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ORDINARY MEETING.

SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S., V.P., IN THE CHAIR.

The Minutes of the last Meeting were read and confirmed.

The CHAIRMAN.—I have now the pleasure of calling upon—I wish I could say Dr. Gordon—to read his most interesting Paper; but as unavoidable circumstances have prevented his being present to-night, he has an excellent representative in his son. The Paper seems to me to be unusually full of interest, and especially to anyone connected with India.

NOTES ON PHILOSOPHY AND MEDICAL KNOWLEDGE IN ANCIENT INDIA. By Surgeon-General C. A. GORDON, M.D., C.B., Q.H.P., &c.

SUMMARY OF CONTENTS.

Origin of the Hindoo People—Aryans—Castes—Non-Aryans—Races—Manu's Code—Systems of Philosophy—Nature—Creation of Man—Theory of Man—Senses—Mythology—Vedic Gods—Manu and Moses—Village System—Personal Hygiene—Scriptural Illustrations—Medicine—Conclusion.

THE origin of the Hindoo people is accounted for after this manner: we are told “Eaphs,” otherwise Japhet, “according to the desire of his father,* turned his face to the north-east, where he had many sons and daughters.” The name of his first-born was Turc, of his second Chin, and of the third Rus, from each of which sprang the several nations thus indicated. “Ham, by the order of his illustrious father, turned his face to the south. He also had many children,” of whom the three eldest were named respectively Hind, Sind, and Habysh. “Hind, turning eastward, possessed himself of the paradisial regions of Hindostan, where he laid the foundation of his monarchy. Sind, turning to the south-east, took possession of the fertile plains of the river Indus, founded the city of Tatta, and ruled the kingdom of Mooltan.” Habysh, according to Mahomedan writers, was the progenitor of the Abyssinians.† Such is the *legendary* account, to which alone reference can now be made.

Hind had four sons, named respectively Purib, Bang,

* Noo or Noah.

† Dow's *History*, vol. i, p. 9.

Deccan, and Nerwaal. These first inhabited the countries known to this day by their respective names. To Deccan was born three sons, amongst whom he divided his kingdom, and from whom sprang the three great tribes of the Deccan, namely, the Marhattas, Conherias, and Telingas. Nerwaal had also three sons, Beroge, Camboge, and Malrage. Bang had many children, who lived to inherit the kingdom of Bengal. Purib, the first-born of Hind, had 42 sons, who in a short time multiplied exceedingly; but among them, one whose name was Krishen (Krishna?*) exalted himself above his brethren, and ultimately became first monarch of Hindostan. The approximate date at which we have thus arrived is B.C. 2100.†

From these traditionary accounts, let us briefly refer to the more recently expressed views on the same subject. According to them, in very ancient times the great river plains of India became the theatre on which a nobler race (than the aborigines) worked out its civilisation. That race belonged to the Aryan or Indo-Germanic stock, from which the Brahman, the Rajput, and the Englishman descend. Its earliest home in Central Asia, whence certain branches started for the East, others for the West. From the Eastern stream, powerful bands descended by the Himalayan passes to the Punjab, and spread themselves as Brahmans and Rajputs over India.

We know little of these noble Aryan tribes in their early camping ground in Central Asia. It is inferred that there they roamed over the grassy steppes with their cattle, making long halts to crops of grain. They had tamed most of the domestic animals, were acquainted with some metals, understood the arts of weaving and sewing, wore clothes, and ate cooked food. They lived the hardy life of the temperate zone.

From all antiquity the Hindoo people have been divided into four great tribes,‡ each of which comprised various inferior castes. These tribes neither intermarried, ate, drank, or otherwise associated with each other;§ nor do they at the

* A man of wisdom, but not the Krishna whom the Hindoos worship.

† *Loc. cit.*, p. 10.

‡ Castes appear to have existed among the Egyptians, Etruscans, and Israelites. Among the Israelites, particular trades descended in certain families.

§ Mr. Chandra Sekhar Sur says: "Anciently they used to intermarry, eat, drink, and associate with each other; of course excepting the Non-

present day. Briefly, the principal of those castes or tribes are thus enumerated: 1, Brahmins, the emblems of wisdom, or priests, who, like the Levites among the Jews, alone officiate in their sacred capacity; 2, the Kshatryyas, the emblem of strength, or military caste; 3, the Vaisiyas, or epitome of nourishment, who, for the most part, follow commercial pursuits; 4, the Sudras, the emblem of subjection, who perform the more menial kinds of work.* There is no such an occurrence as that of an individual born in one caste rising to or being admitted into another, but once to fall is to be utterly exorcised in person and descendants.† On the other hand, proselytes are not admitted into any of the families or castes enumerated.

With reference more particularly to the first class named, or the Brahmins, it is observed that the order of priesthood produced no obstruction to population; marriage in that class was not only permitted, but ordained, nor could a Brahmin "retire to the woods," in other words, become a "jogee," that is, monk or mendicant, until he had given children to the community.‡

Exclusive of the occupations in early ages assigned to the sacerdotal class, numbers belonging to it are now to be met with in the army and engaged in commerce. This they are permitted to do under special "dispensation,"§ "in times of distress to seek a subsistence by the duties of the inferior classes, when it cannot be procured by their own." Under this provision comes the entire period from the first Arab entry into India, A.D. 664, to the present day—a period which, by Hindoo casuists, is considered to be "a time of distress" in which individuals are held to be justified in seeking subsistence or fortune by occupations from which they were originally excluded.

The aboriginal or pre-Aryan peoples by whom India of those distant times was chiefly inhabited appear to have left no written records. Their only works which have come

Aryan Sudras. *Anulom* marriage was when a man of a higher caste married a woman of a lower one, and *Pratilom* marriage, the reverse. The offspring of the latter form were looked down upon and reckoned as outside the society of the three higher classes."

* Craufurd, vol. ii, p. 336.

† Mr. Chandra Sekhar Sur says: "Promotion took place for high attainments and piety; for instance, Vishwamitra Rishi, though born of Kshatrya parents, was made a Brahmin on account of his vast knowledge."

‡ Craufurd, vol. i, p. 35.

§ Namely in the Laws of Manu.—See as above, vol. ii, p. 338.

down to our days are rude stone circles and upright slabs or mounds beneath which they buried their dead. In contrast to the lighter skinned Aryan invaders, those more ancient races were dark, or even black, as their descendants continue still to be. That they were Mongolian in feature appears from various allusions which occur in early poetry. One Vedic singer speaks of them as "noseless," or flat-nosed, while another praises his own "beautiful nosed" gods. Other epithets more or less scornful were applied to them; thus they were designated *Dasyus*, or "menials," *Dasas*, or "slaves," "disturbers of sacrifices," "raw eaters," "not sacrificing," "without gods," "monsters," "demons," &c.

