin, may be open to doubt. The fact that Assyrian literature comprises the oldest Semitic documents, remains nevertheless. We possess an inscription eighty lines in length, of an ancient Assyrian king, Rammân-nirârî I., whose date must be fixed at about 1300 B. C., at the latest.¹¹ We have the great octagonal clay prism of Tiglathpileser I. (containing almost 1000 lines), who, according to the statement of the Sennacherib

inscription on the rock of Bavian, reigned 418 years before the Babylonian expedition of Sennacherib, undertaken in the year 690; so that his date must have been about 1110 B. C. (Lotz, p. v). In the Old Testament, on the other hand, we hardly have any portions reaching beyond 1000 B. C.¹² At any rate the assumption of a greater antiquity for any of these is not as well founded as is the date of 3800 for Sargon I.

§ 8. The great age of Assyro-Babylonian literature, however, does not justify the conclusion that the language of these monuments exceeds the cognate idioms in antiquity. Edward Hincks called Assyrian the oldest and best developed branch of the Semitic family of speech, giving it the name of the *Sanskrit of the Semitic tongues*.¹³ The propriety of this designation may be questioned. At any rate it must be admitted that primitive Assyrian stands much nearer, both in its phonic and morphological material, to the parent speech than even classical Arabic. The forms of the language, as preserved on the extant monuments, arose under the influence of a few characteristic phonetic laws, and can be easily traced back to the parent Semitic stage. The inflections in Assyrian are certainly far more primitive than in any of the cognate idioms.

§ 9. Next to Assyrian among the sister tongues stands Ethiopic or Geez. Common to both are, e. g.:

a. The absence of an article.

b. The preservation of the oldest Semitic verb-form, the Imperfect Qal with accented "á" vowel between the first and second stem-consonants; e. g., Assyr. išábir *he breaks*, Geez isábēr.¹⁴

c. The masculine plural ending "-âni;" e. g., Assyr. belâni *lords*, Geez bâ(')lân, originally ba'lân.¹⁵

d. The termination "-â" for the *tens*; e. g., Assyr. ešrâ *twenty*, šilâšâ *thirty*, erba'â *forty*, = Geez ešrâ, šalâsâ, arbë'â,—accent in all these cases being on the final "â."

e. The ending "-â" for the 3 pers. fem. plur.; e. g., Assyr. labšâ *they are clothed* = Geez labsâ; Present and Imperfect, išabirâ, išbirâ = Geez isabêrâ, iësbêrâ.¹⁶

f. The termination "-ku" for the first person singular of the Perfect, generally called "Permansive" in Assyrian grammar; e. g., Assyr. išâku *I have* (𐎶), palhaku *I fear*; Geez gabârkû *I made*, labâskû *I was clothed* (cf. SFG. 53).

g. The epenthesis of the "i" in the Imperfect of the intensive stem; e. g., urepiš *I enlarged*, for urâpiš, urappiš (SFG. 63,2); Geez ifêšëm, iëfêšëm *he completes*, for iufâšim, iufaššim.¹⁷

h. The emphatic "-ma;" e. g., Assyr. kî šâšu-ma or kî-ma šâšu *like him*; Geez kamâhû-ma (ASKT. 195).* This "-ma," which also

* I should like to raise the question here whether it is not possible that the appended -ma in the Arabic Vocative allâhümma *O God* represents the same emphatic particle.

appears in the shortened form “-m,” the so-called “mîmation,” serves at the same time as enclitic copula, just as Amharic “-m,” which corresponds to Ethiopic “-ma,” is used both as emphatic particle and in the sense of Latin *que*; e. g., Assy. ina eṭûti ašbâ labšâ-ma kî-ma iṣṣûri ṣubât kappe in darkness they dwell and are clad like birds in feathered garments (SD. 518); aptî nappašâ-ma urru imtaqut elî dâr appî'a I opened an air-hole (נפש), Arabic **منفس** manfas) and the light fell upon my face.

i. The use of the suffix pronoun in adverbial expressions, as Assy. ittâlak šalṭiṣ he marched victoriously, Geez ḥôra tēkûzû he went away grieved (SFG. 36,2).

k. The use of the possessive suffix as a demonstrative pronoun; e. g., Assy. amelušû that man, like Geez beesihû, or Assy. ina ûmišû-ma at that time, Geez ba'âmatîhû in that year (CV. xxxvi).

l. Finally, a considerable number of words are common to both Assyrian and Ethiopic; e. g., kišâdu neck, plur. kišâdâti = Geez kēsâd, plur. kēsâdât (SFG. 28,1); zunnu rain (for zunmu, JI. 46) = Geez zēnâm; igaru cultivated land (SFG. 35 below) = Geez hagar (cf. South Arabic **هجر**); mîmâ'iru (= *mumahhiru) master, commander (Senn. v. 70) = Geez mamēhhēr magister; kidînu client, from kadânu to protect = Geez kadâna; † eṣidu area (syn. ḥamâmu sphere, S^b 272; cf. Del. Koss. 72) = Geez 'āṣad; ebištu (or, with partial assimilation of the “b” to the following “š,” epištu) deed, especially evil deed (facinus) = Geez abbasâ crime (stem **עבש**; cf., however, ZA. II. 354,1); mutu husband = Geez mēt (cf. **מתים**); iṣātu fire = Geez ēsât (cf. Syr. iṣšâtâ fever, SFG. 47,2); mušîtu night = Geez mēsēt evening (cf. **مساء** and KAT² 508); dadme (stem **דדמ**) districts (NLA. 60,1; HA. 59) = Geez adiâm (stem **דים**); ṣelûtu hostility (V R. 3,123) = Geez ṣal'ē; daqâqîtu or duqâqû childhood (syn. ṣiḥhirûtu, i. e., **צערות**, II R. 36,50) = Geez daqîqnâ; tulû breast (prop. protuberance, cf. tilu hill, and ṣirtu breast, fem. of ṣîru high) = Geez talâ' (ZDMG. xxxiv. 761,1); âkilu wolf (II R. 6,3; syn. zîbu) = Geez takuĉlâ; ṣâbu warrior (for ṣab'u) = Geez dabbâ'i (**صبا**), cf. **צבא**); † amâru to see = Geez ammâra to show; ruttû (Imperfect

† Dr. Alfred Jeremias, in his interesting little book on *Die babylonisch-assyrischen Vorstellungen vom Leben nach dem Tode*, Leipzig, 1887, p. 83, n. 3, translates kidînu by *Knecht*, deriving it from a stem kadânu to lead into captivity (?).

‡ Cf. also the Amharic zemb, which exactly corresponds to the Assyrian zumbu = zubbu fly (JI. 45; BAL. 89,1); and Geez uṣṣb, plur. auṣṣab earrings, (stem **צב**, or rather **وصب**) = Assyrian anṣabtu (II, 40,40) or inṣabtu (stem **נצב**) infogre in the same meaning (BAL. 94,3), plur. in the “Descent of Istar,” inṣabâti (cf. col. I, 45 and col. II, 44, inṣabâti ša uzneša the earrings of her ears). But the most striking instance, it seems to me, is the Ethiopic word bēnât tribute, which is evidently identical with Assy. biltu, constr. bilat, from abâlu

urattî) to erect = Geez arté'a; şullulu to launch (Pael from şalâlu, Impf. işlal to slide down, cf. צָלַל בְּמַיִם, Exod. xv.10) = Geez aşlâla (cf. Gen. vii.18; u-a-şallâlat i'ê'êti tâbôt lâ'la mâi, Dillm. ed. p. 14, Greek ἐπεφέπερο); şanânu to compete (Impf. افتعل : aştânan or altânan I fought) = Geez tasannâna; takâlu to be stable or firm (cf. Del. Parad. 144) = Geez takâla (cf. Aram. תָּכַל to trust = Assy. ittakil he trusted, for *intakil, Inf. natkulu); nazâzu to stand (Şaphel şûzuzu to erect) = Geez nâzáza to try to raise, to comfort (KAT² 511; cf. זָקַף בְּפָנִים, Job 145,14 and 146,8, he raises them that are bowed down); ragâmu to cry (cf. Lagarde, Mittheilungen, II. 177)¹⁸ = Geez ragâma to curse (prop. beschreiben; cf. جيم); hulluqu to destroy (Pael of halâqu to flee, KAT² 503) = Geez ahlâqa (cf. خلق hâliqa); mâ'u to be strong, powerful (LOP. I. 197) = Geez mô'a to conquer; sapânu to overpower (SFG. 74) = Geez safâna (Amharic şanáfa to triumph); nubû (Imperfect unabbî, unambî) to speak = Geez nabâba (cf. נָבַא for נָבְא "προφητεύειν"); harû to shine = Geez hârha; şabâtu to beat (cf. Targumic שָׁבַט) = Geez zabâta (with partial assimilation of the initial sibilant to the following "b;" cf. LOP. I. 197); "â" not (= *aia) or "e" (SFG. 76) = Geez "i" (cf. יָ, Job xxii.30); "-nu" ne (e.g., mî-nu how? V R. 1,122) = Geez "-nû" (e.g., êfô-nû?); "-nû" also (e.g., iqábûşi-nî they call her also, Pogn. Bav. 109) = Geez "-nî"; "-û" noun (e.g., anâkû am I not? = anâkû + hû) = Geez "-hû" (CV. XI.); iştu¹⁹ from = Geez uęsta in; şu'átu this = "s" + Geez u'ê'tû, fem. şi'âtî = "s" + Geez i'ê'tî (SFG. 33,4) etc., etc.

To be sure, so far as the vocabulary is concerned, Assyrian exhibits infinitely more numerous coincidences with the North Semitic languages, Aramean and Hebrew, especially with Aramean. This is quite natural, considering the contiguity of their respective territories. But it does not by any means involve an especially intimate connection between Assyrian and Northern Semitic, let alone an original community of life, as Delitzsch would have it (HA. 21; cf. ZDMG. XL. 731,2). There is no evidence of these languages having ever formed an historically distinct group as opposed to the other branches of the Semitic family. Nor do the above-cited points of agreement between Assyrian and Ethiopic justify the assumption of a closer relationship between these two extremes of the Semitic territory. All the resem-

(= *uabâlu) to bring (Hebr. הוֹבִיל) the l having been changed into n, as in Arabic صنم image = صَلام. It stands to reason that bēnât must be, in the last resort, an Assyrian loan-word, just as בָּלָל (for בָּלַל*) in the Book of Ezra. Cf. my remarks in Hebraica, vol. III, p. 107, n. 2.

blances enumerated above may be due to a preservation of peculiarities of the parent speech. It would be different if the forms *isábir*, *isábēr* could be shown to be new formations in both Assyrian and Ethiopic. Even in this case, however, the possibility of a merely accidental coincidence would not be excluded.

A closer historical community between any of the five various branches of the Semitic family of speech (Assyrian, Ethiopic, Arabic, Hebrew, Aramean) cannot be established. The reasons advanced by Dillmann (on p. 4 of his admirable grammar of the Ethiopic language) for a closer affinity between Ethiopic and Arabic cannot be considered valid in the light of Assyrian research. The difference between ح and خ e. g., also appears in Assyrian (e. g. *ḥimétu butter*, but *alību millt.* (Heb. חמאה and חלב , constr. חלב). The difference between ص and ض is witnessed in Aramean (e. g. צבעא *finger*, but ענא *sheep*, Heb. אצבע , צאן). Final short vowels, moreover, are as common in Assyrian as in Arabic and Ethiopic. The accusative, too, is regularly distinguished in Assyrian, as well as the subjunctive or voluntative, called in Assyrian precativē. As to the stem-formations of the verb, they are as manifold in Assyrian as in either of the South Semitic languages, and the agreement between Ethiopic and Arabic in the internal plural formations²⁰ is balanced by the internal passive formations preserved only in Hebrew and Arabic or as would perhaps be more correct to say, *developed* only in Hebrew and Arabic. In all these cases we have merely normal developments of primitive Semitic germs, no new formations, which alone could afford conclusive evidence of a special affinity. So, too, the abundance in Arabic and Ethiopic of stems with four or more consonants is only due to the expansion of a tendency in the parent speech. So-called quadrilaterals occur also in Assyrian. Accordingly a closer relationship can hardly be predicated for Arabic and Ethiopic, nor for Assyrian and Ethiopic, nor for Assyrian and Hebrew. On the other hand, we may safely maintain that, among all the Semitic languages, Ethiopic ranks next to Assyrian in point of antiquity.²¹

§ 10. The especial peculiarities of Assyrian in distinction from the other Semitic languages are

a. That Assyrian does not possess the semi-vowels ʔ and ʕ (cf. Assyrian *arḥu month* = Ethiopic *uarḥ*; Assyrian *ûmu*, or rather *ômu*, *day* = Arabic *iaum*). Whether Assyrian N in this case is older than ʔ and ʕ of the cognate languages is difficult to decide.²²

b. Also the two gutturals (or rather laryngeals) h and ʕ appear in Assyrian as N (e. g. *alâku to go*, Heb. הלך ; *aqrabu scorpion*, Heb. עקרב); so too h , Arabic ح (called *Haut* in Ethiopic), the weaker variety of ח , while h , Arabic خ (Ethiopic *Harm*), the

stronger variety of η , is regularly preserved as h (e. g. $h\text{an}\check{s}\hat{a}$ *fifty*, but $e\text{mu}$ *father-in-law*, Heb. חָתָן).

c. The common Semitic perfect form with personal affixes is only in the first stage of development in Assyrian and relatively rare. The form which corresponds to the common Shemitic imperfect serves as *tempus historicum*, and at the same time as *praeteritum perfectum* and *plusquamperfectum*; while for the present and future, the above described verbal form, with inserted accented \acute{a} before the second stem-consonant, has been preserved. Accordingly, $a\check{s}\acute{b}ir$ in Assyrian does not mean as Hebrew אֶשְׁבֵּר *I break* or *I shall break*, but *I broke* and *I have broken* or *I had broken*; *I shall break* is $a\check{s}\acute{a}bir$. So-called permansive forms (with personal affixes), like $\check{s}ab\text{ra}ku$, which may mean either *I have broken* or *I will break*, seldom occur.²³

d. All Assyrian nouns end in the absolute state in u, i, a or with "mimation": um, im, am , no essential difference in meaning existing between these various terminations: $kalbu, kalbi, kalba$ or $kalbum, kalbim, kalbam$ all simply mean *dog*. The appended nasal is certainly not as in Arabic, the sign of the *status indefinitus*; indeed, the contrary might be asserted. The mimation is really found in many cases in which the cognate languages would use the article, thus corresponding to the appended u in Sabean.*

e. Also in the verb—the Imperative and all forms with gender, number and personal affixes excepted—the final stem-consonant can take these vowels u and a or more rarely i : $uzaqqipu, uzaqqipa$ (and $uzaqqipi$) mean only like $uzaqqip$ *I impaled*.²⁴

f. The personal pronouns and suffixes of the third person begin with a sibilant and not with η , as in the other Semitic languages: *he, she*, Heb. הוּא, הִיא are in Assyrian $\check{s}\hat{u}, \check{s}\hat{i}$, pl. $\check{s}unu, \check{s}ina$ for Heb. הֵמָּה, הֵנָּה .²⁵

g. Similarly we find as the prefix of the causative stems in Assyrian not a breathing but the sibilant "š." A Hiphil or Aphel does not exist in Assyrian; only a Shaphel and the reflexive formations derived from it, the אֶשְׁתַּפֵּעַל and אֶשְׁתַּנַּפֵּעַל , or with the change of antedental \check{s} into \check{l} , peculiar to Assyrian, אַלְתַּפֵּעַל and אַלְתַּנַּפֵּעַל .²⁶

h. The form אֶשְׁתַּנַּפֵּעַל (or אַלְתַּנַּפֵּעַל), mentioned above, belongs to the tertiary formations with infixed תֵּן peculiar to Assyrian. Assyrian forms, corresponding to the Qal, Piel, Šaphel, and Niphal, the reflexive passive stems $\text{אַתַּפֵּעַל, אַתַּנַּפֵּעַל, אֶשְׁתַּפֵּעַל}$ (or אַלְתַּפֵּעַל), אַתַּנַּפֵּעַל (or אַתַּפֵּעַל), and in addition to these an $\text{אַפְתַּנַּעַל, אַפְתַּנַּעַל}$, אַתַּנַּפֵּעַל (or אַתַּנַּפֵּעַל), and אַתַּנַּפֵּעַל (or אַתַּנַּפֵּעַל).

i. Assyrian differs from the cognate languages in that it regularly

* This explains why certain words like *eršitum earth* or *napištum life* almost invariably appear with the "mimation."

infixes the formative element of the reflexive passive stems, not only in the reflexive passive stem of the Qal as in Arabic (افتعل), but also in corresponding secondary formations of the intensive stem; e. g., the reflexive to *umaššer I left*, is not *utmaššer*, but *umtaššer*, or, with partial assimilation of the "t" to the preceding **š**, *umdaššer*.²⁷

k. It is noteworthy that the feminine verbal forms of the third person with prefixed **š** are very rarely used, the form with the preformative **š**, corresponding to the third person masculine of the cognate languages, being still of common gender in Assyrian.²⁸

l. Also the prefix **š**, instead of the prefix **š** in other Semitic languages, forms a special peculiarity of Assyrian; e. g., *nark abtu chariot*, Aram. מַרְכַּבְתָּא, Heb. מַרְכַּבָּה.²⁹

m. Finally, a large number of words are peculiar to Assyrian, especially nouns, not occurring in any of the cognate languages. Cf., e. g., *balātu to live*, *kašādu to conquer*, *paḥāru to gather*, *ekēmu to seize*, *teḥū to approach*, *hepū to destroy*, *qebū to speak*; *labiru old*, *limnu evil*, *damqu propitious*, *raggu evil*; *qātu hand*, *zumu body*, *amelu man*, *ardu servant*, *šaḡū chief*, *qurādu warrior*, *zinništu female*, *summatu dove*,* *karanu wine*, *šizbu milk*, *kudurru boundary*, *kunukku scal*,† *šallaru wall*, *uknū crystal*, *palū reign*, *apsū ocean*,‡ *lamassu bull colossus*, *nergalu lion colossus*, *ekimmu spirit*, *sukkallu messenger*, *dupsarru scribe*, *dimgallu architect*, *abkallu leader*, *maḥḥu magnate*, *muhḥu upper part*, *imḥullu and imbaru storm*, *iššakku priest-king*, *šakkannakku ruler*, *abarakku grand-vizier*, *mulmullu spear*, *hegallu and lalū or lulū abundance*, *kisallu platform*, *musukkānu palm-tree*, *šuššu ὄσσοος*, *neru νῆρος*, *šar ὀάρος*, *paramaḥḥu sanctuary*, *narū stone-tablet*, *musarū inscription*, *kimamaḥḥu sepulchre*, etc., etc. A number of these would seem to be borrowed from Akkadian.³⁰

§ 11. Although the Assyro-Babylonian monuments cover a period of almost 4000 years, we can say that the language in general appears at the same stage of development. Changes that Assyrian underwent during this long period of time are only apparent in a limited number of instances: the language of the Inscription of Rimmon-nirari I., about 1320 B. C., does not essentially differ from that of the barrel-cylinder of Antiochus Soter, about 270 B. C. The script, at least, does not betray any material deviations. There is, on the other hand, a marked difference between the language of the royal inscriptions and the popu-

* Cf. Dr. Cyrus Adler's note on *The Legends of Semiramis and the Nimrod-Epic* in the *Johns Hopkins University Circulars*, vol. vi, No. 55 (January, 1887), p. 51a.