Whence came those pre-Aryan representatives of more ancient population? It is said of them that they preserve dim memories of a time when the tribes dwelt under the shadows of mightier hill ranges than any to be found on the south of the river plains of Bengal. Their languages are held to indicate that they belonged to the three great stocks known as the Tibeto-Burman, the Kolarian (*i.e.* Sontal), and the Dravidian, the latter chiefly represented by the people of extreme Southern India.

Of the races or tribes thus alluded to,* some important particulars are contained in a recently-published *Handbook on Indian Art*;† although they refer to a period estimated to be a thousand years subsequent to the Aryan invasion of the Punjab, and to a date subsequent to that, when, about B.C. 1500, as Brahminical Hindoos, they had acquired the tract of country then called *Brahmavata*, which extended to a point about 100 miles north-west of Delhi, namely, the Kurus inhabited the country about Paniput, the *Matsyas* that about Jeypore, the *Panchalas* the Gangetic Doab and Rohilkund, the *Surassenas* the country about Muttra. But I regret my inability to obtain particulars in regard to the ethnic relations of the peoples indicated by these names. The subject is one for further investigation.

The most ancient known work pertaining to India is the book of the Hindoo Scriptures, named the *Veda*, *i.e.*, "Divine knowledge," the approximate date of which is the 10th to 14th century B.C. There are various statements as to the origin of the Vedas. One is that the hymns emanated like breath from *Brahma*, the soul of the universe. It is agreed

* Approximate dates, B.C. 1500 and 1000. Some scholars carry back their dates another thousand years.

† By Sir George C. M. Birdwood, K.C.S.I., vol. i, p. 36.

that they were revealed orally to the Rishis, or sages, whose names they bear; and hence the whole body of the Veda is known as Sruti, or "what is heard." The Vedas are four in number: (1) *Rig*, (2) *Yajur*, (3) *Sama*, (4) *Atharva*; but the last-named is of comparatively modern origin. The other three are spoken of by Manu as the "three Vedas," and are said to have been "milked out" as it were, from fire, air, and the sun. The doctrines therein contained and the code of laws based upon them are said to have been of divine origin, revealed by Brahma to Manu, and afterwards arranged in its present order by a learned sage who obtained the name of Vyasa or Veda-vyasa, *i.e.*, compiler of the Vedas. In the work so named instructions are contained with regard to the performance of all the various duties of life, including such as relate to religious and moral observances, and to ethics. Nor have the instructions so formulated in distant antiquity in any respect failed, even at the present day, to be held in reverence by the orthodox Hindoos.* In A.D. 1794, a translation of that code was published by a learned Englishman,† and still more recently it has claimed the attention of some of our most distinguished students of Oriental literature.‡

Whatever be the date assigned to the code of laws so named,§ there is reason, based upon analogy, to believe that the principles therein contained embody the results of practical experience extending to and from still more remote periods. Looked at from the modern and Western point of view, the ordinances alluded to, although not free from blemishes, yet breathe a spirit of sublime devotion, of benevolence to mankind, and of tenderness to all sentient creatures.|| In its policy, both civil and religious, that code

* According to legend, Vivasvat (the Sun), a Kshatrya by caste, was the seventh of the name of Manu, and it was he who compiled the Code to which the latter name attaches. Eminent Sanscrit scholars write that Manu, or Satyavrata, whose patronymic was Vaivaswata, or Child of the Sun, otherwise Saturn, reigned over the world in the earliest age of Hindoo chronology. As brother of Manu, ancient mythology enumerates Yama, named also Darham Rajah, the judge of departed souls, otherwise Minos. From this Manu, named Swayam-bhuva, or *Sprung from the self-existing*, came six descendants or other Manus, or *perfectly understanding the Scriptures*. Each of the latter "gave birth" to a race of his own, and all were exalted in power. Among these sons was Bhrgu, to whom, under the name of Vyasa, or Veda-vyasa or compiler of the Vedas, the task was assigned of communicating Manu's code to Marichi and the other Rishis or holy sages. (See Craufurd's *Hindoos*.)

† Sir William Jones.

‡ See works by Max Müller.

§ *Viz.*, B.C. 1400 and B.C. 900.

|| Craufurd, vol. i, p. 27.

favours population, agriculture, and commerce. It directs that in time of war, and with a view as much as possible to mitigate its horrors, the produce of the field, the work of the artizan, the city without walls, and the defenceless village shall be sacred and inviolable. In actual conflict also, rules were to be observed such as some 30 centuries subsequently were to be adopted under the Geneva Convention.* The practice of virtue was inculcated "as necessary for procuring happiness even in this transient life. Of the laws as a whole, it has been observed that they tended to procure peace and promote happiness; to prevent violence, to encourage benevolence and charity, to keep the people united among themselves, and to prevent their tranquillity from being disturbed by the introduction of foreign innovations.†

At a date some six or seven centuries prior to that of our era various systems of philosophy had sprung up among the Hindoos of ancient India, but of the whole two only were important in respect to the number and influence of their disciples, namely, the Vedanta and the Nyaya.‡

Of these the first named, Vedanta, or "orthodox," and the oldest of which record is available, had for its founder the sage, Kapila,§ whose doctrines in part resembled those of Pythagoras, in part those of Zeno. The second, Nyaya, or logical school, was said to have been founded by Gotama, otherwise Gautama, a sage who, according to eminent writers, was mentioned in the Vedas, and who accordingly belonged to an earlier period than Kapila. In it metaphysics and logic were presented in such a manner as to be "better accommodated than any other anciently known in India to the natural reason and common sense of mankind."¶ There exists in India a tradition that the (heretical?) Brahmins communicated this system to Callisthenes, from whom it was adopted by Aristotle.¶

Both systems equally inculcate the practice of virtue, that in their actions men should be guided by the dictates of reason, namely, that faculty "which enables us to distinguish

* Birdwood, *Industrial Arts of India*, i, 16. But prior to the Convention so called, similar rules were inculcated by Saladin during the Crusades, A.D. 1186—92.

† *Ibid.*, vol. ii, p. 320.

‡ See Appendix A.

§ Mr. Chandra Sekhar Sur holds that the author of the "Vedanta" (the supplement of the Vedas) is not known, and that Kapila was the author of the "Sankhya Philosophy."

¶ Craufurd, vol. i, p. 219.

¶ Callisthenes, born B.C. 365; Aristotle, born B.C. 385.

truth from falsehood, and what may be proper or unfit in our desires and affections." The Nyaya philosophers made the operation of reason in regard to action to consist in observing a just medium between extremes; between cowardice on the one hand and presumptuous rashness on the other; between avarice and profusion; while as with the one school, so according to the other, extreme temperance in the gratification of desires and appetites is inculcated.

The Vedantas consider the occupations of life as retaining the soul "in the prison of passion and affection." In the common acts of life, say they, it is incumbent on man to attend to religious duties and rites. Renunciation of the world does not require that a person should cease from the acts and duties of life, but only that he should preserve his mind in a state of perfect indifference and tranquillity. Purity in speech and thought was inculcated.

Some of the Hindoo philosophers consider the *vital soul* as separate and distinct from the great universal soul. They thus account for the memory and intelligence possessed in different degrees by the animal world, while others account for the same differences by their system of metempsychosis or transmigration of souls. According to others,* man possesses two souls, namely, the divine and the vital. The former is a pure spirit; the latter is more immediately united with our corporeal substance, and possesses desires and affections.

What we understand by Nature was personified in ancient Hindoo mythology, and introduced into their poetry under the names of Maya and Prakriti,† these names being nearly synonymous. Action in Maya was said to be introduced by the effect of the "supreme pervading essence." Then again, all things were said to be produced by the union of Prakriti and Purusha, the first male. The eternal and universal pervading spirit, by which is implied the Supreme Being, was considered as presenting four modifications or modes of existence of ether; 1, as it appears clear and limpid in the vault of heaven; 2, as it is confined in any given space; 3, as the sky is reflected in water; and 4, as it is obscured by clouds. Creation, say they, "is not considered as the instant

* Namely, the sect of the Jainas.

† Prakriti also bears the name Arya. In the Vedas Arya expresses "believers in the gods," in contradistinction to their enemies, called Dasas or Dasyus. Query, does this circumstance explain the application of that term to the ancient Hindoo immigrants into India? See Craufurd, vol. i, 225.

production of all things, but only as the manifestation of that which exists externally in the one universal Being. According to another section of philosophers, "there is neither creation nor dissolution; the world has ever existed in the same visible form it now exhibits."

In the legendary account of man's creation contained in the sacred writings of the Hindoos, there is much that is poetical and beautiful. For example:—"Brahm," otherwise the supreme divinity, otherwise "God, seeing the earth in full bloom, and that vegetation was strong, from its seeds, called forth for the first time *Intellect*, which he endowed with various organs and shapes to form a diversity of animals upon the earth. He endowed the animals with five senses, namely, feeling, seeing, smelling, tasting, and hearing. But to man he gave *reflection*, to raise him above the beasts of the field. The creatures were created male and female." Various creative acts by *Brahma*, the first of the human race, are subsequently related.*

"The superiority of man" over animals, it is added, "consists in the finer organisation of his parts, from which proceed reason, reflection, and memory, which the brutes only possess in an inferior degree on account of their less refined organs."†

According to the doctrine held by the sect of Sankhya,‡ "Every animal, from the highest of the species down to the meanest insect, has existed from all eternity, and will continue to do so, though it may undergo changes from a higher to a lower rank, or from a lower to a higher."§ What is this but the doctrine of Evolution, alternating with that of Devolution?

Only a very few of the theories expressed by Gotama on certain points relating to physiology can here be touched

* Dow's *History of Hindostan*, vol. i, pp. xlii et seq.

† *Ibid.*, p. ix.

‡ According to Craufurd, Buddha was born B.C. 1364. He was the son of a Rajah of Magatha or Behar. The name Buddha corresponds with one of the titles given to the Hindoo deity which corresponds with the god Mercury (namely Budh), vol. i, p. 266.

§ In the *Mahabharata* it is related of Yudissthira, that being asked by Indra to enter heaven "wearing his body of flesh," he refused unless his faithful dog might bear him company, "notwithstanding that Draupadi and his friends were there already." Also, that "Jatayus, the king of the vultures, and son of Vishnu's bird Garuda, having been killed by Ravana, his soul arose from his dead body, and by four celestial messengers was carried to Vaikuntha, the heaven of Vishnu." *Arts of India*, by Sir G. Birdwood, vol. i, pp. 22—29.

upon.* Intellect, according to his doctrine, is formed by the combined action of the senses, of which five are external, and one internal. The last-named† seems to mean conscience, in which are comprehended reason, perception, and memory. Of the senses he says:—*Sight* arises from the *Shanskar* or repulsive qualities of bodies, by which particles of light which fall upon them are reflected back upon the eyes from all parts of their surfaces; but, he adds, “unless the soul fixes its attention upon the figure in the eye, nothing can be perceived by the mind.”

Hearing is the appreciation of sound which is conveyed through the purer element *akash*, or ether, and not by the air.

Taste is the sensation of the tongue and palate by the particular form of particles which compose food.

Smell proceeds from the effluvia which arise from bodies to the nostrils.

Touch is occasioned by the contact of dense bodies with the skin, and the whole body except the bones, hair, and nails is the organ of that sense. And then is given this further explanation, to which the attention of modern scientists may appropriately be directed, namely:—

“There run,” said Gotama, “from all parts of the skin very small nerves to a great nerve. This nerve is composed of two different coats, the *one sensitive, and the other insensitive.*” The point which here merits our attention is the reference made to the double functions of certain nerves at a date variously estimated at 500 to 1000 B.C. The fact was recognised, although the theory based thereon was erroneous.

According to the Shastras, otherwise the sacred ordinances of the Hindoos, “As a tree, the lord of the forest, even so, without fiction, is man; his hairs are as leaves, his skin as exterior bark. Through the skin flows blood, through the rind sap; from a wounded man blood gushes as from a tree that is cut. His muscles are as interwoven fibres; the membrane round his bones, as interior bark, which is closely fixed; his bones are as the hard pieces of wood within; their marrow is composed of pith.” From all of which expressions the conclusion appears inevitable that a certain extent of knowledge of the tissues so enumerated is thus indicated.

But let us continue our extracts: “Since the tree, when felled, springs again from the root, from what root springs

* For details see Dow's *History*, vol. i, pp. lxi *et seq.*

† *I.e.*, Manus.

mortal man when felled by the hand of death? Who can make him spring again to birth? God, who is perfect wisdom, perfect happiness." So wrote the sages of ancient India.

With reference to this part of our subject, the remark seems appropriate that, according to the chronology of the Hindoos, of the four Yugs or Ages pertaining to man's existence, three have already passed away, namely, the Satya, the Treta, and the Dwapar, the fourth, or Kali* being that which is now in progress. The several periods so named are believed to correspond respectively with the Golden, the Silver, the Brazen, and the Iron ages of Greek and Roman classical writers, and like them to express a progressive decline from purity to baseness; otherwise a retrogressive process in man from a higher to a lower condition of intellectual and moral standing. Thus Satya means truth and probity. During the age so named, and the two succeeding, the Brahmins tell us that "Men were greatly superior to the present race, not only in the length of their lives, but in the powers of their bodily and mental faculties; but, in consequence of vice, they gradually declined, and, at last, in this the Earthen age or Kali yug, degenerated to what we now see them."†

The entire system of mythology of ancient India is comprised in the two great epic poems in which is vividly pictured life as it then was among the predecessors of the races whom it is customary to designate our Aryan brethren. The poems in question are well described by a modern writer‡ in these terms:—"They are the charm which has stayed the course of time in India, and they will probably continue for ages yet to come to reflect the morning star of

* The commencement of the Kali yug is considered to date from 2 o'clock, 27 minutes, and 30 seconds, A.M., 16th February, B.C. 3109. According to M. Bailly, there occurred at that time a conjunction of the planets. But the astronomical time of the Brahmins is dated from an eclipse of the moon, which appears to have happened then. According to some writers, the circumstance which marked the period was the death of Krishna, otherwise Vishnu, in one of his incarnations. Others assign the date to the time of death of a famous and beloved sovereign, Yudhisthira. Whichever of these explanations be the correct one, if either, the Hindoos evidently looked upon the event referred to as a great calamity; they distinguished it by beginning a new age, to which, as an expression of their feelings, they gave the name already mentioned, otherwise "the age of unhappiness or misfortune."