† In Armenian, according to Lagarde (*Mittheilungen*, i, 88): *κνιχ*; cf. CV. xxxv. Dr. Jensen, *ZA.* i, 254,1, seems to have overlooked these passages.

‡ In Akkadian *abzu*. Some Assyriologists consider *apsū* (i. e. the *Ἄπασων* of Damascius) the prototype of *ἄβυσσος abyss*.

lar speech as found in contemporary private documents, contract-tablets, letters, and reports (cf. PSBA. ix., 241). The language of the royal inscriptions represents more or less an artificial dialect kept up in the schools of the Assyro-Babylonian hierogrammatists in accordance with the old traditions. The ancient texts remained for all time the classical model for all the written documents composed by the learned scribes, and the archaic style was conscientiously imitated down to the latest period (ZA. I., 350). Certain peculiarities, moreover, are witnessed in the poetical language, in the religious and mythological and the magical and liturgical texts, especially so far as the syntax is concerned. These texts are almost exclusively interlinear translations from Akkadian, and consequently the Assyrian they contain is influenced by the non-Semitic original. For the syntax of Assyrian, therefore, this branch of literature can be used only to a very limited extent. The same holds good for the grammatical exercises and vocabularies compiled by the ancient Assyrian scholars for the explanation of the non-Semitic texts.³¹

§ 12. The principal changes in the phonic material, as far as can be judged from the writing, concern the "e"-vowel, the labial nasal "m" and the two sibilants "š" and "s." The "e"-vowel (i. e., a modified "a" or "ā") was confounded in course of time as in Western Syriac with "î": for re šu *head*, em ur *he saw*, they pronounced afterwards ri šu, îmur, cf. Western Syriac ri šô, nîmar, instead of Eastern Syriac **רֵאשָׁא**, **נֵאמַר**.³²

The labial nasal "m" passed gradually into the labial spirant "v" which must be distinguished from the semi-vowel "u," English "w." Instead of Sim ânu, Kislim u, e. g., the names of the third and ninth Babylonian months, they pronounced. Siv ânu, Kisliv u,³³ rendered in Hebrew by **סִינּוֹן**, **כִּסְלוֹ**; for Arab-šâmnu *eighth month*, they said Arab-šavnu, Heb. **מְרַחֲשׁוֹן**. Finally, the labial disappeared entirely, like the Greek F, especially in the middle of a word, or to use the terminology of Semitic grammar, the **מ** became an **ס**; for šurmenu *cypress*, they said šurvînu, and finally šur'înu. In the same way, in a list of the Babylonian months, the name of the fourth month, corresponding to Hebrew **תְּמוּז**, is written Du'ûzu, Dûzu, for Du-vûzu, Dumûzu.³⁴

§ 12. In the case of the two sibilants. "š" and "s," a change took place only in Assyrian, i. e., Assyrian proper or the language of the Ninevite empire. In Babylonian the two sounds remained unchanged; here the old **ש** was always pronounced "sh" and **ס** as a simple "s;" but in Ninevite Assyrian, a mutation came about, "š" becoming "s," and "s" on the other hand "š." In Babylonia, for instance, they said šamšu *sun*, and sisû *horse*, in Nineveh, on the contrary, samsu *sun*, and šisû *horse*. The name of Ethiopia, **כּוּשׁ**, appears in the Babylonian Darius inscription of Naqš-i-Rustam as Kûšû; but in the Assyrian

annals of Sardanapalus, as K ũ s u, since Assyrian "s" was pronounced as ŵ. Similarly the Elamitic district Iâšian (in the neighborhood of Susa) is called on a Babylonian tablet Iâšian, but in the Assyrian Prism inscription of Sennacherib Ias'an.³⁵

This mutation of ŵ and D in Assyrian constitutes the chief difference between the language of Nineveh and Babylon;³⁶ we can even say the only dialectical difference; for the often repeated assertion that Babylonian possessed in distinction from Assyrian a preference for softer sounds, as "b" for "p," "z" for "š," "g" for "q," does not agree with the facts. In the cases alluded to, there is no real phonetic change, but only a graphic peculiarity, occurring in Ninevite texts as well as in Babylonian.³⁷ I shall treat of this question more fully in an essay on the development of the cuneiform system of writing which will appear in the next number of *Hebraica*, April, '88.

In conclusion, I should like to state—Lagarde would say, *um keinem Gerechten in die Hände zu fallen!*—that this paper, in its unassuming form as presented here, does not constitute a specimen chapter of my Comparative Assyrian Grammar, but a mere *abstract* of the general introduction to be prefixed to that work. Several important points which could here but briefly be alluded to will be fully treated in my book now in course of preparation. I shall especially endeavor to make the bibliography as complete as possible, an undertaking which, however desirable it might seem, would be out of place in the *Proceedings* of our Society.³⁸

NOTES.

¹ Cf. Delitzsch, *Die Sprache der Kossäer*, Leipzig, 1884, p. 19;2.

² Cf. *Mittheilungen des Akademisch-Orientalischen Vereins zu Berlin*, Berlin, 1887, p. 6.

³ I cannot enter here upon the controversy so freely waged by Assyriologists during the past ten years as to whether Akkadian be a language or a sort of cryptography. I expressed my views on this subject in the year 1881, before the Fifth International Oriental Congress held at Berlin. I think everyone who studies my little book on the Akkadian language, published in 1883, will arrive at the conclusion that, in the so-called Sumero-Akkadian texts, we really have to do with a peculiar non-Semitic idiom. How far the Akkadian texts have been affected by Semitic influence is quite another question. We may readily admit that all the Sumero-Akkadian texts thus far known were composed by Semitic Assyrians and Babylonians, without in any way casting doubt upon the *existence* of a pre-Semitic idiom in the Mesopotamian valley. Joseph Halévy's attempt—made, as I always recognized, with great acuteness—to preserve to the Semites the glory of the foundation of West-Asiatic civilization, leads to the most curious consequences. Cf. Eduard Meyer's *Geschichte des Alterthums*, § 120, rem. Considerable comment has recently been occasioned by the fact that my learned

friend, Professor Friedrich Delitzsch, of Leipzig, has come alarmingly close to Halévy's theory. I trust that this will be only temporary with Delitzsch. It seems to me that he, as we say in German, *schüttet das Kind mit dem Bade aus*. Nor can I restrain the surmise that, by the renunciation of Akkadian, so little favored among Semitic scholars, Delitzsch is trying—of course unconsciously—to ensure a more cordial reception for his Semitic assertions. Cf. Halévy, *Recherches bibliques*, p. 246. [See also Tiele's *Geschichte*, p. 486.]

⁴ Cf. Delitzsch, *Paradies*, p. 214. It might be well to add that I was told last summer that this contract tablet in Zurich does not exist. I have written to Dr. Zimmern, of Strassburg, asking him to look into the matter at his first opportunity. [Cf. Dr. Hilprecht's remarks in his review of Kaulen's *Assyr. & Babyl.* in the *Theol. Lit. Bl.*, Nov., '85.]

⁵ Cf. Oppert's paper in the *Mélanges Renier* (Paris, '86), pp. 217-232, and Lyon's remarks, PAOS. Oct., '84, p. xvi.

⁶ For the biblical form of the name, see my remarks, ZA. II. 267, 2. Cf. also Dr. Wm. H. Ward's interesting article in the second volume of *Hebraica*, especially p. 85 below.

⁷ Cf. PSBA. VIII. 243. A careful drawing of this celebrated inscription is published, PSBA. VI. 68, and an illustration, giving an idea of the general appearance of this unique object, may be found in Budge's *Babylonian Life and History*, p. 40.

⁸ Cf. Delitzsch, *Paradies*, p. 209; Halévy, *Mélanges de critique et d'histoire*, Paris, 1883, p. 162; [Tiele, *Gesch.*, p. 488, n. 1].

⁹ Cf. Sayce's remarks in the London *Academy* of Oct. 22, '87. The same question has been quite recently discussed by Dr. Hugo Winckler in the last number of Dr. Carl Bezold's *Journal* (ZA. II., 351). I cannot suppress the remark, in this connection, that I was really amazed at reading such truculent language in the peaceful columns of the Munich *Zeitschrift*. I do not know how the editor can consider that compatible with the emphatic statement, *im Interesse der jungen Wissenschaft wird Sorge getragen, jede persönliche Polemik unbedingt auszuschliessen*. What are Oppert's remarks against Pinches, so unsparingly condemned by the *Redaction der Zeitschrift für Keilschriftforschung*, ZK. I., 278, compared with Dr. Winckler's savage attack! I remember that, in the summer of 1885, my calm statement (ZK. II., 267), *Im fünften Bande von Prof. Gildersleeve's American Journal of Philology*, p. 70, n. 2, *sind daran einige zeitgemässe Bemerkungen geknüpft*, as well as some similar innocent remarks, were refused admission under the pretext that they were *zu persönlich*. And now! "Bel lirimánnási!" I will only mention in conclusion, that, if Dr. Winckler does not know how to account for the *š* in Šâmarâ'in, he must have rather peculiar views about Assyrian phonology. Perhaps he does not believe that *سما* means "heaven," or *ماء* "water," since these words exhibit an *š* instead of the Hebrew *š*. Nor does he seem to be

acquainted with the passage v, 8, 124. I do not think it impossible that the common Assyrian name Sa-me-ri-na, i. e., according to the Ninevite pronunciation (BAL. § 12), Šâmerêna, refers especially to the city of Samaria, the capital of the *Zehnstämme-reich*; while the Babylonian form Ša-ma-ra-'in (i. e., according to the Babylonian pronunciation, Šâmarâ'iu = שְׁמֶרֶן) in the Babylonian chronicle may represent עֲרֵי שְׁמֶרֶן (cf. 1 Kgs. xiii.32), i. e., the whole kingdom of Israel = Assyr. gimir or kâla mât Bît-Humrî'a (KAT². 191: COT. 181). The determinative âlu instead of mâtu is of no consequence; cf. KGF. 96. Ihtépî does not mean *he destroyed* (ibbul iqqur), but rather *he devastated*. Accordingly the statement given in the Babylonian chronicle, Šulmân-ašarid âl Šâmarâ'in ihtépî, might safely be translated, *Shalmaneser devastated the country of Samaria* (cf. ויעל מלך-אשור ככל-הארץ, 2 Kgs. xvii.5). Shalmaneser's successor, Sargon, on the other hand, is the kâšid or sâpin âl Sa-me-ri-na, i. e., *the conqueror* (Heb. לְכַר) *of the city of Samaria*. For the ending -ên or -în in Šâmerêna, instead of -ôn in Heb. שְׁמֶרֶן, see my treatise on *The Assyrian E-vowel*, pp. 17 and 21 below. [Cf. Tiele's *Geschichte*, p. 614.]

¹⁰ For the genealogy of the Sargonides, compare *Hebraica*, IV. 52.

¹¹ Cf. Sayce, RP. XI. 1. The inscription has been thoroughly studied by M. Henri Pognon. His work appeared first in the *Journal Asiatique* of 1883, and subsequently in a separate edition, under the title *Inscription de Mèron-Nérar Ier*, par M. Pognon, Paris, 1884. M. Pognon, who at present occupies the post of French Consul at Baghdâd, has recently published an interesting new book on the cuneiform inscriptions of Nebuchadnezzar of Babylon, which he discovered at *Wadi Brissa*, on the eastern slope of Mount Lebanon, about two days' journey from Tripoli in Syria. Cf. *Les inscriptions babyloniennes du Wadi Brissa*, par H. Pognon, Paris, 1887.

¹² We must remember, says Paul de Lagarde, in his *Mittheilungen*, I. (Göttingen, 1884), p. 58, that the documents of the *Israelitic* language, as preserved in the Canon, extend over a period from about 900 to about 200 B. C., in the last three hundred years being composed by writers who did not speak Hebrew as a vernacular, but wrote it as scholars, in a more or less correct fashion. The remains of *Aramean*, of a relatively early date, are very scanty; the later Aramean flourished especially from 250-900 after Christ, and *Arabic* literature does not begin before 600 after Christ.—Also *Ethiopic* literature belongs exclusively to the Christian era. The oldest documents are two inscriptions discovered at Axûm, of the pagan king Tazênâ of Axûm, about 500 after Christ. Cf. Aug. Dillmann, *Über die Anfänge des Axumitischen Reiches*, Berlin, 1879, § 8, p. 220. For the Ethiopic version of the Bible, see S. Reekendorf, in ZAT. '87, 61 seq.

¹³ E. Hincks, *Specimen Chapters of an Assyrian Grammar* (JRAS.) London, 1866, p. 1. I consider the name quite appropriate, especially

if we bear in mind that Sanskrit is by no means in all respects the most primitive type of the Indo-European family.

¹⁴ See my paper, *The Oldest Semitic Verb-form*, JRAS. 1878, vol. x., pp. 244-252. It is noteworthy that, in ψ 7,6, we have a very curious Hebrew form which almost exactly corresponds to this formation,— יִרְדֹּף אֵיב נַפְשִׁי, i. e., iraddôf ôiéb nafši the enemy shall persecute my soul. The Present Qal of a stem radâpu (Impf. irdup, irduf) in Assyrian would be irádup, iradduf. I do not mean that יִרְדֹּף is the same formation, but it can certainly serve as a good illustration.

¹⁵ For traces of this termination in Aramean see my treatise on *The Assyrian E-vowel*, Baltimore, 1887, p. 5.

¹⁶ Cf. the Aramean feminine plural ending “-ân,” e. g., יִשְׁכְּנֵן צַפְרֵי שְׂמִיָּא, Dan. iv.18, corresponding to the fuller termination “-âni” in Assyrian; e. g., iškunâni = iškunâ; Syriac נִקְטְלוּ, in the Perfect with epenthesis of the final “i” in “-âni”—קַטְלוּ for קַטְלוּ qatâlâni. Cf. also נִפְקָה, נִפְלָה, i. e., nefâqâ, nefâlâ, Dan. vii.20 and v.5, קָרִי (Kautzsch’s *Grammar*, p. 46), and Targumic קַטְלוּ or קַטְלוּ, Impf. קַטְלוּ?

¹⁷ Cf., however, Practorius’ *Ethiopic Grammar*, §§ 41 and 58.

¹⁸ For תַּרְגָּמָן *dragoman*, Assy. targûmânû, cf. HA. 50; ZK. II. 300.

¹⁹ See Lagarde, *Symmicta*, II. 23, and compare Assy. ina in = Arabic عن *from*. Cf. also Del., *Prol.*, 141 below, and KAT². 498.

²⁰ For traces of this formation in Hebrew, cf. W. H. Salter Brooks, *Vestiges of the Broken Plural in Hebrew*, Dublin, '83; and Wilhelm Jenrich, *Der Pluralis fractus im Hebräischen*, Halle, '83.

²¹ In the past few years it has been repeatedly asserted that Assyrian is closest related to Hebrew. Friedrich Delitzsch, especially, has advocated this view in opposition to the relations between Assyrian and Ethiopic pointed out by myself (HA. 18). I believe my view has not met with general acceptance for the simple reason that there are more persons who have some knowledge of Hebrew than of Ethiopic. If Delitzsch were not the son of the great Hebraist, but the offspring, say, of August Dillmann, the great master of Ethiopic philology, he would, perhaps, substitute Ethiopic for Hebrew.—People entirely forget in the joy of recognizing the numerous alleged striking agreements between Assyrian and Hebrew that this likeness is occasioned by the fact that the literary documents of the two languages are contemporaneous. All these coincidences are due either to a direct borrowing of Assyrian words or to an independent simultaneous preservation or normal development of primitive Semitic speech. Who can say that the expressions and turns apparently exclusively peculiar to Assyrian and He-

brew, were not also in use in Aramean or Arabic dialects at the time of the Sargonides? It would be most useful if Assyriologists who spread themselves on this subject would first carefully study the Indo-European literature on linguistic affinities. Even the study of a single little book like Johannes Schmidt's *Über die Verwandtschaftsverhältnisse der indogermanischen Sprachen*, or Brugmann's paper in Teichner's *Zeitschrift*, i., 226, might give many a much to be desired enlightenment. Cf. also David H. Müller's remarks in the Vienna ZKM. I., 339.

²² Cf. my remarks in the *Johns Hopkins University Circulars* for March, 1884, vol. III., No. 29, p. 51. My view that the semi-vowel "u" did not exist in Assyrian was misunderstood and consequently contested. I have clearly defined my position on this question in an essay published in the last number of the Munich Journal of Assyriology (ZA. II., 259). So far as I know, the statements made in this paper have been almost universally accepted. Only Jacob Barth has taken occasion (in the strange article, mentioned below, on the Semitic Perfect in Assyrian, ZA. II., 382 below) to dispute my theory. But I am sorry to say that he does not understand me. Otherwise he would not talk about the *spirantische Aussprache eines v* in cases like *سوى* and *كوى*. I certainly never dreamed of calling in question the fact that Arabic and Hebrew possessed verbal stems like *لوى* with consonantal *و*. What my remarks combated is the opinion that an Assyrian verb *lamû* could represent a parent Semitic *لوى*. That is something different!