† Craufurd, vol. i. pp. 174, 216; vol. ii, p. 6.

‡ Birdwood, *Arts of India*, vol. i, p. 33.

Aryan civilisation, fixed, as it were, in the heaven of Indra, and irremovable. Neither the Persian nor Greek invasion, the Afghan and Mongol conquests, not even the growth of Buddhism, has left a lasting effect upon the native mind of India; on the contrary, the effects of each in its turn have yielded to the mighty magic of Manu's code, and poetic imagery of the *Ramayana* and *Mahabharata*."

The Vedic gods were mere abstractions, intangible and illusive personifications of the attributes and powers of nature, including space, the heavens, firmament, sun, earth, day and night, twilight, dawn, wind, rain, storm, and sunshine; all ministering to the divine care of man, in the breathing air and radiant light, the fleeting moon and constant stars, the rising mists and falling dews, the rivers which flow down from the hills through the fruitful plains, making with the flocks and herds, and woods and fields, one ceaseless voice of praise and adoration.* Vedic worship was itself simply the natural expression of men for their daily bread at a time prior to the institution of an order of priesthood apart from members of the ordinary community.

In the *Puranas*† the Vedic gods assumed distinct personality, and individual character, such as we find conventionally represented in figures with which those of us who have resided in India are familiar. The definite statement occurs with respect to those figures that "they are merely allegorical," although "the more ignorant Hindoos, it cannot be denied, think these *subaltern* divinities do exist." But the unity of *Brahm*, the supreme deity, was always a fundamental tenet of the uncorrupted faith of the more learned Brahmins.‡

In these and other writings on the Mythology of the Hindoos we shall find the original of almost the whole of that of the Greeks and Romans. To this day the Deity is adored by names derived from the same old Aryan root by Brahmins in Calcutta, by Protestant clergymen at Westminster, and by Roman Catholic priests in Peru. Some particulars may be modified, but the principal features of the

* Birdwood's *Industrial Arts of India*, vol. 1, p. 46.

† *Puranas*, i.e., the *old* or sacred writings. They treat of five topics, namely:—1. The creation of the universe. 2. Its destruction and renovation. 3. The genealogy of the gods and patriarchs. 4. The reigns of the Manus. 5. The history of the Solar and Lunar dynasties, including the wars related in the *Ramayana*. The works so named appear to belong to different historical periods.

‡ See Dow's *History*, vol. i, p. 49.

system may be traced through them all.* This part of my subject is entered upon more at length in the Appendix to this paper marked B.

In the remarks which are now to follow, certain affinities will be indicated as existing between the Mosaic code of sanitation and practical medicine and that to which the name of Manu is attached. Eminent Oriental scholars† have ascertained that long prior to the date of Moses (*i.e.*, B.C. 1571) there existed free communication between the Egyptians and Brahmanic India, that Egyptian priests from the valley of the Nile visited the territories situated between the Ganga and Yamuna, otherwise Ganges and Jumna. The circumstance of the priests of Mizraim having travelled to the seat of Indian science may be held to support the belief that their object was to acquire knowledge, while probability is equally against the impression that the self-sufficient Brahmins were in those distant times any more disposed to accept teaching from foreigners than they are at the present day. Be this as it may, the fact remains that through many generations prior to the time referred to the condition of the Hindoos had been that of a highly civilised and advanced people. Distinguished as they were in philosophy and in science, history relates that they were not less so in the study of means to succour the maimed, to alleviate pain, to treat disease, and to preserve health. "The wisdom of the East" was referred to in connection with that of Egypt by the sacred historians.‡

Although little was known of the Hindoo nation prior to the conquest by Alexander, in the 4th century B.C., the fact is on record that the Greek surgeons who accompanied that expedition were somewhat surprised to see that medical knowledge among the inhabitants of North Western India was in advance of that possessed by themselves.

According to tradition, rather than actual history, an offshoot from Hindoo society migrated westward at a very early period, notwithstanding the circumstance which we are justified in assuming that such a migration was then opposed to the rules of the community, as it would be at the present day. For example, the Brahmins affirm that the Jewish religion, like the much more recent faith of Mahomed, is a heresy from what is contained in the Vedas.

* *Edinburgh Review*, No. 29.

† Sir W. Jones, &c. See also Craufurd, vol. ii, p. 321.

‡ Kings iv. 30; about B.C. 1000.

Rajah Tura, say they, who is placed in the first ages of the Kali yug, had a son who apostatised from the Hindoo faith, for which he was banished by his father to the West. This apostate fixed his residence in a country called Mohgod, and propagated the Jewish religion.* The inference, accordingly, is that other social rites and observances, besides such as were purely "religious" in their nature, were similarly transmitted. In the sacred records of the Hindoos, a system of medicine is shown to have existed among that people from an antiquity far beyond the period to which history is supposed to extend. Inasmuch, however, as human nature exhibits a general resemblance among all nations, the absence of absolute identity among peoples being accounted for by the influence of climate, habits, customs, and political state, so from similar necessities, speculations and practices directed towards the well-being of individuals and communities may be considered to have gradually sprung up and developed among them; also that in the earlier ages to which our remarks refer, nationalities and civilisations presented many closer affinities among themselves than exist in modern days. Hence it has doubtless come about that a remarkable similarity is traceable as having existed between the sanitary and medical codes of Moses, and of Manu.

The particular rules of Manu's code which more especially relate to personal hygiene and public sanitation are intimately associated with religious observances. Those rules apply to the individual from the moment of his birth.† Notice occurs of the ceremonies to be observed at the baptism of the infant on the tenth or twelfth day after birth, of the tonsure, investiture with the Brahminical sacred cord, betrothal, marriage, and wedded life. Much importance is attached to the performance of funeral rites. Stringent rules are inculcated in reference to domestic morals and economics, including employments, amusements, ablutions, giving and receiving alms, &c. Diet and purification are placed under restriction, as is also indulgences and dissipation in their several phases.

The village system of communities is detailed much as it exists at the present day, each as a little community managing and conducting its own affairs, with its staff of

* Dow's *History of Hindostan*, vol. i, p 7. It would be interesting to identify the country alluded to in the text.

† They relate also to the period of gestation.

hereditary officers, among whom was the barber-surgeon and the health officer*—a system which is described as subversive of all sense of nationality and of public spirit, but as having rendered the country proof against revolution within itself. As facilitating local government in its various branches, it presents many obvious advantages.

According to the medical Shastras, it is the duty of the physician to instruct persons not only in the method of treating, but also in that of preventing, disease, for, said Manu: "As bodies are cleansed by water, the mind is purified by birth, the vital spirit by theology and devotion, and the understanding by knowledge."

Under the system of hygiology, instructions were comprised under two separate sections, the first of which included relative duties, the second such as were personal. The rules laid down under the former of these refer to climate and season, the characteristics of persons according to the region in which they were born and had lived; the clothing, food, and general mode of life appropriate to dry climates and to hot, and to each of the four seasons, namely, the cold, the spring, the hot, and the rainy. The diseases incidental to each were also enumerated.

Under the heading of personal duties, instructions given refer to rising from bed in the morning; cleansing the mouth; anointing the body; exercise; shampooing and rubbing the body, otherwise massage, of which we hear so much as if it were a recent development of modern science; bathing; clothing; food; and sleeping. Of such instructions, a few examples must here suffice.

Exercise increases strength, prevents and cures diseases by equalising the humours; it prevents laziness and fatness; and strengthens the firmness of the body. It removes grief, increases the internal fire, and renders the body lighter, more vigorous, and ready to work. Walking is the form of exercise considered best by the Indians of old. It was directed to be always used by those who live on rich food, and especially in the morning and evening.†

In ancient India the practice of anointing was observed not only for purposes of consecration and inauguration,‡ but also for guests and strangers, and for health and cleanliness.

* Namely, an accountant, watchman, money changer, potter, carpenter barber, shoemaker, astrologer, &c.; in some villages, also a dancing girl. and a genealogist or bard. *Ibid.*, p. 44.

† *The Hindoo System of Medicine*, by T. S. Wise, M.D.

‡ Exod. xxiv.; Lev. iv. 3, 5, 16; vi. 20; Psalm cxxxiii. 2.

In all these respects similar customs were observed by the ancient Egyptians, and were inculcated by the Mosaic code, and at a much later period by the Romans.

With the Brahminical Indians, as with the Arabians ancient as well as modern, the anointing of the body was believed to strengthen and protect it from the heat of the sun, and by filling up the pores of the body to prevent that too copious transpiration which enfeebles the frame.

Like all other Orientals, the Hindoos were, and still are, persuaded of the sanatory properties of oil. Under this impression, they anointed the sick, and applied oil to wounds.*

Reservoirs existed around the most ancient temples in India as in ancient Egypt, so that priests and people might perform therein the ablutions connected with their religious worship. The head was shaved and kept clean for the prevention of insects or other filth.

Ablution of person and of clothing was enjoined as the concluding rite of purification—as after touching a dead body, or a leper, or that after childbirth (such as were enjoined by the Mosaic law).—Lev. xii-xv.

The cleaning of brazen and other vessels was very carefully observed, and articles of earthenware of little value were then broken, as they still are, after use—the rules for these proceedings being much as described in the Mosaic laws (Lev. vi. 28; xi. 32-36; xv. 23).

Although not altogether pertaining to sanitation, the following further illustrations of Scriptural allusions to corresponding manners and customs among the Hindoos may conveniently be added, namely:—

They have ever considered that the want of children renders all other blessings of no esteem (Gen. xv. 2; xvi. 4).

Travellers and guests may be seen eating under the shade of trees. The house of a Hindoo serves for sleeping and cooking, and for secluding the women, but never for eating (Gen. xviii. 4).

A young Hindoo has no choice in the selection of a wife (Gen. xxiv. 4).

In Bengal it is the universal practice for women to go to tanks, wells, or rivers, to draw water (Gen. xxiv. 11.)

A Brahmin sometimes goes to a house, sits down, but refuses to eat till he has obtained the object he had in view (Gen. xxiv. 33).

When a daughter is leaving her father's house to live

* Psalm cix. 18; Is. i. 6; Mark vi. 13; Luke x. 34; James v. 14.

with her husband, a common address to her is, "Be thou the mother of a son. Be thou the wife of a king" (Gen. xxiv. 60).

The Brahmins anoint their images with oil before bathing (Gen. xxviii. 18).

A person might become a slave on account of love, or to obtain a wife (Gen. xxix. 18).

The Hindoos avoid giving a younger son or daughter in marriage before the older (Gen. xxix. 26).

When friends meet after long absence, they embrace and "fall upon each other's necks" (Gen. xxiii. 4).

Hindoos always change their clothing previous to eating or worship (Gen. xxxv. 2).

Dishes or "messes" at meals are sent by the host to each guest (Gen. xliii. 34).

At the conclusion of a feast each guest is presented with a new garment or piece of cloth (Gen. xlv. 22).

In times of famine many children were wont to be sold to prevent them from perishing (Gen. xlvii. 19).

Natives of India never enter a house with their shoes on* (Exod. iii. 5).

Hindoos often made a vow, and devoted to an idol the first born, whether child or kid (Exod. xiii. 2; 1 Sam. i. 11).

Dancing before an idol takes place at nearly every Hindoo feast (Exod. xxxii. 19).

A Brahmin never allows the fire he kindled at his investiture to go out (Levit. vi. 13).

A Hindoo widow generally returns to her father's house (Levit. xxii. 13).

The Brahmin priest uses "holy water" in the "trials by ordeal" (Num. v. 17, 24).

Having made a vow, he omits to cut the hair during its term; at the expiration of the period of the vow he shaves the hair off (Num. vi. 18).

Ancient Indian kings employed sages to curse their enemies (Num. xxii. 6).

While in a state of uncleanness, Hindoos are interdicted from feasts, &c. (Deut. xxiii. 10).

Brahmans will refuse food from inferior castes, but will accept money from all (Joshua vi. 18, 19).

It is a common practice for Hindoos to plant trees in the names of themselves and friends (Judges iv. 5).

* This remark applies of course to conditions as they existed in *pre-modern* times.

In soliciting a favour a Hindoo proffers a present of fruit or sweetmeats (1 Sam. ix. 7).

Servants sleep in the verandah or porch (2 Sam. xi. 9).

Some of the Hindoo Sunyassees or Fakeers besmear their faces with ashes (1 Kings xx. 38).

A contention as to the superiority in efficiency of certain sacred rivers in India is not uncommon, although the superiority is always accorded to the Holy Ganges (2 Kings v. 12).