²³ My theory about the relatively late origin of the Perfect was ten years ago designated as more than bold. I had only the problematic support of Dr. Hommel, of Munich (see his *Semiten*, pp. 53 and 422). However, even this revolutionary view, involving a radical change in the entire system of Semitic grammar, is gaining ground. For example, Geo. Hoffmann, of Kiel, one of the best Semitists living, has recently, in his review of Nöldeke's most excellent (but rather one-sided) article on Semitic languages in the *Encyclopædia Britannica*, very closely approximated my position. See the *Literar. Centralblatt* of April 30, '87, col. 606 below. David H. Müller, of Vienna, however, in his review of Nöldeke's article, in the *Wiener Zeitschrift für die Kunde des Morgenlandes* (vol. 1, p. 337), considers this stand-point untenable. In the last number of the Munich *Zeitschrift für Assyriologie* (ZA. II., pp. 375-386), Jacob Barth, of Berlin, has advanced a new theory as to the nature of the Assyrian Imperfect forms. He takes them to be Perfect forms with personal preformatives, instead of the personal affixes as found in all the other Semitic languages! I do not believe that Barth will convert many to his novel view, either Assyriologists or other Semitic philologists. If he had read Mr. Pinches' papers on the Assyrian Permansive (PSBA. v, 21-31; vi, 62-67), and my former

pupil's, Dr. McCurdy's, article, *The Semitic Perfect in Assyrian*, in the Leyden Congress Transactions (Part II, section 1, pp. 509-534), it might have prevented him from writing his essay. This would have been no loss for science, but a gain for himself. The only statement in his whole paper that really holds good is his final remark, that his results *wahrscheinlich keinen Sachkenner ernstlich beunruhigen werden!* I shall review the paper in the second part of the *Beiträge*. I will only state here that Barth does not seem to have understood my article published in 1878. I never maintained that Assyrian possessed no Perfect at all. I only believed that the Perfect was in the first stage of development in Assyrian, just as I said above, § 10, c, in the foregoing *Prolegomena*. I say, JRAS. x, 246, 2, expressly: "The common Semitic Perfect is a new formation from the Participle, which has not yet been developed in Assyrian into a stereotyped tense. The Assyrian has not lost it, a few traces of it excepted; on the contrary, these apparent vestiges of its former existence are really the fresh nucleus of a form the growth of which we can watch." Accordingly Barth's assertion that all Assyriologists had unanimously denied the existence of a Perfect in Assyrian is not true.

²⁴ The forms with "u" occur especially in relative clauses, those with "a" after a preceding copulative "ma" corresponding to Hebrew forms like *וַאֲשַׁלְחָהּ* (cf. LOP. i. 198). Furthermore, in asyndetically co-ordinated verbal forms, the second usually takes the overlapping "a."

²⁵ We also find the sibilant instead of the breathing in Southern Arabic, in the so-called Minæan dialect, represented by the inscriptions of Me'in.

²⁶ In Hebrew we find the causative *ש* in *שְׁלַחְתָּ* *flame*, Ez. xxi.3; Job xv. 30; and *שְׁקַעְרוּרְתָּ* *hollows*, Lev. xiv.37, from *קַעַר*. *שְׁבִלּוּל* *swail*, *ש* 58,9 (quoted by Stade, § 149), cannot be a causative formation, the Aramean reflex of the *ש* in this case being a *ת*, not a *ש*, cf. Aram. *תִּבְלָלָא* (Del., *Prol.*, 125). In Aramean the *שפעל* formations are rather numerous; yet a large number of them seem to be borrowed from Babylonian and Assyrian; e. g., in Biblical Aramean *שְׁבִלּל* *to complete*, *שְׁיַצִּיא* *to terminate*, *שְׁיַיב* *to save*. In Syriac we find, alongside of *ש* (e. g., *š a mlî to complete*), *ܣ* as causative prefix; e. g., *sa rhib to hasten*, *sa qbil to bring against*, *sa ušî to nurse*. These forms must come from a dialect in which *ש*, as in Assyrian, became *ܣ*.

²⁷ In Hebrew the infix *ת* only occurs in the Hithpael of verbs with initial sibilant, e. g., *הִשְׁתַּמֵּר* *to guard one's self*. It is not impossible that all infixes in Semitic are due to a similar reason, the transposition of the prefix having been first occasioned by the peculiar nature of certain consonantal groups and having thence, under the influence of uniforming analogy, been transferred to other cases.

²⁸ This is certainly an evidence of great antiquity. Also in the plural of the feminine, the form תקטלנה is younger than יקטלנה. ת was originally only the performative of the second person. That the performative ׳ was used for the feminine is not wonderful, since the ׳ is identical with the personal pronoun היא she. הוא and ה׳יא, too, were originally of common gender. In Aramean, e. g., we have אב׳וה׳ his father, for אב׳והו, or מלכ׳ה his king, for *malkahi, ה׳ being here still a masculine suffix.

²⁹ It has recently been observed that this ן is due to dissimilation caused by the presence of a labial among the following stem-consonants. In stems without a labial the prefixed ן remained; while in stems with a labial, no matter whether first, second, or third stem-consonant, the dissimilation to ן took place, e. g., manzazu seat, from nazâzu to sit down, but narbašu resting place, for *marbašu from rabâšu to lie down. I have collected all attainable forms with ן and ן, and the rule holds good throughout. Exceptions are quite rare and always occasioned by special circumstances. My investigation on this subject is already in print and will appear in the first number of the *Beiträge zur Assyriologie und vergleichenden semitischen Sprachwissenschaft*. I must mention here that the first proof of my article, which went to press in the early part of September, was sent by somebody to Jacob Barth several months ago, along with the invitation to write a *Gegenartikel* in the next part of the Munich Journal of Assyriology! I will take up this unsavory matter at some other place. Here I will confine myself to calling attention to the fact that we need not by any means consider the prefixed ן in all cases more primitive than the ן. For instance, in the passive Participle namkûru, which would appear in Arabic as a form مفعول, the ן seems to represent the original form. I believe this passive form نفعول, as preserved in Assyrian, is a Niphal formation. The differentiation between the Perfect (or Infinitive) Niphal (which has the form naf'ulu in Assyrian) and the Participle would then be similar to that of נקטל and נקטל in Hebrew. The ן of the form مفعول instead of the characteristic prefix ן of the Niphal, it seems to me, is based upon the analogy of the numerous participial formations with prefixed ן (= ן׳ someone) in the derived conjugations. We witness the same influence of uniformirende Analogie in Assyrian, the ן of the passive Participle نفعول being changed here into ן (as in the cognate languages), except in those cases where it was followed by a labial among the stem-consonants.

³⁰ Cf. SFG. 70. This principle, however, has been quite overdone. Ten years ago it was the fashion to derive as many words from Akkadian as possible (cf. *Chald. Gen.*, 273-280; SFG. 9). Delitzsch even explained gammal camel as non-Semitic (SFG. 70). Now a reaction has set in (cf. my remarks, ZDMG. xxxiv. 759); but this, too, is

going too far. In his *Assyrian Lexicon*, e. g., Delitzsch would like to explain everything from Semitic (cf. Halévy, *Recherches bibliques*, fasc. 6, p. 246)—very praiseworthy, but rather one-sided!

³¹ The syntactical peculiarities in the Assyrian version of the so-called bilingual texts, as compared with the unilingual inscriptions, afford a strong evidence for the existence of a non-Semitic idiom, beside the Assyro-Babylonian. This ought to be the starting-point of all investigations dealing with the question whether there was a non-Semitic idiom alongside of Assyrian in Mesopotamia.

³² I have fully treated this subject in a special treatise entitled *The Assyrian E-vowel*, Baltimore, '87 (reprinted from *The American Journal of Philology*, vol. VIII.3, pp. 265-291).

³³ I remarked, ZA. II. 265,2, that *kislimu* seems to be a compound like the well-known *kis libbi*. In order not to be misunderstood, I will expressly mention here that I am acquainted with foot-note 2 on p. 24 of Zimmer's *Busspsalmen*. [Cf. the Vienna ZKM. I, 199.]

³⁴ A further treatment of this subject may be found in my article on the semi-vowel "u" in Assyrian, recently published in the third part of the second volume of the *Munich Journal of Assyriology*.

³⁵ Cf. Delitzsch, *Die Sprache der Kossäer*, p. 47, n. 1.

³⁶ I have shown in the *Johns Hopkins Circulars* for August of this year that the great Irish Assyriologist, Edward Hincks (born August 19, 1792, †December 3, 1866), discovered this difference between Babylonian and Assyrian in their treatment of the sibilants *ṣ* and *ṣ*, as early as the year 1857, illustrating it by numerous examples. Hincks' merits have by no means been sufficiently recognized. Many discoveries ascribed to various Assyriologists go back to Hincks. I consider Edward Hincks the greatest of all cuneiformists, and it is my desire, as soon as I can possibly find the time, to set up for this really unique man a worthy biographical monument.

³⁷ Cf. my ASKT., p. 168, § 12, and Flemming's *Nebuchadnezzar*, p. 27.

³⁸ For the scanty references which I deemed necessary to insert in the present abstract, I have used the following abbreviations, most of which are familiar to all Assyriologists: ZK. is the *Munich Zeitschrift für Keilschriftforschung*; ZA., *Zeitschrift für Assyriologie* (Leipzig, O. Schulze); RP., *Records of the Past* (London, Bagster); HA., (i. e. Heb. and Assy.), Delitzsch, *The Hebrew Language*, etc., (London, 1883); JL., Hommel, *Zwei Jagdinschriften Assurbauipal's* (Leipzig, 1879); SD., my paper *Über einen Dialect der sumerischen Sprache*, Göttingen, 1880 (GGN.); CV., my little book *Die akkadische Sprache* (Berlin, 1883); ZAT., *Zeitschrift für alttestamentliche Wissenschaft*, ed. by Stade (Giessen, Rieker); NLA., Guyard, *Notes de lexicographie assyrienne* (Paris, 1883); LOP., *Literaturblatt für orientalische Philologie*, ed. by E. Kuhn (Leipzig, Schulze); SFG., my book *Die sumerischen Familiengesetze* (Leipzig, 1879); JRAS., *Journal of the Royal Asiatic Society of Great Britain and Ireland*; ZDMG., *Zeitschrift der*

Deutschen Morgenländischen Gesellschaft (Leipzig); PSBA., *Proceedings of the Society of Biblical Archaeology* (London); ASKT., my *Akkadische und sumerische Keilschrifttexte*. (Leipzig, 1881-82).

18. On a new periodical devoted to Assyriology and comparative Semitic grammar; by Professor Paul Haupt.

In the early part of next year there will appear the first number of a new periodical entitled *Beiträge zur Assyriologie und vergleichenden semitischen Sprachwissenschaft*, and published by the well-known house of J. C. Hinrichs, of Leipzig. It will be edited by myself in association with my learned friend Professor Friedrich Delitzsch.

The plan of this undertaking was conceived ten years ago (compare the announcements on the covers of my ASKT. and Delitzsch's *Paradies*, p. 144), but various circumstances have hitherto prevented its execution. The *Beiträge* are intended as a parallel series to our *Assyriologische Bibliothek*, including my *Akkadian and Sumerian Cuneiform Texts*, Dr. Bezold's *Achæmænian Inscriptions*, with the cuneiform text of the smaller Achæmænian inscriptions autographed by myself, my edition of the *Babylonian Nimrod-Epic*, Strassmaier's *Alphabetical Index*, Lyon's *Sargon*, and Dr. Zimmern's *Babylonian Penitential Psalms*.

All works which, for some reason or other, are not exactly suited for the quarto volumes of the *Assyriologische Bibliothek* will be united in this new series of the *Beiträge*, which will afford at the same time a convenient repository for isolated communications of value and short texts of importance.

Due regard to the principles of comparative philology will be the distinctive feature of the *Beiträge*. The first number will contain among other papers an exhaustive treatment by myself of the Assyrian nominal prefix *na*, with especial reference to the theory lately advanced by the Berlin Arabist Prof. Jacob Barth (*ZA.* II., 111); then, the cuneiform text of the fragments of the 12th tablet of the Babylonian Nimrod-Epic, autographed by myself, after my copies made in the British Museum in the spring of 1882. Since the complete text of the 11th tablet with the Deluge episode has been published by Delitzsch in the third edition of his *Lesestücke*, we now have the whole poem in a reliable edition. This will be followed by an exposition of my new system of transliteration for Semitic sounds based upon phonetic investigations, a brief survey of which was presented to the Society by Mr. Edgar P. Allen.

Finally, I will discuss some points in Friedrich Philippi's learned paper on the Semitic sounds η and ϵ , published in the 40th volume of the *Journal of the German Oriental Society*—with especial reference to my investigation concerning the semi-vowel \underline{u} in Assyrian, recently printed in the last part (September, 1887) of the *Munich Journal of Assyriology*.

I mention my own contributions first, because they are already in print.

Delitzsch will publish a photo-lithographic reproduction of a valuable

Babylonian cylinder (*Sin-idinnam*) in his private possession, accompanied by a translation and commentary; perhaps also a full explanation of the aim and arrangement of his great Assyrian Lexicon reviewed by Prof. Lyon at the meeting of the Oriental Society held last spring (cf. Article 16). In addition to these, Prof. Praetorius, of Breslau, will furnish a series of contributions to the comparative grammar of the Abyssinian dialects, especially Ethiopic lexicography; Prof. Fleischer, a note on a Persian loan-word in Arabic; and my former pupil, Dr. Geop. Steindorff, now Assistant keeper of the Egyptian Museum in Berlin—who, also, will shortly publish a Coptic Grammar in the Petermann series—will investigate anew the Egyptian names mentioned in the cuneiform account of the two Egyptian campaigns of Sardanapalus. Some of these names were discussed in the year 1883 by Professor Adolf Erman, Director of the Egyptian Museum in Berlin, in an excursus appended to my Contributions to Assyrian Phonology published in the Proceedings of the Göttingen Academy (cf. *Nachrichten von der Königl. Gesellschaft der Wissenschaften zu Göttingen*, 1883, No. 4, pp. 112-115, and *Zeitschrift für Ägyptische Sprache*, 1883, p. 88).

Our new periodical appeals by no means exclusively to Assyrian specialists. The chief stress will rather be laid on comparative Semitic philology. Representatives of this line of research, to be sure, are still fewer in number than Assyriologists, who, however, are multiplying with a really alarming rapidity. In Germany only Gustav Bickell of Innsbruck, Geo. Hoffmann of Kiel, David H. Müller of Vienna, F. W. M. Philippi of Rostock, Franz Praetorius of Breslau, and Bernhard Stade of Giessen can properly be called comparative Semitic philologists, and none of them, I am sorry to say, knows much about Assyrian. To this number may be added the name of the eminent English Arabist, Professor William Wright of Cambridge. The Nestor of Semitic Philology, Professor Fleischer of Leipzig, as also Paul de Lagarde of Göttingen and Theodor Nöldeke of Strassburg, perhaps the most distinguished Semitists living, occupy a somewhat peculiar position not easy to define in a few words. I do not wish here to indulge in petty criticism. Certainly nothing is further from my intention than to belittle the universally recognized merits of these men.

Especially characteristic of what I may be allowed to call the old school is its attitude towards phonetics, almost entirely neglected in the domain of Semitic philology. Praetorius' remark (in the preface to his great work on the Amharic language, Halle, 1879, p. vi), that the Semitic grammars contained no *Lautehren* but rather *Buchstabenlehren*, is not unfounded. The heading of § 24 in the latest edition of Gesenius' Hebrew Grammar (Leipzig, 1885) still reads: *Veränderungen der schwachen Buchstaben ך und ם*; and in the tenth edition of Gesenius' Hebrew Lexicon (Leipzig, 1886) we read, e. g. on p. 88: *es wechselt der Buchstabe ך mit dem härteren ם*; p. 866: *ך ist Gaumenbuchstabe von mittlerer Härte*; p. 762, the editors speak of the *Übergang des Buchstabens ך in ך und ם*. Nor have the Arabists risen to an appreciation of the difference between sounds and letters. Even in the fifth edition of

Caspari's Arabic Grammar, issued but a short time since (Halle, 1887), we have no special treatment of phonology in distinction from the writing. All phonetic processes are more or less considered as graphic changes (cf. Mr. Jewett's review in the *American Journal of Philology*, vol. viii, p. 361). It is gratifying to learn, however, that this is to be remedied in the next edition.

The deplorable lack of interest in problems of Semitic phonetics is no doubt chiefly due to the fact that these indispensable studies are not favored by the coryphees and leaders in the field of Semitic philology. For instance, Paul de Lagarde, as he freely admitted in his review of Hübschmann's treatise on the transliteration of Armenian and of the Iranian languages (reprinted in Lagarde's *Mittheilungen*, Göttingen, 1884, p. 144), entertains towards phonetics the greatest mistrust, inherited perhaps from his great master and patron Jacob Grimm, who repeatedly declared that at the physiological treatment of sounds *würde ihm die Luft allzu dünn* (cf. Merkel's *Physiologie der menschlichen Sprache*, Leipzig, 1866, p. iv.). I recently tried in an incidental remark (ZA II., 264) to define the difference between Aspirata, Spirans, and Affricata, adding that Indo-European linguists would perhaps wonder that I deemed it necessary to discuss these rudiments of phonetics, whereupon one of our greatest Semitic scholars writes to me, Spirans and Affricata are all one to him, since he does not demand of a technical term that it should indicate the exact nature of a thing. This, of course, stops all further discussion.