Numbers of poor Brahmins are fed from the houses of the rich (Ezra iv. 14).

The Hindoos for the most part were clothed in white raiment (Eccles. ix. 8).

For fuller particulars with regard to these matters, and various cognate subjects, reference may be made to the work on the *Hindoos*, vol. ii, by the Rev. W. Ward, dated 1817, that author being one of the three* great pioneers of missionary work in India.

Adverting to the subject of medicine proper, we learn that the first of the Upa Vedas, or Ayur Veda, delivered to man by Brahma, Indra, Dhanwantari, and five other deities, comprises the theory of disorders and medicines, with the practical methods of treating diseases, as also the practical art of surgery.† Various medical works in Sanscrit, so we learn, contain the names and descriptions of Indian plants and minerals, with their uses, discovered by experience in curing diseases.

It was directed that "all the tracts on medicine must be studied by the Vaidyas,‡ or those who are born physicians," that is, of the class or caste that exclusively professes the study and practice of physic.

In the ancient works, it is stated that the teachers of medicine were Rishis, or ascetic sages; that "the feet of the teacher is the origin of all happiness, and, like a light in a dark room, he will illuminate the contracted and dark mind of the pupil;" that the student should be the son of a respectable and ancient family, who is either the son of a practitioner, or of one who respects the medical profession. Then follow a series of minute rules in regard to the duties of the physician and the patient towards each other. It is pointed out that "there are four circumstances required in

* The other two, Carey and Marshman.

† Craufurd, vol. i, pp. 233, 241.

‡ See *Med. of the Hindoos*, by Wise, p. 11.

the cure of a disease, namely, a physician; a disease that is known; a reasonable patient; medicines, instruments, and attendants—all of which points are fully entered upon. In reference to the physician, it is said in the Ayur Veda that “money will be the recompense bestowed by the rich; friendship, reputation, increase of virtue, prayers, and gratitude, will be that of the poor.*

Under the head of “Anatomy and Physiology” are considered “the theory of the elements; beginning and growth of the body; nature of the corporeal, vital, and spiritual parts, the temperaments, and death.” Pharmacy and materia medica are next considered. Remarks follow “on simple medicines from the vegetable and animal kingdoms.”†

The frequent accidents incidental to the pursuit of hunting, agriculture, and war induced the Hindoo sages to pay attention to surgery in its various divisions. In the Vedas surgery was considered as the first of the eight departments of medical science.

Hindoo mythology peopled the heavens, the earth, the waters, and all animated nature with innumerable tribes of imaginary beings, arrayed in tints borrowed from the fervid imaginations of tropical climates. Some of those supposititious beings were beneficent, others malignant, and to the latter the occurrence of diseases and frightful dreams was attributed, as, long subsequently, the origin of these evils came to be similarly accounted for in the philosophy of Pythagoras. Thus it came about that everyone had some deity to fear, to solicit or propitiate.‡

Particular gods were supposed to superintend different parts of the body, and to them prayers were offered up before operations were performed or medicines were exhibited. The following is a list of the principal among them, and of the parts “superintended” by them respectively, namely:—*Ugni*, or fire, the tongue; *Bayu*, air, life; *Indra*, the firmament, strength; *Baruna* (*Varuna*), water, understanding; *Surya*, the sun, sight; *Chandra*, the moon, understanding; *Vishnu*, the preserver, courage; *Brahma*, the creator, soul; *Samudra*, the ocean, the umbilicus; *Dhruba*, the stars, eyebrows.

At the present day, the visitor to Benares, the sacred city

* Wise, p. 29.

† In the time of Solomon (B.C. 1015-975) drugs from India were largely exported by the ships of Tarshish.

‡ Craufurd, vol. i, pp. 144, 184.

of the Hindoos, may observe, close to the holy Gunga, two shrines dedicated respectively to the presiding deities over small-pox and cholera, the two great scourges of the population. In Southern India also, on the occasion of the outbreak of cholera, the goddess Maha Maree was quite recently propitiated by noisy ceremonial and sacrifice. A representation of that deity, obtained by me on the spot, is in my possession.

Reference has already been made to the similarity, not to say identity, which may be traced between observances hygienic and medical, as directed in ancient Hindoo writings and as enjoined by the Mosaic Code. This remark applies with much force in the case of leprosy. Hindoo writers distinguished three forms of that dire malady, and indicated the diagnostic characters of each, together with the causes to which they were severally assigned. The subject of treatment was elaborately dealt with, including diet, external applications, and internal remedies. "Lepers in one life," it was said, "are born again with the complaint, and the disease is supposed to be communicable by contact, by breathing the same air, by eating together, by wearing the clothes or ornaments of a person labouring under the disease."* In other words, the malady was hereditary, as also contagious and infectious.†

With time exhausted, and, I fear, interest and patience of my hearers wearied, I bring this paper to an end. Fragmentary and imperfect in themselves, my remarks have embraced no more than a few out of the many points in respect to which knowledge in ancient India had attained a high standard of progress, ages before the date when history first took notice of Hellenic civilisation. That even then, in those distant ages, India was not alone in respect to arts and sciences conducive to the comfort and well-being of the people is doubtless true, for did they not exist, highly perfected, in Assyria, in Egypt, and, though in a modified degree, in China? Suffice it that conditions as they existed in India were of indigenous growth, their subsequent progress being westward, through Arabia and Persia, even to Continental Europe and the British Isles, whence by example and precept by our fellow-countrymen and countrywomen. It is now, in an ever-increasing degree, our duty as a people

* *Hindoo Medicine*, by Wise, pp. 258, *et seq.*

† For summary of Mosaic Regulations, see Appendix C.

and a nation to restore them brightened and purified to the length and breadth of Hindostan, their original home and starting point.

APPENDIX A.

Schools of Philosophy.

Six different schools of Hindoo philosophy are enumerated; all of them have one and the same starting point, namely, *ex nihilo nihil fit*; and all the same ultimate object, namely, the emancipation of the soul from future birth and existence, and its absorption into the supreme soul of the universe. These schools are:—

1. *Nyaya*, founded by Gotama; called also the Logical School. It is said to represent the sensational aspect of Hindoo philosophy.

2. *Vaiseshika*, founded by the sage *Kanada*, about the same date as the preceding. It is called the Atomic School, because it teaches the existence of a transient world composed of an aggregation of atoms.

Both of these schools recognise a Supreme Being.

3. *Sankhya*, founded by the sage *Kapila*. It is atheistical in its teachings, and takes its name from its numeral or discriminative tendencies.

4. *Yoga*, founded by *Patanjah*, whose name it also takes. It is theistical in its teachings. It asserts the existence not only of individual souls, but of one all-pervading spirit, which is free from the influences which affect other souls.