I presume there will come about in the Semitic domain a distinction between classical philologists and comparative linguists as we see it at present in Indo-European philology. Philologists of the old school will hereafter as before ignore the results of comparative linguistic research and retain the old *Zopf* of the national grammar, which, as Paul de Lagarde justly remarks (in his review of Hartwig Derenbourg admirable edition of *Sibawaihi*; reprinted in *Mittheilungen*, I., 171-174) is only of value as a collection of material. Prof. August Müller of Königsberg expressly says in the preface to the last edition of Caspari's Arabic Grammar, it would have a most pernicious effect if we should approach Arabic on any other basis; the good language, he says, should not be degraded to a *corpus vile* for the experiments of promising *Jüngstgrammatiker*—a new expression indeed to which Müller, I suppose, was helped by his colleague Bezenberger. I consider this innuendo quite absurd. To demand of Assyriologists that they should stick to the Arabic national grammarians is just about as wise as prohibiting a Sanskritist from explaining Greek forms unless he knows the *τῆχνη* of Dionysius Thrax and Apollonius Dyscolus by heart. To master the Arabic forms is not particularly difficult for an Assyriologist. If the treatises on Arabic morphology now at hand are incomplete and unreliable the fault is certainly that of the Arabists. Theirs is the duty to bring forward the necessary philological material for comparative purposes with the greatest attainable completeness and correctness. Instead of falling foul of the comparative philologists it would certainly be far more useful to pay more attention to Arabic dialectology. A

complete compilation of the notices incidentally given in Arabic authors concerning dialectical peculiarities would be a great step in advance. The *Jüngstgrammatiker* will surely not degrade this *corpus* to a *corpus vile* provided that it is not brought forth by the Arabists as a *corpus vile*.

I mention, in conclusion, that the *Beiträge* will as a rule be published in the summer but not at regular intervals. The price will be reasonable, only one mark for the printed sheet of sixteen octavo pages, though the publisher is willing to pay the contributors about \$10.00 per sheet. The time of publication will entirely depend on the quantity and value of the material placed at the disposal of the editors. Experience teaches that an obligation to print a certain number of pages every quarter does not exercise a particularly favorable influence on the quality of work thus published.

Naturally the *Beiträge* will principally contain studies of German Semitists, though other languages, especially English and French or Latin, will by no means be excluded. The editors would be most happy indeed to receive contributions from other countries, such as France, England, or the United States. I hope that above all in this country, where Semitic studies have in the last few years made such great strides, the younger workers in this field will always pay due attention to comparative grammar. It would give me special pleasure to publish in the organ of the new school a number of thorough studies from the pen of American Semitologists.

19. Animal worship and sun worship in the East and the West compared; by Rev. Stephen D. Peet, of Mendon, Illinois.

Sun worship prevailed at a very early date in different parts of the globe. It has left its traces on the early historic records, on traditions, mythology, language, and art. The very forms of the temples had reference to it, and the symbol of the sun is found in the clothing of the priests, the furniture of the temples, and the adornments of the idols. These tokens show that sun worship was a most extensive system, out of which other systems have grown. Sun worship may have been preceded by more primitive systems, but it seems to have been more powerful and more extensive than any of these. We may indeed regard it as a form of universal religion, which reached the stage of universality before historic times. We may also view it as the connecting link between historic and prehistoric times. In prehistoric times it must have existed for a long period. The change to anthropomorphic systems was evidently slow. Animal worship and sun worship were closely associated in prehistoric times, and were perpetuated in parallel lines even long after history began. The human semblance was a later development, and yet we can trace in this country the idolatry which contains the human semblance back into prehistoric times. All these types were perhaps prevalent in the East before the historic period.

I. We are to consider first the animal forms which are found in the idols of the East. We find figures composed of animal and human forms combined. These are held to be symbolic of divine attributes.

This may be so, but another view is also possible. In America animal worship preceded sun worship, and was perpetuated after sun worship was developed, and so we have the earliest and latest forms of nature worship in this country. We do not learn, however, that the animal forms which are combined with the human were symbolic of divine attributes, but we do learn that they were in a measure totemic: i. e., they symbolized the relation of ancestry which is contained in divinity, and at the same time expressed protection and power.

1. It is noticeable that the different parts of the human form in America symbolized nature powers; the eye of Tlaloc, the Mexican god, signifying that he was a rain god, etc. The serpent is found among the ornaments of his dress, symbolizing the lightning, and the cross, symbolizing the division of the elements, the points of the compass, the four quarters of the sky.

2. In America the animals symbolized were wild, while in the old world the figures were those of domestic animals, showing that symbolism was used by races which had come up out of the wild state.

3. It is common in the eastern symbolism but rare in America to find human heads on animal bodies.

4. One and the same divinity is worshiped in different Oriental countries under different animal forms.

5. Is there any historic connection between the symbolism of the East and the West? There are certain symbols which indicate that there was, though some scholars hold that these might have arisen independently in different countries. A careful inspection of the symbols representing the sun shows such marked resemblances that historic connection seems necessary to explain those resemblances.

6. The successive steps are: (1) the totem system, with animals used for symbols; (2) sun worship, with rude figures of the sun for symbols; (3) a combination of the two, including animal figures and sun symbols; (4) nature powers, symbolized by animals, introduced as an adjunct to sun worship; (5) personification of the sun, the sun being symbolized by a human figure.

These views as to the source of idolatry in America are suggestive of the source of idolatry in Asiatic countries.

II. Symbols of the sun as they are found associated with animal figures in different parts of the East. In Egypt those animals are the phoenix, the bull, the hawk, the lion, the scarabæus, the goose, the cow, the vulture. Besides those animals, the ram, the fox, the jackal, the dog, the hippopotamus, the goat, the eagle, the crocodile, were sacred in Egypt, and most of them were symbols of the sun. In India, the elephant, the buffalo, and the ox were sacred; among the Hittites, the stag, the panther, and the lion; in Assyria, the leopard, the lion, and the dolphin. In Babylonia, the vulture and the eagle were very ancient symbols.

The correspondence between the symbols of different countries deserves attention. (1) The lion is a common symbol in Assyria and Egypt, and so is the sphinx. There are no sphinxes in America because there are no lions here. But there are composite figures reminding one of

sphinxes. The significance of the lion in Egypt, Assyria, and Phœnicia is power. (2) The eagle or vulture is found in all countries. It was originally a sun symbol, but has now lost this significance. The vulture was a symbol of maternity in Egypt. (3) The winged circle combined with a human figure combines the three elements, animal worship, sun worship, and hero worship. The golden egg is to be considered as connected with this symbol of the bird. (4) The serpent in the shape of a circle represents the sun in the Assyrian symbols. In America we find no asp or serpent circle, but we find an approach to it in the bow and the disk. There is also another figure which reminds us of the human-headed bird in the sun circle of Assyria. It is found in the sculptures of Cosumalhuapa in Gautemala. The combination is different, but the elements are the same. We have the human face, the sun circle, the overshadowing wings, and the intertwined serpent.

In Egypt there were four suns, rising sun, midday sun, setting sun, and sun at midnight rest. A divinity was assigned to each of these portions of time, and a different animal represented each divinity or typified each sun. These animals were the lion, the ox, the hawk, and the cow. In Egypt animals also presided over different parts of the country. This is to a degree true in America. There we find different suns, or different animals to typify these suns. The points of the compass are also typified by different animals.

III. Transition from animal worship to sun worship, and from sun worship to a reverence for the personal attributes.

1. In America we begin with the superstitions of the savage about animals, but we end in a very high stage of symbolism, in which personal attributes are represented by the combined figures. (1) The figures of wild animals are found among the emblematic mounds of Wisconsin, protecting villages, guarding caches, etc. (2) In the mounds of Tennessee are found shell gorgets with rude and simple figures of the sun and moon but without animal figures. We have however other engraved relics which show that both systems were combined. (3) We have even human semblances in the mounds. Such is a shell gorget from the McMahon mound in Tennessee, representing two human figures, plumed and winged and armed with eagle's talons, engaged in mortal combat. (4) Among the Pueblos we find symbols of the sun attended by animal and human figures. Here we see an advance on the totem system of the mound builders. Animal worship has been lifted and combined with sun worship. (5) Mexico furnishes another stage of animal worship and sun worship combined. The four quarters of the sky are symbolized by different animals. The dragon appears. Every day has an animal divinity. The months and years are named after animals. The symbolism of Mexico and Central America is very elaborate, and shows a great advance on that of New Mexico.

2. The progress of thought is also apparent in the old world. The earliest symbols are rude, the later are more elaborate and are significant of advanced thought. The change is clear to one who compares the Hypocephali recently discovered in Egypt with the older Babylonian carved seals. As connecting links between the two we have the sym-

hols and inscribed animal figures found at Jerabis and Sindjirli. Two things are noticeable in all these symbols, whether ancient or comparatively modern: viz., the sun symbol is everywhere present, but it is attended by animal figures. Thus archæology makes a closer record than history or mythology does of the alliance between these two forms of worship. There are several stages of progress; but we have not time to dwell upon them. In closing we refer to two or three points only.

Let us consider first the bird on a proto-Ionic capital found by Dr. Ward in Mesopotamia. "This bird is evidently the symbol of the seated divinity. Before them are two worshippers, each with a hand raised in adoration. Behind them are two animals, a hare and a kangaroo (we should say ibex). The seated divinity in dress and type takes us back to the Babylonian cylinders of 2000 and 3000 B. C." Notice the dates ascribed to this cylinder and the figures upon it. Prof. Frothingham says "kangaroo." It looks to us more like a mountain goat or ibex. We have taken the position that some of the earliest inscriptions indicate that animal worship prevailed before the first ancestors migrated from their early home among the mountains of Thibet to the plains of Shinar, that they had a totem system similar to that of the North American Indians before they migrated. The hare and the ibex on this cylinder seem to confirm our position. The bird reminds us of the thunder bird of the Thlinkets and of the Aztecs, but it may have been a mere sign of royalty. The question is whether the symbols on these early seals and cylinders had reached to the stage where heraldry was adopted and understood. We think that the totem system would account for them, and yet they may be ascribed to a system of heraldry. There is another seal or cylinder in the De Clercq collection in which a bird with spread wings is represented as in the air three times repeated, with the symbols of the sun and moon beneath and seated divinities facing these symbols. Here we have heraldry, for the birds with the spread wings may have been the ensigns of power, and yet we have mythology, for the sun and moon are there and evidently were objects of worship. Layard says that "sacred birds belong to the Babylonian and Assyrian religion and were connected with magic." The progress of the totem system into the magic arts was manifest in the old world as well as in the new. The magician and the "medicine man" are analogous terms. The Eleusinian mysteries and the mysteries among the Zunis have some points of resemblance. Both came out of an elaborate system of sun worship and both were expressive of the operations of nature. We have then three stages of progress: the totem system, the primitive heraldry, and the introduction of *magicism*. There are several stages beyond. (1) The sun divinity is personified and animal figures represent the attributes of the divinity. This is the first stage apparent in Egypt. (2) After that there is an esoteric significance to the gods. Isis and Osiris and Horus are very different from Ra and Set and Neph; as different as the intellectual is from the physical. The story of Isis and Osiris and Horus is allegorical. Here we have two stages. (3) The Hypocephali introduce another stage—the

theological—or rather psychological, for the doctrine of the soul is brought in and dwelt upon extensively by these symbols. Notice, however, that the sun symbol is perpetuated as well as animal figures. These Hypocephali are divided into two parts to represent the two spheres, the upper and the lower. The boat or ark is always in the center of the sphere or disk. The soul is conveyed in the ark to the west, the land of the setting sun.

We might speak of the "survivals" in these figures, "survivals" from sun worship in the form of the disk and its divisions into hemispheres, also "survivals" from animal worship in the animal figures, but we have not time to dwell on this. Others have spoken of the universality of certain animal myths or animal symbols, such as the hare, the owl, etc., as if these were survivals from primitive totemism. There certainly has not been much progress made in these myths, and it is a question whether the hare expressed the action of the sun in its various movements or symbolized the attributes of the divinity. The Egyptian word for hare may have several different significations: 'to start up,' 'to open,' to 'transgress or overleap,' etc.: but what has the Egyptian word to do with American symbolism? Linguistic analogies in different countries are certainly not sufficient to account for the universality of this myth about the rabbit or the hare. Is it because the hare is everywhere found that it is taken as a tribal totem in all countries, and because it fitly symbolizes or represents a nature-power? The progress of thought may be recognized in the history of this single animal myth, for the hare itself has passed through all the stages from the simple totemism up to the psychological symbolism, and is the best instance of a "survival of the fittest" which we have on record.

20. Korea in its relations with China; by William W. Rockhill, Secretary of the United States Legation at Peking.

The paper of Mr. Rockhill was a review of the political relations existing between Korea and China during the past five hundred years, with copious extracts from Chinese authorities.

From the *Annals of the Ming Dynasty* we learn that in 1392 Sōng Ké, the founder of the present reigning dynasty in Korea, sought and obtained the recognition of the Emperor of China. He sent in return for this favor valuable presents, and his successors from time to time did the same. China, also, during the Japanese invasion of Korea, made contributions both of men and money to her defense, prompted less perhaps by friendly feeling than by the dread of possible danger to herself in the success of the Japanese.

In the *Sheng wu chih* (the history of the campaigns of the present dynasty) is found an account, which Mr. Rockhill translates at length, of the Manchu invasion of Korea. This was in retaliation for aid given by the Koreans to the Ming dynasty, and resulted in the complete defeat and submission of Korea in 1637. An annual tribute was imposed and a tablet was erected by the Koreans at Song p'a, where the

Manchu army had been encamped, commemorating in Chinese, Manchu, and Mongol the virtue and benevolence of the Manchu sovereign.

The *Ta ching hui pien* (Institutes of the Ta ching Dynasty) furnishes data for a sketch of the relations since subsisting between the two countries. The amount of the tribute was gradually reduced, and Korea likewise acquired valuable privileges of trade with China.

An extract from the narrative of Po Chün, a Chinese Envoy to Korea in 1843, gives a detailed account of the ceremonies with which he was received.

Mr. Rockhill gives in conclusion the Chinese text and a translation of the Song p'a inscription mentioned above.

Two maps copied from native Korean authorities, one of the capital, Söul, the other of its environs, accompany the paper.

After a vote of thanks to the Johns Hopkins University for the use of Hopkins Hall as a place of meeting, the Society adjourned, to meet in Boston, on Wednesday, May 2, 1888.

Proceedings at Boston, May 2nd, 1888.

THE Society met on Wednesday morning at 10 o'clock in the hall of the American Academy. The President, Professor Whitney of New Haven, being absent, the Vice-President, Rev. Dr. Peabody of Cambridge, called the assembly to order and presided during the first part of the morning session; after which, the Vice-President, Rev. Dr. Ward of New York, took the chair, and presided for the rest of the meeting.

The Recording Secretary, Professor Lyon of Cambridge, read the minutes of the foregoing meeting and they were approved. The general order of proceedings for the day was announced, and thereupon the reports of the retiring officers were presented.

The accounts of the Treasurer, Mr. Van Name, were referred, with the book and vouchers, to Dr. W. H. Ward and Professor I. H. Hall, as a Committee of Audit, and upon examination were reported to be correct. The following is a summary of the accounts:

RECEIPTS.

| | | | |
|---|-------|----------|-------------------|
| Balance on hand, May 11th, 1887. | - - - | - - - | \$1,520.37 |
| Assessments (99) paid for year 1887-88, | - - - | \$495.00 | |
| Assessments (26) for other years, | - - - | 130.00 | |
| Sale of Journal, | - - - | 67.68 | |
| Interest on bank-deposit, | - - - | 55.68 | |
| Total receipts for the year, | - - - | - - - | 748.36 |
| | | | <u>\$2,268.73</u> |

DISBURSEMENTS.

| | | | |
|---|-------|----------|-------------------|
| Printing of Journal (on account), | - - - | \$291.00 | |
| Printing of Proceedings, | - - - | 461.14 | |
| Correspondence (postage, job-printing, etc.), | - - - | 65.92 | |
| Journal (2 vol's) returned, | - - - | 6.00 | |
| Total disbursements for the year, | - - - | - - - | 824.06 |
| Balance on hand, May 1, 1888, | - - - | - - - | 1,444.67 |
| | | | <u>\$2,268.73</u> |

The Bradley type-fund now amounts to \$1,127.62.

The Librarian, Mr. Van Name, reported as follows:

The additions to the Society's library for the past year, 1887-88, amount to fifty-two volumes, one hundred and sixty-seven parts of volumes, and fifteen pamphlets. As usual the exchanges

received from corresponding Societies make up the larger part of this increase. Two gifts however require special mention: *Das Aegyptische Todtenbuch der xviii. bis xx. Dynastie*, from the editor, Professor Edouard Naville; and from the Government of India twenty-one volumes, among which are *Albiruni's India*, the Arabic text edited by Dr. Edward Sachau, the first volume of the *Archæological Survey of Southern India*, and the second edition of Hunter's *Imperial Gazetteer of India*, in fourteen volumes. The titles of printed books now number four thousand three hundred and ninety-one. To the manuscripts there have been no accessions, and the number remains as last year, one hundred and sixty-two.

The Corresponding Secretary, Professor Lanman of Cambridge, announced for the Committee of Publication that the printing of the *Kāuṅikasūtra* was making slow but steady progress; and that a large amount of material was on hand for publication, contributed by Professor Hopkins of Bryn Mawr, Mr. Rockhill of the U. S. Legation at Peking, Professor Hall of the Metropolitan Museum in New York, and Professor Morris Jastrow of the University of Pennsylvania.

On behalf of the Board of Directors, the chairman, Dr. Peabody, announced that the next meeting would be held on Wednesday October 31, 1888, either at New Haven or at Philadelphia, the duties of the Committee of Arrangements to be performed by the President and the Treasurer in the one case, or by Talcott Williams Esq. and Professors Hopkins and Jastrow in the other. The Committee of Publication had been reappointed, so that it consists, as before, of Messrs. Salisbury, Toy, Van Name, W. H. Ward, and W. D. Whitney.

The Directors proposed and recommended to the Society for election the following persons:

As Corresponding Member—

Prof. Eberhard Nestle, of Ulm:

and as Corporate Members—

Mr. Edgar Pierce Allen, Johns Hopkins University, Baltimore;

Mr. Stewart Culin, Philadelphia;

Mr. Jacob Grape, Jr., St. John's College, Annapolis, Md.;

Rev. William Elliot Griffis, Boston;

Mr. John Dyneley Prince, Columbia College, New York City;

Mr. Hugo Albert Rennert, University of Pennsylvania, Philadelphia;

Rev. James E. Rogers, Maryville College, Maryville, Tennessee.

The gentlemen thus proposed were duly elected.

The Chairman named as a committee to nominate officers for the ensuing year the Rev. Messrs. Dickerman and Henry F. Jenks, and Prof. L. H. Elwell. The Committee subsequently reported, proposing the re-election of the old board, with the substitution of the name of Professor John Phelps Taylor of

Andover for that of Professor Avery, deceased. The proposal of the Committee was ratified by the meeting without dissent.*

The names of those who have died during the year are as follows :

• The Honorary Members—

Prof. Heinrich Leberecht Fleischer, of Leipzig :

Prof. August Friedrich Pott, of Halle ;

and the Corporate Members—

Prof. John Avery, of Brunswick, Me. ;

Mr. Henry A. Homes, of Albany, N. Y. ;

Dr. Alexander Meyrowitz, of New York City ;

Dr. Peter Parker, of Washington, D. C.

Both Fleischer and Pott went down to the grave full of years and honors. The former was born in 1801 ; and the latter in the next year. Fleischer had already consecrated himself in the twenties to the study of Arabic and Persian antiquities—in part, under the influence of his friend Silvestre de Sacy. Fleischer deemed his work in the cathedra to be perhaps of even more importance than his work as a writer. At any rate it is given to few to be so widely revered and loved as a teacher. Both he and Pott stood among the first four enrolled on the list of the German Oriental Society, and in its establishment they both took an active part. Pott's mind was of extraordinary versatility and his acquisitions were of vast range. His name is justly coupled with those of Bopp and Grimm as of one of the founders of the science of Comparative Philology. If his *Etymologische Forschungen* have been used at first hand by only a few, they have not on this account been without a powerful and lasting influence on the progress of this discipline.

The junior of Pott by only a couple of years, Dr. Parker, after studying at Yale College, went out to China at the early age of thirty. He established at Canton a hospital which his professional skill soon made crowded and famous ; and, in the capacity of a missionary-physician, and later in the diplomatic field, he faith-

*The names of the board as now constituted may be given for convenience : *President*, Professor W. D. Whitney, of New Haven ;—*Vice-Presidents*, Rev. A. P. Peabody, of Cambridge ; Professor E. E. Salisbury, of New Haven ; Rev. W. H. Ward, of New York ;—*Recording Secretary*, Professor D. G. Lyon, of Cambridge ;—*Corresponding Secretary*, Professor C. R. Lanman, of Cambridge ;—*Secretary of the Classical Section*, Professor W. W. Goodwin, of Cambridge ;—*Treasurer and Librarian*, Mr. Addison Van Name, of New Haven ;—*Directors*, Professor John Phelps Taylor, of Andover, Mass. ; Professor Joseph Henry Thayer, of Cambridge, Mass. ; Mr. Alexander I. Cothel and Professor Isaac H. Hall, of New York ; Professor Edward W. Hopkins, of Bryn Mawr, Penn. ; and President Daniel C. Gilman and Professor Maurice Bloomfield, of Baltimore.

fully served his day and generation, with honor to himself and our country. He died Jan. 10, 1888.

Professor Avery was born at Conway, Mass., Sept. 18, 1837, and died at North Bridgton, Maine, Sept. 1, 1887. He graduated at Amherst in 1861, and soon after went to New Haven to study Sanskrit with Professor Whitney. In 1867 he went to Germany to continue his favorite studies at Tübingen and Berlin. He was Professor of Greek from 1870 to 1877, at Iowa College; and from 1877 till his death, at Bowdoin. Of late years his studies had been devoted to the Aboriginal Tribes of India and their languages, preliminary sketches of which he has from time to time published in the Proceedings of our Oriental meetings, where he was one of the most faithful attendants. He was a man of singular modesty and simplicity of character, and a devout and earnest Christian.

Mr. Henry A. Homes was born at Boston in 1812. He spent the prime of his life (1838-56) in missionary and diplomatic service in the East, and his later years as Librarian of the Library of the State of New York at Albany.

Dr. Meyrowitz was known especially as a Talmudist, and died at New York in August, 1887, aged about 71 years. He was born of Jewish parents in Wilna, Poland, and educated for the rabbinical chair. The critical study of the Old Testament overturned his Jewish orthodoxy. Under the teaching of Professor Franz Delitzsch of Leipsic, he accepted Christianity. In 1843 he was a tutor in Hebrew at Bristol College, England; and in 1869 he came to New York, and was appointed Professor of Hebrew there. Later, in 1876, he became the incumbent of a similar chair at the University of the State of Missouri, where he remained until the failure of his sight, about 1880.

The Corresponding Secretary brought to the notice of the Society some matters of interest from the miscellaneous correspondence of the half year. Mr. Rockhill writes that he expects to leave Peking early in April and to arrive in the United States about the first of June. He sends a paper supplementary to the one presented at the last October meeting, and also a photograph of the gate at Söul where the King of Korea goes to receive the envoys from the Chinese Emperor. The gate bears the inscription *Ying en men*, 'the reception of (the imperial) bounty gate.' It is really a *pai lon* or arch. It rests on pillars of fine granite; and the superstructure is painted in the ordinary bright Chinese fashion and is of a purely Chinese style of architecture.

President Gilman sends a finished copy of the new edition of the *Διδαχὴ τῶν ἀποστόλων* with facsimiles of the entire manuscript thereof in the library of the Most Holy Sepulchre at Jerusalem. He also sends a letter from Rev. Dr. C. R. Hale, Dean of the Cathedral at Davenport, Iowa, in which is transcribed from a Greek newspaper published at Constantinople an account of a murderous assault committed upon the Patriarch of Jerusalem—to whom we owe the reproduction of the manuscript—as he journeyed to Jericho.

Rev. Lawrence H. Mills, in a letter dated Oxford, April 5, 1888, reports that he is making final arrangements for his complete edition of the Gāthās.

This will contain : 1. the original text in Zend characters ; 2. a transliteration thereof ; 3. a literal Latin, and 4. a metrical English translation ; of the Pahlavi paraphrase, 5. the deciphered text in Roman letters, and 6. an English version ; of the Sanskrit paraphrase, 7. the text, and 8. the translation ; and 9. the Parsi-Persian paraphrase. The first volume, of 393 pages, was distributed to leading Avesta scholars in 1883 (see *Proceedings* for Oct. 1883, vol. xi.). The completion of the second volume was then deferred, pending the working out of the translation of the Gāthās, later Yasna, Visparad, etc., contained in vol. xxxi. of the *Sacred Books of the East*. This last was published in May, 1887. Mr. Mills's second volume will contain from 150 to 250 pages, according to the amount of assistance received. A subvention of £50 has been obtained from the Secretary of State for India. The price of the complete work has been fixed at 50 shillings. The author retains, however, the right to dispose of it for a smaller sum to private subscribers ; and hopes to receive from his fellow-countrymen in America liberal aid for his undertaking. Mr. Mills dwells upon the importance and difficulty of the Pahlavi version, here for the first time deciphered, edited with comparison of manuscripts, and translated into a European language ; contends that the Pahlavi translation has been the foundation for all subsequent ones, and that its imperfections have been grossly exaggerated ; and sets forth the reaction now in progress towards a more just estimation of the Asiatic commentaries in general.

The Catalogue of the Syrian Jesuit Missionary Press (address, Imprimerie Catholique S. J., Beirūt, Syria) was laid before the Society. It contains titles and descriptions of a considerable number of Arabic, Arabic-French, and Syriac works for sale, with statement of prices and postage. The books are in great part religious and educational ; but there are also valuable works on literature and science. Of interest to intending American purchasers of Oriental type are the ten pages of specimens of the Hebrew, Samaritan, Syriac, Arabic, Armenian, and Greek type-founts of this establishment.

Of great importance and interest to Sanskritists is the catalogue of the Bombay bookseller, Jyesthārām Mukundjī, for 1887-88. It is an octavo of 62 pages, handsomely printed in Nāgarī by the Education Society's Press. It contains over 1200 titles of Sanskrit books, with statement of the author, place of printing, and price of each. The works enumerated cover almost every department of Sanskrit literature : Veda (Sāṁhitā, Brāhmaṇa, Sūtra, and especially Upaniṣad), law, the six philosophical systems, grammar, lexicography, poetry, *nīti*, drama, rhetoric, medicine, astronomy, epos, etc. The places most often named in the column "*mudramāsthānam*" are Bombay (*Mumbāi*), Calcutta, Benares (*Kāṣī*), and Poona. Not seldom we find Lucknow and

Lahore, now and then Ahmadābād, Muttra (Mathurā), and a few others ; and sometimes also "Yūropah."

For Occidental students, European editions are doubtless to be preferred in general to Hindu editions. But the former are wont to be printed in so few copies that they soon become practically inaccessible and high-priced. The latter are indeed usually destitute of all typographical helps and conveniences, and are often very incorrectly printed. But for Western scholars who have got beyond the rudiments, the Hindu editions, and especially those coming from Bombay, are strongly to be recommended. Thus the "Bombay Sanskrit Series," published by the Department of Public Instruction, now contains thirty odd volumes of excellent character and moderate price. A beautiful edition of the Bhagavad Gītā, bound in silk, may be had for about 20 cents. An edition of the Mahābhārata (of which advance sheets were shown to the Society) is now in press. It is a reprint of the Bombay edition of 1877, with Nilakantha's commentary. Its convenience is immensely enhanced by the addition of the current chapter-numbers in the right-hand margin. The type is large and admirably clear, and the work will cost, when complete, 60 rupies.

For the guidance of persons desiring to order, the following may be said : Small orders will be sent best by mail. Large orders should be sent as freight, and so as to need only one transshipment (at Liverpool or London) between Bombay and America. Remittances, unless very large indeed, are best made by post-office money-orders. The American purchaser applies for a British International Money-order, say for £7 sterling, to be paid directly to the Bombay bookseller. This amount costs \$34.49, and for it the purchaser gets only a receipt. The actual order is transmitted by the government to the postmaster at Bombay, who pays the bookseller the equivalent of £7=1680 pence in rupies at the current rate of conversion. This has varied for the last year from 16 to 17.5 pence per rupie. At 16.8, the order would yield just 100 rupies. The rupie would thus cost 34 cents ; and the anna ($\frac{1}{16}$ of a rupie), about 2 cents. The rate of conversion for any given date may be learned by addressing the Superintendent of the Money-order System at Washington ; and the amount in rupies which the bookseller ought to credit to the account of the American purchaser may thus be calculated. The time of mail transit from Boston to Bombay is about 27 days. The purchaser should demand that the works be collated before they are sent, as it is rather common to find some leaves in duplicate and others missing in Hindu books. Mr. Mukundji's address is No. 353 Kalbadevi Road, Bombay ; and from him copies of the catalogue (*sūcīpattram*) may be obtained.

Dr. Binion, of the Johns Hopkins University, laid before the Society a number of plates and proof-sheets of his book entitled *Ancient Egypt or Mizraim*. The aim of the work is to give a popular and readable account of the language, religion, manners

and customs, arts and sciences, and temples and monuments of the Egyptians. The work is a very large folio (pages 22×28 inches), and will contain 144 full-page engravings. The engravings are reproduced from the great *Description de l'Égypte*, the result of the observations made during the Napoleonic expedition of 1798, from Rosellini's *Monumenti*, Lepsius's *Denkmäler*, etc.; and some of them are very beautifully colored.*

Mr. Benjamin S. Lyman gave an interesting account of the formation of a local Oriental Club at Philadelphia. It was organized April 30, 1888, at the house of Mr. Talcott Williams, by a meeting called by Messrs. H. C. Trumbull, B. S. Lyman, J. P. Peters, M. Jastrow, Jr., H. V. Hilprecht, E. W. Hopkins, Talcott Williams, and Stewart Culin. It is proposed to have meetings at stated intervals through the winter, at the houses of the members. The Club hopes to further the objects of the American Oriental Society, by arousing interest in Oriental studies and by stimulating the activity of those interested.

Mr. James R. Jewett, of Harvard College, presented to the Society the plan for the establishment of a School of Biblical Archaeology and Philology at Beirüt, in connection with the Syrian Protestant College. A special endowment of \$100,000 is required to provide for the annual salaries of a Director and of native teachers and for incidental expenses. To provide for temporary support while the permanent fund is being raised, it is suggested that American Theological Seminaries and other institutions be asked to contribute \$100 a year for five years, with the right to have tuition remitted to students sent out under their auspices. A circular setting forth the details of the plan and the advantages of Beirüt as the seat of the school has been published, and may be obtained by addressing D. Stuart Dodge, Esq., No. 11 Cliff street, New York City.

The following communications were presented:

1. Inquiry into the conditions of civilization in the Hindu Middle Age from the point of view of the ruling power or warrior-caste, by Prof. E. W. Hopkins, of Bryn Maur College, Penn.

The Corresponding Secretary presented to the Society about 300 pages (or one-half) of the manuscript of an elaborate essay upon the above-mentioned subject. As an earnest of the contents of the paper, it seems advisable to publish now the prefatory note thereto.

This essay, in its original form, was read before the Oriental Society in May, 1886. Further contributions to the subject, made as reported in the subsequent Proceedings of the Society, have now been incorporated into the work, and the point of view of the whole somewhat extended.

* The work will be issued in 12 portfolios, by the American Polytechnic Co., of Buffalo. The price is \$150.

My first intention was simply to record the data furnished by the Mahābhārata in regard to the Warrior-caste. In order, however, to the establishment of a firmer basis of investigation, I found it necessary to re-examine the Epic with a view to the general constituents of the state, and in so doing have been led to incorporate also such illustrative matter as I found in literature more or less parallel to the Mahābhārata.

This paper, therefore, now offers an inquiry into the conditions of civilization in the Middle Ages of India from the point of view of the ruling-power or Warrior-caste. How these conditions arose, and whither they tended; what special relations existed between the king and his dependents; what factors, large or small, helped to constitute the life of this period; and finally, from the narrower limits of the warrior's special activity, what method and art of war is depicted by the Epic poetry. The subjects introduced by these questions are those to which I have here tried to give the beginning of an answer. The field of literature that I have attempted to work is perhaps too extended—for the Epic area is broad; yet in view of the whole development of Hindu letters it is small, and the age represented is plainly demarcated both from the preceding and from the following eras. I hope, hereafter, to bring these eras into their historical connection with that here presented, and thus to be able to complete the answer to the queries proposed above by following out the lines of Hindu civilization from its earliest origin to its latest phase. But this, if done thoroughly, is a work of decades. For the present, I have sought to sift the Epic alone, and relied upon the work of others for illustration necessarily preliminary to this study, while I have left wholly untouched the great dramatic period that overlaps the extension of the Epic—rich as will be the reward to one carefully investigating this latter aspect of Indian life.

In accordance with my first intention I have, however, while illustrating the Mahābhārata by the Rāmāyaṇa and the law-books, endeavored carefully to keep distinct the political and social explications found in the second epic poem or in the legal works and the parallel implications or didactic statements of the Mahābhārata; and, again, to discriminate in the latter between what is done and what is taught—since large parts of the poem are so didactically composed that for historical purposes they belong rather to legal than to Epic literature. For this purpose I have allowed myself the liberty of calling *pseudo-epic* the part of the poem embraced by the twelfth and thirteenth books, as a conveniently comprehensive term for a part confessedly manufactured for purposes of instruction, and presumably among those portions latest added. For the sake of convenience also I call only the Mahābhārata the *Epic*, although, conversely, the designation of *Kāvya* or 'art-

* The development of the topics embraced by Weber's *Collectanea* (*Indische Studien*, vol. x.) deserves a fuller treatment than the brief allusions allowed by my general subject. For quotations from the pre-Epic period I am, as will be seen, mainly indebted to Zimmer's *Altindisches Leben*.

poem' is, as was long ago said by Müller, applied even to the Mahābhārata, and not to the Rāmāyaṇa* alone.

Many of the points touched upon in this essay require a more special treatment than I have here been able to give them; but in respect of these—or let me say of all—I beg that my present paper may be considered as written *δι' ἐκτίπλων*, and rather as a provisional study for future elaboration and completion than as a pretense of thoroughness in an investigation where little help was to be had from outside sources, and not much had been accomplished by previous inquiries.†

The various topics involved arranged themselves to my mind in a certain order, which, for the sake of summarizing the whole paper, I here add. To these topics I have prefixed a few words on the source of our legendary Epic.

- I. Origin of the Epic.
- II. Historical value of the Epic.
- III. The social position of the ruling caste.
 - A. The caste in general. Divisions of the people. Governing officials. Taxes. Common warriors.
 - B. Royalty. The king. Royal duties. Royal occupations. Modes of government. Succession. Choice of king. Primogeniture. Royal consecration. Assembly and council. Purohita and priestly power. Ambassador. The king's friends and general social relations. Royal marriage. Royal burial. The imperial city. Note on caste-exchange.
- IV. Military position of the ruling caste. The military sentiment. The army in general. Military tactics. Usages in the field. Laws of battle. Army forces in detail. (a) The chariot, knight, and

* Müller, *Ancient Sanskrit Literature*, p. 41, quoting Mbh. i.1.72, *tvayā ca kāvyaṃ ity uktān tasmāt kāvyam bhaviṣyati*. In and for itself the Rāmāyaṇa lacks the sociological value of the Epic, neither possessing primitive elements nor claiming to be more than the completed work of one author. The nucleus of the Epic (the Mahābhārata), to which after much unwinding we may still attain, presents a natural strength, not to say brutality, that separates it from the cultured prettiness of the Rāmāyaṇa. Whatever later additions have been superimposed upon the Epic, carrying it doubtless beyond the age of the Rāmāyaṇa, its gist is earlier. Those maintaining the relative posteriority of the Epic must embrace the whole work in their judgment, where the point may easily be yielded. I entirely agree with L. von Schroeder in his comparative estimate of the two works (*Lit. u. Cult.*, p. 455), as against any comprehensive assertion of priority in either case (compare Lassen, *Ind. Alt.*, i. 584, 1006).