5. *Purva-mimansa*. 6. *Uttara-mimansa*. The prior and later mimansas; they are both included under the general term *Vedanta*, "the end or object of the vedas." The former was founded by *Jaimini*, a disciple of *Vyasa* (arranger of the vedas); the latter by *Vyasa* himself. The principal doctrine inculcated in both is that "God is the omniscient and omnipotent cause of the existence, continuance, and dissolution of the universe; that creation is an act of his will, that he is the efficient and material cause of the world; that, at the consummation of all things, all are resolved into him. He is the sole-existent and universal soul, and besides him there is no second principle."

The period of the rise of these schools is assumed by Indian scholars to be about the fifth century B.C. and even

later. With reference to the doctrines expressed in them, it has been questioned whether they were more or less due to Greek influence; but Mr. Colebrook, the highest authority on the subject, is of opinion that in this instance the Hindoos were the teachers, not the learners.

Besides the six schools enumerated, there is a later system, known as the *Puranik*, and the Eclectic. The doctrines therein expressed have been obtained from the Mahabarata. They inculcate the doctrines of *Bhakti*, i.e., faith; and exalt the duties of caste above all other obligations, including those of friendship and kindred. Its philosophy is pantheistic; but it claims "adoration as one with the great universal spirit pervading and constituting the universe."*

APPENDIX B.

Comparative Mythology.

Between the mythology of the Hindoos and that of the ancient Greeks and Romans an affinity has been discovered of so conspicuous a character as in the opinion of various competent writers to point to the existence of a distinct connection between them. A few examples must here suffice—

In *Ganesa*, the god of wisdom of the Puranas, we discover some characteristics of *Janus* of the Romans. *Manu* or *Satyavrata*, child of the Sun, otherwise Time personified, represented by *Saturn*.

Yama or *Dharma Rajah*, god of the dead brother of *Manu* or Time, otherwise *Minos*, supposed son of *Jove*. The triple divinity of Brahma, the great law-giver, *Vishnu*, the preserver, and *Siva* or *Mahadeo*, the destroyer or regenerator, as *Jupiter*, "father of gods and men," that trinity being worshipped under various names. As *Siva* destroyed the *Daityas* or children of *Diti* who rebelled against heaven, so *Jupiter*, in his capacity of avenger or destroyer, overthrew the Titans and Giants. As *Vishnu* is sometimes represented as riding on *Garuda*, a species of eagle, as Brahma presented *Siva* with fiery shafts, so did an eagle bring lightning and thunderbolts to *Jupiter*. *Siva* is represented as having had three eyes; a statue of *Jupiter* (*Zeus*) is said to have been discovered at the capture of Troy, B.C. 1184, having a third eye in the forehead, signifying that he reigned in heaven, in the infernal regions, and over the waters. *Siva* also, as *Mahadeo*

* From Dawson's *Dictionary of Hindoo Mythology*.

the destroyer, corresponds with the Stygian *Jove*, or *Pluto*. *Kali*, or Time personified, consort of *Siva*, subsequently to appear as *Proserpine*. Furthermore, in his capacity as regenerator or producer, *Siva* is represented as riding on a white bull, a circumstance which leads to the question, does the myth typify the approach of *Jupiter* in the form of a white bull to *Europa*? Yet another question presents itself: Does *Mahadeo* represented with the trisula prefigure *Jupiter Marinus*, otherwise Neptune with his trident? The veneration paid all over India to the buccinum or conch-shell, especially that in which the convolutions are reversed, recalls to mind the musical instrument of the *Triton*. *Bhawan*, consort of *Mahadeo*, has been reproduced, so it is at least suggested, in *Venus Marina*, and the *Rumbah* of *Indra's* court, who sprang from the froth of the churned ocean, in the popular *Venus* as goddess of beauty, who rose from out of the sea foam, also as *Juno Canixa* or *Lucina* of the Romans. Under the name of *Iswara* she seems to have affinities to *Osiris* and *Isis* of the Egyptians; under that of *Doorga* to resemble *Minerva* as *Pallas*, while the unarmed *Minerva* as patroness of science and genius is considered as corresponding to *Suruswatee*, the daughter of *Brahma* and wife of *Vishnu*. The *Minerva* of Athens was named *Musica*; *Suruswatee* presides over melody, and is usually represented with a musical instrument in her hand.

Cuvera, named also *Vetesa* and *Pancastaya*, the Indian *Plutus*, is represented as being borne through the sky in a splendid car, and is himself described as "a magnificent deity."

Cama, or *Camadeva*, the Indian god of love, was the ideal of *Cupid*, otherwise *Eros*. The Hindoos represented *Camadeva** as riding on an elephant; the *Eros* of the Greeks was mounted on a lion.

Krishna, believed by pious Hindoos to have been an incarnation of *Vishnu*, and to have come among mankind as the son of *Divaci Vasudeva*, in his manifestation as *Gopal*, or the shepherd, was believed to be represented by the pastoral *Apollo*, *Nomius*, or *Pan*. When a boy, *Krishna* slew the terrible serpent *Kaliya*. *Nomius*, who fed the flocks of *Admetus*, slew the serpent *Python*.

* In some representations of his elephant, the body, limbs, and trunk of the animal are composed of the figures of young women, entwined in so whimsical but ingenious a manner as to exhibit its shape. Craufurd, vol. i, p. 112.

Agni (*Ignis*), the personification of fire, named also *Pavaca*, or the purifier; represented as having been uncreate, was one of the Vedic deities, the other two being respectively *Indra*, called also *Vayu* and *Surya*. *Agni* appears to have affinity to the *Vulcan* of Egypt, who was a deity of high rank, whereas the *Vulcan* of Greece, otherwise *Hæphaistos*, was merely a forger of arms. According to other authors, *Viswacarma*, the fabricator of arms used in the wars by the Dewatas against the Assours, otherwise by the good spirits against the evil, more closely coincides with the characteristics assigned to the Egyptian *Vulcan*. The Persians held fire sacred prior to the date B.C. 2066, namely that of Zoroaster. The pyrtanoi of the Greeks were of the nature of perpetual fire.

Swaha, the sacti, spirit, or wife of *Agni*, seems to correspond to the younger *Vesta* of the Romans, or *Vestia*, as the Eolians pronounced the Greek word for hearth.

Indra, or *Iswara*, god of the visible heavens, also the sky and rain, represented as having had a father and a mother; of endless forms; of a golden or ruddy colour; armed with a thunderbolt and a net; his golden car drawn by two tawny horses; attended by his dog, *Sarama* (or the dawn?), himself drinking the intoxicating *soma*, the *amrita*, or water of immortality; his terrestrial residence, the Himalayahs, or Mountains of Snow. In these characteristics, *Indra* is believed to have been represented by Jupiter and Olympus.

Vayu, personification of the wind, and is generally associated with *Indra*. Also called *Pavana*, the purifier, *Gandha Vaha*, the bearer of perfumes, *Satatu-Ga*, the everlasting, and *Vata*, the wind.