† Muir has some scattered remarks on Epic *Realien*, and some more thorough studies on special points in his Sanskrit Texts. To this and to Lassen's *Indische Alterthumskunde* general (as well as special) acknowledgment is due, but the points touched upon in these works are limited. Of Wilson's *Art of War* and Rājendralāla-Mitra's *Indo-Aryans* I shall speak more particularly in the notes on the subjects embraced by those works. I believe no especially Epic study of Hindu civilization has yet been attempted.

steeds; (b) Cavalry; (c) Elephants; (d) Weapons; (e) Arms and defense; (f) Paraphernalia of battle. Music in the Epic.

V. Appendix on the status of women.

2. On a Rhodian jar in the Boston Museum of Fine Arts; by Prof. Isaac H. Hall, of the Metropolitan Museum of Art, New York City.

Among the objects found in Cyprus by Gen. di Cesnola, and sold by him to the Boston Museum of Fine Arts in 1872, is a Rhodian jar similar to those which I described in the Proceedings for Oct. 1886. It has rectangular stamps on the handles, the one being upside down when you are reading the other, but the one at the right hand being always right side up. The stamps are very hard to read, but are certain in their reading. On one handle is the eponym and name of Doric month, and on the other is the name of the manufacturer, owner, or exporter.

ΕΗΙ ΔΥΚΟΥΡ
ΓΟΥ
ΗΑΝΑΜΟΥ

ΕΡΜΙΑ
ΝΟΥ

3. On the Syriac Ritual of the Departed; by Prof. I. H. Hall.

I had nearly finished an article describing the whole Ritual of the Departed in the manuscript from which the Ritual of the Washing of the Dead was translated for the Proceedings of last October, when I came into possession of a printed book containing what must be substantially the same Ritual, published at the Catholic Mission Press of the Lazarists at Oroomiah in 1881. The book is a small quarto of 172 pages, printed in that most wretched of all Syriac type, the Nestorian used by the Catholic missionaries and native Chaldean (i. e. Roman or Papal Nestorian) ecclesiastics, very annoying to read. The printing is wretched likewise, much blurred and bloated. While occidental studies are not helped much by such a publication (since there are few who can obtain the book, and far fewer who can or will read such type and printing), the fact requires rather a comparison of the manuscript with the printed book than an independent description. This I have had no time to make, since I obtained the book, as well as knowledge of its existence, only about a week or less before the meeting of the Society. I have had time to compare only the Ritual of the Washing, wherein I find more than twenty variant readings; of which the more important are the following:

My conjecture that "belly" was to be read for "bed" is sustained; but instead of "and all his members" (which immediately follows) the printed text reads "and all his front [parts];" and just before the next following "his feet" is inserted "his loins and all his hind [parts]." At the place where it is stated that it is not lawful to bring in a cross, a printed foot-note reads, "This ancient prohibition is abolished, and now it is permitted to every man to bring in a cross with him." (Of course this is a late Catholic note, and probably based on their own practice,

without any Nestorian decree.) The directions for leaving the house, and all that follows the washing itself, is omitted in the print. Evidently this printed ritual is intended to replace the manuscript ones; but it must be suited to the ways of the Chaldeans; and probably it is changed in sundry places besides the ones just noted. I shall take some other opportunity to consider the matter in the new light.

4. On a Nestorian liturgical manuscript from the last Nestorian Church and Convent in Jerusalem; by Prof. I. H. Hall.

This manuscript is in the possession of Dr. William C. Prime, of New York, who purchased it a number of years ago. It bears an old label on the side, which gives a hint of its former ownership: "Syriac Manuscript—from Jerusalem;" with the numbers 61 (crossed out) and 778. The binding is of thick heavy boards, covered with leather, and lined with Persian cloth; the leather figured by a hand stamp; the cloth of cotton, both dyed and a print. The exterior dimensions of the book are $12 \times 9 \times 1\frac{1}{2}$ inches. The paper is thick and glazed, arranged in *quiniones*, except that the ninth quire is a *quaternio*, and the tenth (and last) a *ternio*. The first three (blank) leaves of the first quire are torn out. The writing begins on the second page of the original fourth leaf, and ends on the first page of the last leaf of the book. The manuscript thus contains exactly 180 written pages. The writing is in beautiful Nestorian script, amply pointed, abundantly rubricated, with many ornamental titles, many marginal titles and some marginal rubrics, and a few absolute ornaments. The Estrangela character is rarely used except for ornamental titles and quire numbers. The writing occupies a space of about $7\frac{1}{2} \times 5$ inches on the page, in fourteen lines. This is surrounded by a ruled and colored border, still outside of which are the marginal titles or rubrics, wherever such occur, as they do frequently. The ornaments proper are of the tile patterns and woven-work patterns which have been used for centuries in such manuscripts and in Persian tapestries. Altogether, it is a very beautiful manuscript, of the style and class generally made by ecclesiastics in the region whence it came. Singularly it has the Nestorian symbol of the Trinity and Unity of God on a portion only of the pages. That it has been much used as a service-book, its general appearance, and wax-droppings on many of the leaves still testify.

The contents of the manuscript are the three Liturgies (consecrations, *anaphoras*) in use among the Nestorians at the communion-service: (1) The "Liturgy of the Apostles" of Addai and Mârî; (2) The Liturgy of Theodore of Mopsuestia; (3) The Liturgy of Nestorius. To the last is appended the "*Canon DeChûlath*," or Prefaces (used after the consecration, and before partaking of the elements), for the festivals of Christmas, Epiphany, Easter, Ascension, Pentecost, Revelation, and The Cross. Immediately after the Liturgy of Addai and Mârî is one page of finer writing, giving directions with regard to those who were not able to receive the communion on Good Friday or Easter Sunday, or the preceding Saturday.

As there is much matter common to the three Liturgies, such matter is generally written but once, in the first one; and referred to, at the proper place, in the other two. Rubrics (proper) are given with all necessary fulness. Psalms, prayers from other rituals, and other familiar matter, are usually noted by their opening words.

The Liturgy of Nestorius is translated in the second volume of George Percy Badger's "The Nestorians and their Rituals;" where also occurs a general description and account of the use of these three liturgies. The Liturgy of Addai and Mârî is to be found (translated into Latin) in Hammond's Liturgies of the Eastern and Western Church (taken from Renaudot). Manuscripts of these Liturgies are rare in Europe and America. I know of but two in England, viz., one in the British Museum, and one that Mr. Badger brought for the Christian Knowledge Society. In Paris there are more, but one is a copy made by Renaudot's own hand, another written in Paris by a native, and the others are either partial or very few. There is also one in Berlin. How many there are in the Vatican and elsewhere in Italy, I do not know. The history of this manuscript is somewhat peculiar, and I therefore present a translation of its titles and colophons, which will tell their own story.

Title to the Liturgy of Addai and Mârî :

"[Relying] on the strength of Our Lord Jesus Christ we begin to write the Order of Consecration of the Apostles; which was composed by Mar Addai and Mar Mârî, blessed Apostles. Our Lord, aid me in thy mercy. Amen."

Colophon to the Liturgy of Addai and Mârî (quire 5, fol. 5. *b.*):

"Ends the Order of the Mysteries [i. e. the communion] with the Consecration of the blessed apostles Mar Addai and Mar Mârî, who made disciples of the East. Their prayers [be] for the common weal [of the believers]. Amen."

Title to the Liturgy of Theodore of Mopsuestia (quire 5, fol. 7. *a.*):

"[Relying] on the strength of Our Lord Jesus Christ we begin to write the Consecration of Mar Theodoros, Expositor of the Divine Books, Bishop of Mopsuestia; which Mar Abba, Catholicos, brought out and translated from the Greek into the Syriac, when he went up to the Romans [i. e. the Greeks of Constantinople]. And he brought it out [i. e. translated it] by the help of Mar Thomas of Edessa, Doctor. And we consecrate with it [i. e. use it at communion] from the first Sunday of Annunciation to the Sunday of Hosanna [i. e. Palm Sunday]."

Colophon of the Liturgy of Theodore of Mopsuestia (quire 7, fol. 2. *a.*):

"Ends, in the help of our Lord, the Consecration of the Blessed Mar Theodoros, the Expositor of the Divine Books. His prayer [be] for the common weal of the believers. Amen." †And written below in finer characters: "I pray and beseech, O priest, [that] in the time of presenting the offering [i. e. celebrating the communion], [you do it] in behalf of the poor writer, that he may be made worthy, in the mercies [of God], to obtain pardon."

Title of the Liturgy of Nestorius (quire 7, fol. 2. *b.*):

"[Relying] on the strength of Our Lord Jesus Christ we begin to write the Consecration of Mar Nestorius, Patriarch of Byzantium, which is the city Constantinople; the martyr without blood, and the one persecuted for the sake of the truth of his orthodox confession.

Mar Abba, Catholicos, the Great, when he went into the place of the Romans [i. e. the Greeks of Constantinople], brought out (or translated) his Commemoration for the communion-elements, the Consecration of Mar Nestorius; and they all adopted it, from the Greek into the Syriac, as Mar Yoannis, Catholicos, makes known in his *mîmrâ* [homily, usually metrical], which he composed for the [festival of the (?)] Fathers. His prayer [be] for us.

“And it is used in the consecration [communion] five times in the year: at Epiphany; on the Friday of Mar John the Baptist; at the Commemoration of the Greek Doctors; on the Wednesday of the Supplication of the Ninevites; at Passover.”

Colophon of the Liturgy of Nestorius (quire 9, fol. 6, b.):

“Ends the Order of Consecration of Mar Nestorius, Patriarch of Constantinople. His prayer [be] for the common weal of the believers. Amen.”

Title of the Occasional Prefaces (quire 9, fol. 7, a.): “Again through (*lit.*, by the hand of) the Living God we write the *Qanôn dē chîlath*.”

Colophon of the same (quire 10, fol. 2, b.): “Ends the *Qanôn dē chîlath*, and to Jah [be] glory.”

Colophon of the whole book, occupying the last six pages; the paragraphs written in red and black alternately. (Begins quire 10, fol. 2, b.):

“Ends, in the help of Our Lord and Our God, this Order of the Three Consecrations, in full, without diminution: The Consecration of the Apostles, and the Consecration of the Expositor, and the Consecration of Mar Nestorius. Their prayers for the common weal of the true believers intercede with Our Lord. Amen.

“This Book of the Order of the Priests, now, was concluded and finished, on the day of Saturday, at vespers of the sixth Sunday of the seven of the Apostles, whose Anthem is ‘Worthy is Our Lord Jesus’ [or perhaps ‘Our Lord Jesus, the promise,’ for one abbreviation is obscure], in the blessed month Tammuz, its first day, the beginning of the month, in the year two thousand and twenty and one of the blessed Greeks [i. e. 1 July, A. D. 1710]. To him upon whose strength relying we began, and by the aid of whose favor we have finished, be glory never ceasing, and honor without bounds; to Him and to his Father and to the Holy Spirit, now, and in every time, and for ages of ages.

“And it was written in the village, blessing and blessed, and abounding in the orthodox faith, and strong in the Pauline teaching, the house of refuge of the destitute and the poor, and the dispenser of food [*lit.*, baker] of the ill-faring and the strangers and the hungry, Elqôsh, the village of the prophet Nahum, which he founded and set in order and built, beside the convent, the holy of holies, of Mar Rabban Hormizd the Persian. Our Lord Christ dwell in it and increase it by his powerful right hand, and cause to cease and bring to nought the wrong of wrong-doers and the wickedness of the wicked, through the prayer of the Ark of Light, my Lady Mary. Amen.

“And it was written in the days of the Father and Lord of Fathers, and head of the rectors and pastors, and anointer of priests, and dispenser of talents, and binder of girdles, and good and wise and merciful, and long-suffering and meek and indulgent, the builder of convents and churches, and planter of schools and a house of teachings, lover of Christ, and full of goodness of spirit, Mar Elias, Catholicos, Patriarch of the East. May his throne be established to the end of days, and may his arm be strong with strength and victories, and may he live long years, many hundreds [of them], by the prayer of the apostles and fathers. Amen.

“There wrote, nay rather defiled and corrupted and blackened this book with a purpose that is like that of writers, a man viler than all

[who are] of flesh, and despised of all [who are] of dust; who also is not worthy to be mentioned by name; but for the sake of the prayer for pardon that he may gather [i. e. as a vintage] from the mouth of readers, he makes known the name of his weakness: that he is by name Priest Gîwargîs, son of Priest Israel the Elqôshite: beseeching [you], Pray for him before Our Lord. Amen.

“And this book was written at the command of his Lordship, and by the permission of his Fatherhood, and by the authority of his Holiness, Abûn [i. e. Our Father] the blessed and happy and worthy of heaven, Mar Elias, Catholicos, Patriarch of the East. And he caused it to be written in the name of his faithful and departed Christian wife Ezdîfê, the daughter of the late priest Marûgê, who was of the village of El-qôsh, as something of this memorable woman's own. And he decreed it and gave it for the holy church and exalted dwelling that diffuseth holiness, of my Lady Mary, which is in our convent in the holy city Jerusalem; that they may make offerings [i. e. according, probably, to the provisions and ritual of the Nestorian burial-service book] in her behalf, and may make remembrance of her before the holy altar of Our Lord, that he may pardon her debts and her sins, and may mingle her with the just and the righteous in the bridechamber of his kingdom. Amen. [The last part of this sentence is a quotation from the Nestorian burial-service for women.]

“We entreat all owners [or, lordships], who may meet these lines, that if they find any errors [therein], they will not cast reproaches upon me, but will correct [them] in love. And let them know this: that every creature is deficient, and there is no perfection except to the One God, who—may he in his mercies forgive the unfaithfulnesses [i. e., adulteries, i. e. idolatry] of us all. Amen.

“Remembered be all the brethren strangers, who have made themselves strangers to the world, and have journeyed unswervingly in the path of chastity upon the holy altar of Our Lord, before the adorable Trinity. And may we, poor and weak, by their prayers be aided and rescued from the snares of this world, and from the repentance of the world to come. Amen.

“Let not my Lord be afflicted with the reward of the five foolish maids, but [have his reward with those who] shall be delivered and rescued from the fire of Gehenna. Amen.

“Blessed [be] thou, O God, forever. And may thy name be adored for generation of generation of generation of generation of generation of generation of generation of generations. Amen.”

It may be interesting to add the matter above referred to as written on the page immediately following the Liturgy of Addai and Mârî. It reads as follows:

“*Question.*—If it happen that one of the believers does not partake of the communion [i. e., consecration] on the day of Passover, has he [a right] to break his fast? And, likewise, if it happen that he be on a journey, and does not receive the communion at Passover, nor on the Saturday, nor on the Sunday of the Resurrection, has he [a right] to break his fast?

“*Answer.*—If he receives the communion at Passover, and does not receive it on the Saturday or the Sunday of the Resurrection, he shall not break his fast until the fifteenth day after the Resurrection. But if he does not receive it either at Passover or the Saturday or the Sunday of the Resurrection, nor on the next day after it, it is necessary that he remain in his separation a month of days after the Resurrection; but that he fast [during that time] is not required.”

Respecting the text of the manuscript, I have read it through, and found it very correctly written; but I am not well enough acquainted with the subject matter to know how it compares with other copies.

A word may be added respecting the history of the volume. It seems beyond doubt that the book was presented to a church and convent of the Nestorians in Jerusalem, where it was formerly in use. That convent and church was probably the last of its sect in Jerusalem; upon whose breaking up this manuscript became part of the scattered property. The only Syrian church or convent in Jerusalem now for many years is the Jacobite one; all the others having been, at various times, the objects of Turkish seizure or sequestration. At present, according to the best authorities, there are no Nestorian residents nor Chaldaean residents (i. e. Nestorians united to Rome) in Jerusalem. An interesting passage in Assemâni's *Bibliotheca Orientalis* (Tom. III., Pars II., p. cccxxxix.) shows that there was still one, but only one, church of the sect in Jerusalem ("In Syria & Palaestina olim frequentissimi; nunc unam tantum ecclesiam Hierosolymis habent"); though formerly they were so strong there that their Eastern brethren sent to them to collect funds for charitable purposes. There was a Nestorian archbishop in Jerusalem as early as A. D. 1247; and in 1616, Elias, patriarch of the Chaldaeans (i. e. of the Roman Catholic Nestorians) was appointed "ad Pontificem" of the Nestorians in Jerusalem. Assemâni's testimony certainly relates to the time a little before and after the year 1720; so that the church and monastery to which he refers must be the same with that to which this manuscript was presented. It is thus a relic of the last Nestorian church and convent in Jerusalem; but its history since the scattering and demolition of that church until it came into the hands of Dr. Prime, rests in obscurity.

5. On a Syriae geographical chart; by Prof. Richard Gottheil, Columbia College, New York City.

The accompanying geographical chart is taken from the Berlin MS. (Sachau 81) of the *M'nārath Kudhšē* of Bar 'Ebhṛāyā.¹ It is found in the third chapter, which is a sort of Hexaëmeron, containing in the order of creation as set forth in the Book of Genesis, a compendium of all the physical sciences.² In the section treating of the earth Bar 'Ebhṛāyā speaks about its stability, its physical divisions, about longitude and latitude, and about the seven *klipara* (اقاليم, *اقلیم* sing. *اقليم*).³ The chart of the habitable world, here reproduced, accompanies the text. The geographical literature of the Syrians is extremely small and unimportant.⁴ This chart, however, is, as far as my knowledge reaches, unique.

¹ See *Hebraica*, July, 1887, p. 249.

² Cf., for a work of such a character, Land, *Anecdota Syriaca*, vol. i. p. 2ff.; Martin, *L'Hexaméron de Jacques d'Edesse* in *Journal Asiatique*, 1888, p. 155ff.

³ He treats of these subjects also in the second part of his *Sūlakā Haumānāyā*, of which I hope to speak in some other place. See Payne Smith, *Catalogue*, col. 581.

⁴ See J. P. N. Land, *Aarvrijkskundige Fragmenten uit de Syrische Literatuur der Zeele en Zevende Eeuw*. Overgedrukt uit de Verslagen en Mededoelingen der Konink-

Along the southern coast are mentioned **الروم** *the great Rome* (with no attempt at a projection of Italy!), **قسطنطينية** *Constantinople*, and **كالميدون** *Kalchedon*. To the north are **فرنجة** *Frank* and the **سكوثيا** *Scythians*. The **البحر** *Pontus Sea* is also roughly drawn. The short distance between this sea and the Baltic¹² is occupied by the **البلغاريين** *Bulgarians*. This Baltic, or **البحر** *Sea of Warnag*, as it is called, is entirely out of position, and, as among the Arabians, is considered to be a part of the great northern sea.¹³

In Asia Minor, Bar 'Ebhryā registers **تربزونديا** *Trebizond*, **فيلادلفيا** *Philadelphia*, **الانكيا** probably *Anatolia*,¹⁴ **تارسوس** *Tarsus*. The later hand has added **ملطية** *Melitene*. After a couple of names which cannot be made out, there follow **قپادوقيا** *Cappadocia*, and an illegible name ending in **موس**.

In Syria and Palestine I read the following names, **صيدون** *Tyre*, **قيساريه** *Caesarea*, **الاسكندرية** *Ascalon*, **دمشق** *Damascus*, **القدس** *Jerusalem*. The Mediterranean is fairly drawn, and contains **قبرص** *Cyprus*, **رودس** *Rhodes*, **صفت** *Chios* (?) and **سكيا** *Sicily*. The later hand has added **قريظية** *Crete*, and what seems to be **السقالية** which would again be *Sicily*!

Between Palestine and Africa lies **مصر** *Mesrēn* (Egypt); and on the **البحر** *Red Sea* the place is noted where *Israel passed over and Pharaoh sank* **مصر**. Our chart knows nothing of the lower part of Africa beyond where the **النوبيين** *Nubians* live. The **النيل** *River Nile* has a most extended course, running first to the south, and then to the west almost through the whole breadth of Africa. Where the Nile turns in its course we find **دونغولا** *Dongola*, **جرمي** i. e. **جرمي** *Garmā*(?),¹⁵ .. **الزنج** i. e. **زنج** *Zeng*(?),

¹² This is an old mistake of Ptolemæus. Most of the Arabic geographers knew better. See Peschel, *loc. cit.*, pp. 57, 109.

¹⁴ **ابولفدا** *Abulfeda*, *Takwīm Abuldiān*, p. 35. Kazwīnī, (p. 414) has a very poor opinion of this sea, where there is eternal snow, and where no flowers can bloom.

¹⁵ **انطالية**, in the fifth **اقلير** according to Mokadessi, p. 41, line 7; but according to Abulfeda (p. 380), in the fourth.

¹⁶ Abulfeda, p. 159.

the common name among the Arabs for the dark races of eastern Africa,¹⁶ and perhaps also **حَبَشَة** *Habesh*, i. e. Ethiopia.

In the interior of Africa there live **بَنِي إِفْرِيْقِيَة** *black barbarians, also Arabs*. At the very end of the Nile is the **جَبَل مَوْن** *Mount ?* On the northern coast of Africa are noted **أَلْأَسْوَء** *Alexandria*, and **أَسْوَء** *Aswān*, and **أَسْوَء** *Sa'id*. In the north-western corner of Africa we read **أَبْدُ الْعَرَبِ** *the cities of the western Arabs, i. e. the place of 'Abd el Mu'mīn*. The later hand has written in Arabic **الْقَيْرَوَان** (*Kairawān ?*), **أَفْرِيْقِيَة** *Africa*, **بَرْبَر** *Barbary*. Between Africa and Europe we have the **أَبْدُ الْعَرَبِ** *pillars (?) of Hercules*, and close by the **أَبْدُ الْعَرَبِ** *Adriatic Sea*, which runs along the coast of Africa.

In Southern Arabia Bar 'Ebh'rāyā places the **أَبْدُ الْعَرَبِ** *remote South*; in the interior **أَبْدُ الْعَرَبِ** *Subhā*, and **أَبْدُ الْعَرَبِ** *Yathrib*; to the north **أَبْدُ الْعَرَبِ** *Pāran* and **أَبْدُ الْعَرَبِ** *Mount Sinai*. The second hand has also added **أَبْدُ الْعَرَبِ** *Negrān* and **أَبْدُ الْعَرَبِ** *Hudramaut*.

To the right of Arabia lies the **أَبْدُ الْعَرَبِ** *Sea of the Elamites, i. e. the Persians*.¹⁷ Above the Persian Gulf we have **أَبْدُ الْعَرَبِ** *Kirmān* (Carmania), **أَبْدُ الْعَرَبِ** *Širāz*, **أَبْدُ الْعَرَبِ** *Basra* (by the later hand **أَبْدُ الْعَرَبِ** *Irāk*), **أَبْدُ الْعَرَبِ** *Baghdād*, **أَبْدُ الْعَرَبِ** (i. e. **أَبْدُ الْعَرَبِ** *Kūfa*). A little further to the north lie **أَبْدُ الْعَرَبِ** *Harrān*, **أَبْدُ الْعَرَبِ** *Haleb* (Aleppo), **أَبْدُ الْعَرَبِ** *Maiperkat* (the **أَبْدُ الْعَرَبِ** of the Arabs), and **أَبْدُ الْعَرَبِ** *Lesser Armenia*. To the west again we have **أَبْدُ الْعَرَبِ** *Hallāt* (**أَبْدُ الْعَرَبِ** *Athōr* (Assyria), **أَبْدُ الْعَرَبِ** *N'šibhīn* (Nisibis), and the **أَبْدُ الْعَرَبِ** *Iron Gate*. The second hand notes **أَبْدُ الْعَرَبِ** *Taberistān* (very much out of position) and another name which I am unable to read.

The Caspian Sea is moved much too far eastward. It is called by its old name **أَبْدُ الْعَرَبِ** *Sea of Hyrcania*.¹⁸ To the south of it lies **أَبْدُ الْعَرَبِ** *Greater Armenia*. In Persia and to the north of India Bar 'Ebh'rāyā has the following: South of the Hyrcanian Sea the **أَبْدُ الْعَرَبِ** *Place of the Iberians*; to the south of Armenia Major **أَبْدُ الْعَرَبِ** *Dyārbigān*, **أَبْدُ الْعَرَبِ** *Hamadhān*, **أَبْدُ الْعَرَبِ** *Tūs*, **أَبْدُ الْعَرَبِ** *Kazwīn*,

¹⁶ Peschel, p. 122.

¹⁷ Land, loc. cit., p. 14.

¹⁸ Land, *Anecdota*, iii., p. 334, line 2.

إسپهان *Ispahān* and بابل *Babylon*, which is situated in our chart on the wrong side of the Persian Gulf. The Arabic additions are واسط *Wāsīt*, اقبار *Anbār*, and two other names which I cannot make out.

India is divided into هندوستان *Outer India* towards the west and هندوستان *places of the Inner Indians* to the east. To the north of India lies the هندوستان *place of Kuthān* (?) which is doubtless the same as the هندوستان mentioned by our author in his *Chronicon*, p. 241. The second hand has added کابل *Kābul* and سکستان *Segestān*. We have to note بھارہ *Bōhārā*, سمکند *Samarkānd* and and ہوارزم *Hōwarezm*.

To the east of India lies the ہندوستان *Indian Ocean*, in which are the ہندوستان *Island of Serendīb*,¹⁹ and the ہندوستان *Island of...*? In the south-east corner are some Arabic names of which I can read only one, کشمیر *Kāshmīr*.

Along the eastern border of the world live the سینائیہ *Sīnāyē* (Chinese), which is also recorded in Arabic مملكة الصين. There is another name in Syriac which seems perfectly plain, but which I am unable to read. Then come the ہندوستان *Huns or the outer Turks, who are the Mongolians*.²⁰ The mystical گوغ *Gog*, or گوغ *City of Gog*, appears three times (the *یجوج و ماجوج* of the Arabs).

The other names mentioned in the north are فاراب *Fārāb* (فأراب), گورجان *G'org'ān* (جرجان); also the آٹلانی *Allanī*,²¹ and the ہندوستان *Valley of the Kaphaškāyē*. In the extreme north we have ہندوستان *Horestānī* (?) and the ہندوستان *desolate mountains in which are the Huns who are very bestial and wild*.

I regret that a copy of *Yākūt* was not at my disposal.

¹⁹ *Notices et Extraits*, II., pp. 392, 400. Peschel, p. 116, note 3, explains the name.

²⁰ Cf. Bar 'Alī apud Payne Smith, col. 994, s. v. ہندوستان, and 2030 s. v. ہندوستان.

²¹ Land, *Aardrijkskundige Fragmenten*, p. 19.

6. The grammatical works of Abu Zakariyyâ Yahyâ ben Dawûd Hayyûg; by Prof. Morris Jastrow, Jr., University of Pennsylvania, Philadelphia.

Abu Zakariyyâ Yahyâ ben Dawûd Hayyûg, or, as he is more commonly known, Yehûdâ Hayyûg, was born in Fez about the middle of the tenth century, but spent the greater part of his life in Cordova. He is the author of two grammatical works—the one treating of the so-called weak verbs in Hebrew,¹ the other of verbs with stems containing a reduplication of the second radical²—which may be said to have revolutionized the study of Hebrew grammar during the Middle Ages.³ Led by a study of Arabic grammar to apply to the Hebrew language the principle set up by Arabic grammarians for Arabic, that every stem must consist of at least three letters, Hayyûg was enabled to remove the stumbling-block to a systematic treatment of Hebrew grammar—the apparent irregularities of the ‘weak’ and the ‘reduplicated’ verbs. The predecessors of Hayyûg labored in vain to explain the peculiarities arising in the conjugation of such verbs. Their efforts culminated in the curious and artificial theory maintained by the immediate predecessor of Hayyûg, Menaḥem ben Sarûk, that a letter which in the course of conjugation dropped out, or apparently dropped out, could never be part of the stem. The logical outcome of this theory was the assertion that stems could consist indifferently of five, four, three, two letters, or even of one letter.⁴

Hayyûg put an end to the confusion resulting from such views and such a treatment of the language, through the new principle which he claims to have found, and his treatises are mainly devoted to a practical application thereof. These two works of his became the models upon which his successor and pupil, the famous Abu'l-walid Merwân Ibn Ġanâḥ worked out his elaborate grammatical system. The latter's dictionary⁵ and grammar⁶ of the Hebrew language may be designated as the unfolding of the germs contained in the two treatises of Hayyûg.

In addition to these two treatises, Hayyûg wrote a little work on the accents;⁷ and, according to Abhrâhâm Ibn Ezrâ⁷, a fourth, under the title, “Book of Spices.” The last was in all probability also of a grammatical character, but is apparently lost. The three extant works of Hayyûg have been translated into Hebrew twice, by Moše Ġikaṭilia and by Abhrâhâm Ibn Ezrâ, both of whom flourished in Spain during the eleventh century. Ġikaṭilia's rather free rendering of the two treatises

¹ *Kitâb el-af'âli dawâti ḥurûfi'l-laini.*

² *Kitâb el-af'âli dawâti'l-ni' l'uni*

³ See the writer's article on Menaḥem ben Sarûk in *Hebraica*, vol. iv., no. 1; p. 28.

⁴ *Kitâb el-Uṣûl*, edited by Adolf Neubauer, Oxford, 1881.

⁵ *Kitâb el-Lumâ*, edited by Joseph Derenbourg, Paris, 1887.

⁶ *Kitâb et-Tankîṭ.*

⁷ *Sefer Moznâim*, edition of Venice, p. 197a.

with copious additions has been edited by William Nutt;⁸ while the Arabic text of the *Kitâb et-Tankîf*, and Ibn Ezrâ's more literal but less elegant translation of the three works, have been published by Leopold Dukes.⁹ The Arabic original of the two important treatises, however, still remains unedited, and Derenbourg is certainly justified when he says "on peut le regretter."¹⁰

Three complete manuscripts of these treatises are extant, two in the Bodleian collection,¹¹ and one in the Imperial library at St. Petersburg.¹² There is also a small fragment of the work on the weak verbs in the Royal library at Berlin.¹³

7. Announcement of a proposed complete edition of the works of Edward Hincks, with a biographical introduction and portrait of the author. Presented, on behalf of the Semitic Seminary of the Johns Hopkins University, by Dr. Cyrus Adler.

At the last meeting of the American Oriental Society, held in Baltimore, October, 1887, Prof. Paul Haupt remarked, in note 36 of his "Prolegomena to a Comparative Assyrian Grammar" (*Proc.*, p. lxiv), "Hincks's merits have by no means been sufficiently recognized. Many discoveries ascribed to various Assyriologists go back to Hincks. I consider Edward Hincks the greatest of all cuneiformists, and it is my desire, as soon as I can possibly find the time, to set up for this really unique man a worthy biographical monument." Prof. Haupt's feelings in this matter are shared by a number of distinguished orientalist: for instance, Prof. A. H. Sayce of Oxford, and the late Justus Olshausen and Emil Roediger of Berlin. Compare Lagarde's *Mittheilungen*, vol. i., Göttingen, 1884, p. 152, and *Gött. Gel. Anzeig.*, 1883, st. 9 and 10, p. 276. It seems not to be generally known that all the philological remarks in Layard's early book on Nineveh and Babylon are due to the genius of the great Irish decipherer. Layard says, for instance, *l. c.*, p. 117. "I take this opportunity of attributing to their proper source the discoveries of the names of Nebuchadnezzar and Babylon inadvertently assigned to others in my 'Nineveh and its Remains.' We owe these, with many others of scarcely less importance, to the ingenuity and learning of Dr. Hincks;" and on the following page he adds,

⁸ Under the title, *Š'ibšâ sifrê had-Dikduk*, London, 1870. Gikâtîlia's translation of the book on accents has not been found.

⁹ In Ewald & Dukes's *Beiträge z. Geschichte d. Spracherkklärung d. A. T.*, vol. iii., Stuttgart, 1844.

¹⁰ *Opuscules et Traités d'Aboulvalid*, etc. Paris, 1880: p. cxix.

¹¹ A. Pococke 134. Uri 185. Neubauer, 1453. B. Pococke 99. Uri 459. Neubauer, 1452.

¹² Firkowitsch collection, II., Nos. 184-85.

¹³ Mss. or. Oct. 242. For a description of these manuscripts, as well as for further remarks on *Hayyûg*, and for a specimen chapter of the Arabic text taken from the treatise on weak verbs, see the writer's dissertation published in Stade's *Zeitschrift f. die alttestamentliche Wissenschaft*, Jahrgang 5, 1885, Heft 2, Giessen.

“I must here remind the reader that any new discoveries in the cuneiform inscriptions referred to in the text are to be attributed to Dr. Hincks.”

The true share which Dr. Hincks had in the decipherment of the cuneiform inscriptions can only be made evident by a complete edition of his various papers, all of which are of more than ephemeral value; their re-publication in convenient shape would not only pay a debt of gratitude to a distinguished scholar, but would also earn the thanks of all Assyriologists, those now living, as well as those to come. The learned world will be surprised at the variety and scope of Dr. Hincks's works.

We propose to reprint all Dr. Hincks's writings, with carefully prepared indices to the whole book, a biographical introduction, and a portrait of the author, a copy of which was presented to Prof. Haupt by the late Dr. Samuel Birch, the distinguished keeper of the Department of Oriental Antiquities of the British Museum. In pursuance of this plan, which appeals, we trust, to all friends of oriental research, we have placed ourselves in communication with Dr. Hincks's Alma Mater, Trinity College, Dublin, as well as with the Royal Irish Academy. Both of these bodies have welcomed the project, offering all the assistance in their power.

To indicate the scope of our undertaking, and to enable all interested to assist us in making the work as complete as possible, we have thought it expedient to subjoin a tentative list of Dr. Hincks's most important contributions to cuneiform research and kindred subjects. Most of the papers are scattered, we might even say buried, in magazines and periodicals hardly accessible to the majority of Assyriologists. The biographical material thus far published is scanty. Obituary notices of Dr. Hincks appeared in the *Daily Northern Whig*, December 5, 1866, in the *London Athenæum*, 2d vol., 1886, p. 839, in the *Annual Report of the Transactions of the Royal Society of Literature* for 1867, and in the *Journal of Sacred Literature and Biblical Record* for 1867, pp. 250 and 508. (Compare also Sayce, *JRAS.* NS. vol. ix., pp. 24 and 57.) These statements can no doubt be completed by careful search. Prof. Haupt intends to go to Dublin during the course of the summer to obtain all available information, letters, manuscripts, and papers.

For suggestions, advice, and the presentation of this subject to Trinity College and the Royal Irish Academy, we are indebted to Prof. W. F. Stockley of Fredericton, N. B., to the Reverend Canon Smith of Dublin, and especially to Dr. John K. Ingram of Dublin, the distinguished writer on Political Economy.

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51. On the Assyro-Babylonian Measures of Time; read April 10, 1865. *Trans. Roy. Ir. Acad.*, vol. xxiv., *Polite Lit.*, pp. 13-24.

52. Specimen Chapters of an Assyrian Grammar. *JRAS.*, vol. ii, N. S., 1866, pp. 480-519.

The collection and republication of Dr. Hincks's works will constitute an important preparation for our proposed Assyrian-English Glossary, announced in the last number of the *Proceedings*.

8. Note on the Collection of Oriental Antiquities in the National Museum at Washington, D. C., by Dr. Cyrus Adler.

At the last meeting of our Society, I had the honor of announcing that the U. S. National Museum had decided to form a study-collection of Assyrian Antiquities, with the understanding that an attempt be made to first obtain a representative collection of fac-similes of Assyrian and Babylonian objects preserved in this country. The work is steadily progressing. The first Assyrian case on the floor of the National Museum contains, among other curious objects (as for instance a piece of unburnt brick collected at the Birs Ninrud as early as 1880, some contract tablets, etc., etc.), fac-similes and rolled-out flat impressions of the unique collection of Assyrian and Babylonian seals brought together by the late Rev. William Frederick Williams, American Missionary at Mosul. The originals are mostly in the possession of the various members of the Williams family, but few having passed into the hands of other persons. Those which are the property of Mr. R. S. Williams of Utica, Dr. G. H. Williams of Baltimore, Mr. Talcott Williams of Philadelphia, Miss C. D. Williams, Mr. P. V. Rogers, and Dr. A. G. Bower, have been kindly placed at the disposal of the Museum. Each lender is to receive a set of casts of the objects loaned. The collection is being catalogued; and the character of the various hard stones has been accurately determined by Dr. G. H. Williams, Associate Professor of Mineralogy and Geology at the Johns Hopkins University. Some of the seals in the Williams collection have been described by the eminent French archæologist, M. Joachim Menant, in the *American Journal of Archæology*, vol. II., Baltimore, 1886, pp. 247-260; but the majority of the objects are as yet unpublished.

Such a complete collection of casts is all the more important, because, in spite of Miss Amelia B. Edwards's just warnings against the dispersion of Egyptian Antiquities, in the *Leyden Congress Transactions*, it seems that Assyrian antiquities will suffer the same fate in this country. Archæological studies, however, cannot prosper without proper centralization.

It may be interesting to some of our members to learn that there are also some Oriental MSS. in the National Museum. One of the most interesting of these is among the Grant relics: a copy of the Ethiopic version of the Gospels presented to General Grant by Lord Napier, who

captured it with King Theodore of Abyssinia in 1867. The MS. contains the four Gospels (Matthew, Mark, Luke, and John), with calendars of church festivals, lives of the apostles (but slightly different from those contained in the *Synaxaria*), and directions concerning the service. It is written on vellum; there are 396 pages, in dimension 14½x 12¼ inches. The letters are black and red, with illuminated punctuation marks. It is bound in heavy boards, covered with crimson velvet, and decorated with gilt and silver; floral and arabesque metal ornaments are riveted to the boards. We learn from a statement of the scribe on page 18b that the MS. was written by order of the King Sarza Dengel and presented to the Monastery of the Lebanon "in order that the king's name might be remembered in this world and in the world to come." A few lines below, the name of Mark, the archbishop, is found; and in the British Museum Catalogue, p. 235, Prof. Wright has described a MS. dated in the 20th year of Sarza Dengel and in the 6th of Mark, Metropolitan of Ethopia. Sarza Dengel ("root of the Virgin") died in 1597. The MS. presents other interesting features, a discussion of which I reserve for a future number of the *Proceedings*.

9. Explanation concerning a remark in the notes of the *Prolegomena* to a Comparative Assyrian Grammar; by Prof. Paul Haupt, of the Johns Hopkins University, Baltimore, Md.

In note 29 of my *Prolegomena*, JAOS., vol. xiii., p. lxiii, I remarked: "I must mention here that the first proof of my article (devoted to a critical examination of Prof. Jacob Barth's paper on the nominal prefix *na* in Assyrian), which went to press in the early part of September, was sent by somebody to Jacob Barth several months ago along with the invitation to write a *Gegenartikel* in the next part of the Munich Journal of Assyriology!" In a long letter, dated Berlin, March 29, 1888, Herr Jacob Barth admits that the first proof of my article in question was sent to him by somebody, whose name he declines to mention, but requests me to state that this, no doubt most gratifying mark of obliging thoughtfulness, was not accompanied by an invitation to write a *Gegenartikel* in the next number of the *Zeitschrift für Assyriologie*. I will freely confess that I was under the impression that the estimable editor of ZA. had rendered Herr Jacob Barth this service, chiefly on account of a letter from England received by me about the end of October last, and it is with genuine satisfaction that I state here spontaneously that, according to Herr Jacob Barth's most emphatic assurance, my silent surmise on this particular point was not correct.

10. On some Babylonian cylinders supposed to represent human sacrifices; by Rev. Dr. W. H. Ward, of New York City.

Dr. Ward offered some considerations on the Babylonian cylinder seals supposed by Menant to represent human sacrifices. They show a man, generally naked, in an attitude of fear before another figure who appears to be attacking him. There is little to show that this rep-

resents a human sacrifice rather than divine vengeance, or an incident in war or any other conflict. Among the nine cylinders, so catalogued by Menant in the "Collection de Clercq," several can hardly represent human sacrifices. Thus figure 181 shows the "Pontife" as winged, and, of course, a god and not a priest. This carries with it figure 176, where the "victim" is in the same attitude falling over a rock, and which is apparently from the same workshop, and which cannot therefore be a sacrifice. To the same effect is figure 181 bis, where the same winged god attacks a human-headed bull with a dagger. Here it is plain that both the winged god and the mythical creature which is being attacked forbid the idea of a human sacrifice. In figure 181, and others, Menant sees in the groups of personages in conflict, one of whom is being conquered, the slaying of other victims for sacrifice. But in figure 181 the "victim" carries a weapon shaped like a club, which forbids the idea of sacrifice. In a number of cylinders of this class, as in Menant, "Pierres Gravées," I., p. 153, fig. 96, the so-called "Pontife" holds a weapon over the head of the "victim," who is on one knee and lifts up one arm in terror.

To get the true meaning of this scene it may be necessary to compare one or two other cylinders, as Lajard "Culte de Mithra," xxxii. 2, where this same victim, drawn very diminutively, cowers under another figure, apparently a deity, with the scimiter generally carried by Mero-dach in one hand, and a bunch of what might be lotus blossoms, or, more likely, thunderbolts in the other. It would seem to represent Ramman terrifying man with his lightnings. Another similar cylinder is found in Cullimore's "Oriental Cylinders," figure 119, where this same deity holds his weapon over three victims who have fallen prostrate. See also Lajard, "Culte de Mithra," liv., A, 5, where the same god appears with his weapon and his bundle of lotuses or thunderbolts, and with his foot on his victim. Also see *ib.*, liv., B, 5, where the same victim appears again under the foot of the same god, but this time with a bundle of straight lines in his hand, which cannot be lotuses. These scenes cannot represent a human sacrifice, and yet they must belong to the same class as the one last cited from Menant.

The suggestion that the figure who appears so many times, in a short garment and with his right hand holding a weapon over his head, and sometimes with a bunch of "thunderbolts" in his hand, sometimes with and sometimes without a victim cowering before him or under his feet, is Ramman, the god of storms, is offered with some hesitation, chiefly on account of a parallel scene depicted on a cylinder belonging to the Metropolitan Museum. Here the same god, as I have taken this figure to be, with the curved scimiter in his uplifted right hand, and with a mace or club in his left, stands threatening the same cowering figure; but this latter figure is held down by a third figure similar to the god, who puts his hand on the "victim's" head, and who carries a bow on his shoulder. Certainly the bow is not the weapon of a sacrificing priest.

With these figures, where a cowering figure is seen before a threatening one, must be compared another small class on which appears a simi-

lar naked cowering figure before a lion whose mouth is open to devour him, as in Menant, "Pierres Gravées," I., p. 148, fig. 91. It might have seemed that this was a case of sacrifice by throwing a victim to lions. But the cylinder belonging to the Metropolitan Museum shows us the victim holding a shield over his head, a protection not likely to be carried by a victim offered in sacrifice. There appears to be no clear evidence of human sacrifices from the old Babylonian cylinders.

11. On a new theory of the nature of the so-called Emphatic Consonants in the Semitic languages ; by Prof. George F. Moore, of Andover, Mass.

In the American Journal of Philology, 1887, p. 268, note, Prof. Haupt describes the Ethiopic *t*, *k*, *p* as *tenues* with glottal catch (*festem Absatz*); and *šadai* as an *affricata* with glottal catch. In a paper read at the meeting of this Society in Baltimore, October, 1887 (*Proceedings*, p. xlii), Mr. Edgar P. Allen ascribes a similar character to the Emphatics in all the Semitic languages. "The peculiarity of these sounds is a combination of glottal catch with the mouth position. The glottal catch may follow the mouth position or be simultaneous with it. There is a difference in different dialects and with different sounds." Mr. Allen's Phonetic Studies, to which it is understood we are to look for an exposition of the grounds on which this assertion rests, have not yet appeared. In the meantime it can do no harm to call attention to some of the considerations which make against his theory. We shall hardly err in regarding Mr. Allen's position as a generalization of Prof. Haupt's remarks on the Ethiopic Emphatics. We have then to begin with the latter.

Recent observations on the way Abyssinian priests pronounce Ethiopic, recognize a class of so-called explosive sounds, namely *k*, *t*, *ts* (*šadai*) and *p*, which were, as far as I know, first described by Isenberg, in his Amharic grammar (1842), as belonging to the latter language.¹ Trumpp, in 1873 (ZDMG., 1874, p. 515 ff.), had the opportunity of studying the modern pronunciation of Ethiopic from the lips of an Abyssinian whom the revision of the Amharic Bible brought to Europe. Unfortunately neither Isenberg nor Trumpp gives a precise physiological description of the sounds in question. The former says that *k* "is a sudden explosion of breath from the palate, after the latter has been spasmodically contracted." The latter writes: "*Ihre Aussprache ist schwer zu beschreiben; sie ist annähernd die folgende: die Glottis wird geschlossen, die Lippen dann plötzlich geöffnet, und der betreffende Laut voll explodirt.*" One must think, as König has already observed, that Trumpp had in mind *p* only, when he speaks of the sudden opening of the lips, as a characteristic of these sounds. The breaking of a lip-closure can hardly be conceived as belonging to *t*, *k*, or *ts*. If we take the liberty of modifying Trumpp's expression so as to say: "The glottis is closed, the labial, lingual, or palatal closure then suddenly broken, with

¹ Cf. also Fresnel, *Journ. Asiat.*, Dec., 1838, p. 545 (on the Elhkili dialect).

a smart explosion," we have a description which we might take for that of *tenues* with sharp cut-off. To make this clear, compare Sievers's language (*Phonetik*, 137) to which Haupt has already directed attention.

"Bei diesen (d. h. bei Tenues mit Kehlkopfverschluss oder, was dasselbe ist, mit festem Absatz) wird nach der Bildung des Mundverschlusses die Communication des Mundraumes mit den Lungen durch festen Verschluss der Stimmritze abgeschnitten. Die Compression erfolgt dann durch Hebung des Kehlkopfes (theils vermöge seiner eigenen Hebungsmusculatur, theils auch vermöge eines von unten her durch Compression der Luft im Brustraume auf ihn ausgeübten Druckes). Bei der Explosion verpufft dann nur das geringe Quantum Luft, das bisher im Mundraum eingeschlossen war. Deshalb klingen diese Tenues stets sehr kurz und scharf abgestossen. . . Die Hebung des Kehlkopfes ist hier (in the case of the Armenian from whom Sievers heard these sounds) eine sehr energische, sie beträgt reichlich $\frac{1}{4}$ - $\frac{1}{2}$ Zoll." Compare also on *Affricatae* of the same sort, Sievers, l. c., p. 158.

It must however be said that the language of Isenberg and Trumpp does not shut us up to this interpretation. In fact König infers from their descriptions that this "explosion" is in the case of *k*, *t*, and *s* not different from the اطبان of the Arab grammarians, in ض ص ظ ط. The language of Praetorius (in his *Tigriña Grammatik*, p. 70; against which see Trumpp, l. c., 518), who makes the characteristic of *p* "eine sehr vollkommen aspirirte Aussprache," and the sound therefore a *tenuis aspirata*, is opposed to this interpretation; even if König's reconciliation of these authorities (*Aeth. Studien*, 48) be admitted. It is to be remarked also that in our accounts, though the closure of the glottis is noted, the most striking feature of Sievers's description, the smart elevation of the larynx through $\frac{1}{2}$ - $\frac{3}{4}$ inch is not observed. While therefore I should freely admit that the vague descriptions we possess of the modern Abyssinian pronunciation of the Ethiopic consonants in question may be interpreted of *tenues* with sharp cut-off, this interpretation is not at all certain.

It is perhaps proper to advert to the oldest description of these sounds which we have—Ludolf's. He says that they differ so much from the sounds of any European language that it is idle to attempt to convey a notion of their sound by description. They resemble most nearly *k*, *t*, *p*, *tz*' (thus distinguished by the apostrophe, as Mr. Allen proposes); "sed tam valida instrumentorum collisione, et quadam soni repercussione efferuntur, ut tarde et difficulter admodum imitari possit." This is not very definite; but as far as it goes, it is against the theory that we have to deal with "tenues with glottal catch," in which there is neither an unusually forcible collision of the mouth-organs, nor a *repercussio soni*.

But even if it were fully established that they have this character in the pronunciation of modern Abyssinians when they read the old Ethiopic, as well as in their vernaculars, we should be far from feeling any confidence that this was the *ancient* pronunciation. It would be precarious to argue from the way an Italian priest now reads Latin, to the pronunciation in the time of St. Jerome, not to say to the original powers of the Latin consonants. It is far more precarious in the case

of an Abyssinian priest. Contact and race-mixture with African neighbors have greatly affected the modern spoken languages of Abyssinia; why not the pronunciation? In fact Trumpp, in the account which he gives of these sounds says (p. 518): "they have manifestly originated under the influence of the neighboring Galla languages, since they are entirely foreign to the other Semitic languages."

This remark brings us to Mr. Allen's more sweeping proposition, that the Semitic emphatic consonants are all of them characterized by the combination of the mouth-position with glottal catch. Trumpp knew modern Arabic, as well as the theories of the Arab grammarians. That he recognized no resemblance between his Abyssinian's pronunciation of these consonants and that of the so-called Emphatics in Arabic is of considerable weight. For if in his description of the former we are to find *tenues* with glottal catch, then we have his decided and entirely competent testimony that they differ in this respect from the etymologically corresponding consonants in Arabic. We may, I think, go further than this. As regards the pronunciation of Arabic, we have the descriptions and classification of the Arab orthoepists, the observations of modern European scholars in every quarter of the Arabic-speaking world, and the studies of phonetic specialists, made in part upon the actual living utterance of natives and with all the appliances of modern science. So far as I know this literature, Mr. Allen's theory finds no support from any of these sources.

I will advert to only one further consideration, which, however, seems to me conclusive. The Arab grammarians group the four letters

ص ط ظ together as الحروف المطبقة. The اطباق they define in a way which does not seem to bring out all the peculiarities of these sounds—but certainly they do not understand by it a *glottal* closure.² The point however is this: two of these letters, at least, ص, and ض in its original power (see e.g. Spitta-Bey, *Grammatik d. arab. Vulgärdialectes*, p. 10), cannot be combined with a glottal catch at all. Mr. Allen has seen this in the case of ص, and can only suggest that the original pronunciation of ص seems to have been as an *affricata ts*, as it is pronounced by the Jews [more accurately, by part of the European Jews] and the Abyssinians.³ But it has escaped him that the difficulty is quite as great with ض—which has in the pronunciation of the modern

² So, e.g., Ibn Ya'ish, p. 1499: a passage which, I may remark, also illustrates the conflict between Mr. Allen's assertion that ط "was originally, as now, only the voiced variety of ص," and the dicta of the native authorities. For the relation of ط and ض, cf. Beidhawi (ed. Fleischer), II. 389, 390; and further Wallin, ZDMG. xii.625f.

³ One might ask, if ص is originally an "affricata with glottal catch," how we shall explain phonetically the tendency to substitute in pronunciation ص for س under the influence of an adjacent ع, خ, or ق (Beidh. II. 114)?

Bedawfn, as also apparently of the old Arabs. an aspirated finish. ف. also, which belongs to the so-called Emphatics, has its proper point of articulation so deep, that I cannot succeed in the attempt to combine it with the glottal catch. The enclosed column of compressed air would in any case be so short that at most a very feeble puff would follow.

It will be borne in mind also that the glottal catch, which we treat as a mere incident of vowel attack or closure, is, in the Semitic languages, itself a strong consonant, often at the end of a syllable, for which reason it is the more unlikely that it should in another capacity be inherent in a group of explosive and continuant consonants.

I may add that I recently asked a scholar of our own, who has in the double character of physiologist and Arabist an unquestioned right to speak, whether in the case even of ط, there is in fact any participation of the glottis. He answered: Emphatically no! and gave a description of the position of the organs in the production of ط as distinguished from ت which accords with that of the grammarians.

Not to be confused with Mr. Allen's theory is the suggestion of Wallin, in his paper upon this very difficult question, ZDMG. xii.612, who asks whether it is possible that the epiglottis, falling like a cover (طبق) over the glottis and partly closing it, may in some way affect the articulation of these letters.

Phonetic studies on the Semitic languages must be based upon spoken Arabic in its various branches taken in connection with the native literature on orthoepy. Modern Aramaic dialects must also be investigated. For the reason already indicated, the Abyssinian languages are to be used with great caution.

12. Supplementary note on the relations of Korea with China; by William W. Rockhill, Secretary of the United States Legation at Peking.

Mr. Rockhill sends a translation of a Memorial of the King of Chōsen to the Emperor of China in reference to sending envoys to western countries. The text of the Memorial was published in the *Shih pao* of Tientsin, November 29, 1887. It clearly reflects the attitude of Korea towards China in the matter of making treaties with western powers, and the rôle that China played in their negotiation. It expressly admits the suzerainty of the Heavenly Court. The document will best be published in connection with the review of the political relations between the two countries during the past five hundred years soon to be printed in extenso in the *Journal of the Society*.

After the usual vote of thanks to the American Academy for the use of its assembly-room, the Society adjourned to meet again on Wednesday, October 31, 1888.

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 v, vii, x. Berlin, 1887-88. 4°.
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 Bd. x. Verzeichniss der armenischen Handschriften, von Dr. N. Karamianz.
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*American Oriental Society :**From Prof. Otto Böhtlingk.*

Sanskrit-Wörterbuch in kürzerer Fassung, bearbeitet von Otto Böhtlingk. Theil vi, vii. 1. St. Petersburg, 1885-87. 4°.

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 Philadelphia, Pa. (Univ. of Penn.)
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 Cambridge, Mass.
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 Cambridge, Mass. (Episc. Theol. Sem.)
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 Philadelphia, Pa. (907 Walnut.)
 Boston, Mass. (1 Mt. Vernon.)
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 Boston, Mass. (Inst. of Technology.)
 Philadelphia, Pa. (907 Walnut.)
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 Chatham, New Brunswick.
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 Andover, Mass.
 Hannover, Germany.
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 Andover, Mass. (Theol. Sem.)
 Philadelphia, Pa. (1821 Walnut.)
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