The Hindoo *Ayodhya*, or the conqueror *Dionysius*, is believed to correspond to *Bacchus*. The story of Rama and *Sita*, representing the expedition of this hero against *Ravana*, King of Lunka or Ceylon, is believed by some modern writers to have supplied the type of the abduction of Helen by Paris, and subsequent Trojan War. *Surya*, or the Sun, was believed to be represented by *Phæbus* and *Apollo* of the Greeks. *Surya* is represented as sitting in a car drawn by a horse with twelve heads, and preceded by *Arun*, or the dawn. Each of the two sons, *Aswinan*, of *Surya* are considered to have had the character of *Esculapius*, or of *Apollo*, in his healing quality; and, moreover, from *Surya* is considered to have descended the higher Hindoo, or, as they are proudly called, the great Solar race of men. The wife of *Surya* was *Sangya*, the mother of the river Jumna.

Chandra, or the Moon, was considered to be a form of *Isvara*, the god of nature (masculine *Isani*), his consort, in one of her characters the type of *Luna* of the Romans, *Lunus* of the Palmyrans.

Kali, the wife of *Siva*, appears to have been represented by *Hecate* and by *Proserpine*, daughter of *Ceres*, the transposition being accounted for by the fact that the apparent destruction of matter signifies no more than that the same matter is reproduced in a different form. As *Bhawani* she has been already mentioned; other names she bears are *Parvati* and *Durga*. As emblematical of eternity, by which her husband, or time, is destroyed, the representations of *Kali* and *Siva* are for the most part associated in sculptures and pictures. In Egyptian symbolic inscriptions the snake has ever been the emblem of eternity. As *Parvati*, many of the qualities of the Olympian *Juno* occur in *Kali*; she is usually attended by her son *Kartikya*, who rides on a peacock.

Kartikya, with his six faces and numerous eyes, bears some resemblance to *Argus*. He is considered to be the same as *Orus* of Egypt, *Cupid* of the Romans, and *Apollo* of the Greeks. Like the latter, he was skilled in the healing art.

Nared, a son of *Brahma*, has been compared with *Hermes* or *Mercury*.

Lakshmi, daughter of *Bhrigu*, wife of *Vishnu*, and goddess of beauty; named also *Myrionyma*, *Sris*, and *Sri*. Her representations are very similar to those of *Ceres*; also to those of *Venus Aphrodite* of the Greeks, and to *Isis* of the Egyptians. Among the Hindoos *Lakshmi* is looked upon as the goddess of harvests and abundance. She is represented as "sitting upon a lotus, and resplendent as the sun." The lotus (*Nymphaea lotus*) is held sacred to her in Hindostan, as the same plant, or the *Nelumbium*, is also sacred in Tibet and Nepal.

The *Lingam* is believed to have been represented by *Phallus*, son of *Bacchus* and *Venus*, worshipped at Lampsacus, on the Hellespont. The seven lamps used when that emblem was worshipped by Brahmins "exactly resemble the candelabra of the Jews, as seen in the triumphal arch of Titus."*

* Craufurd, vol. i, p. 140.

APPENDIX C.

Mosaic Regulations.

(From Kitto's *Encyclopædia*.)

Section I. Ten laws about animals, clean and unclean, for food. Leviticus xi. 2, 9, 13, 20, 24, 27, 29, 39, 41, 43, 45.

Section II. Ten about uncleanness from child-bearing, and leprosy in person and dress. Lev. xii. 2; xiii. 2, 9, 18, 24, 29, 38, 40, 42, 47.

Section III. Ten about cleansing the leper. Lev. xiv. 2, 4, 5, 11, 12, 14, 15, 16, 20, 21, 32.

Section IV. Ten laws about leprosy in houses. Lev. xiv. 34, 36, 38, 39, 40, 41, 43, 46, 47, 48, 53.

Section V. Ten laws about uncleanness by issues in man. Lev. xv. 2, 4, 5, 6, 7, 8, 9, 10, 11, 13, 15.

Section VI. Ten more on the same subject in women. Lev. xv. 16, 17, 18, 19, 20, 21, 22, 23, 24, 30.

Arrangement of camp and march. Numbers i. 1, 4, 8; ii. 1; iii. 5, 11, 14, 44; iv. 17, 21, 49.

The CHAIRMAN (Sir JOSEPH FAYRER, K.C.S.I., F.R.S.).—I am sure we must all feel that our thanks are due, not only to Dr. Gordon for his most interesting Paper, but also to his son, for so carefully rendering it. It seems to me to be a singularly interesting Paper in so short a space, giving an epitome, as it does, of the ancient history, philosophy and medicine of India. Before making any further remarks I will invite discussion.

Mr. CHUNDRAS SEKHAR SUR.—There is one point in regard to distinction of caste upon which I would like to make a remark. Brahmins eat and drink together, but there is no such thing as an Indian born in one caste rising to or being admitted into another.

Mr. T. H. THORNTON, C.S.I.—All I can do is to bear general testimony to the fact that the Paper is a very interesting *resumé* of facts regarding India. Of late many circumstances, and especially railway travelling, have tended greatly to modify the strict exclusiveness of caste. Strictly speaking no Brahmin should sit in the vicinity of a person of the lowest caste; and I remember when railways were first projected in India it was feared that an enormous number of classes would be necessary in order to enable the different castes to have carriages for themselves; but in practice there is not the slightest difficulty; in a railway carriage a Brahmin of the highest rank will gladly sit next to a Sudra of the lowest caste if he can save sixpence by so doing. I have noted one or two other points in the Paper to which I take exception, for instance, "on the other hand, proselytes are not admitted into any of the families or castes enumerated." Theoretically that is perfectly true, but practically, as Sir Alfred Lynn has shown, in some parts of India the aboriginal races are being admitted in large numbers to castes of Hindoos. They are first admitted into an exceedingly low caste, and after a time by a little payment and intermarriage, they gradually work themselves up into a higher caste. Again the author says at page 231, "The village system of communities is detailed much as it exists at the present day." Well, that is not exactly the case, because there is a very remarkable difference between the communities, as they exist in the present day, and the communities as depicted in the Vedas, and it opens up a very interesting question. In the Vedas the villages are represented as consisting of an aggregate of holdings in severalty, and there is a remarkable omission of what constitutes now a very interesting feature in the villages at any

rate of upper India, *i.e.*, the presence of a large body of proprietary co-sharers of higher proprietary title than many of the cultivators. Well, from the fact that no mention is made of these superior proprietary co-sharers in the Vedas, we infer that these sharers were an after-growth, the result of conquest or purchase or some other form of expropriation; and this is specially interesting because it corresponds in a remarkable degree with certain theories that have been advanced regarding the development of the English manor. It was formerly supposed that the lord of the manor created the village, but modern investigation now inclines to the opinion that the lord of the manor was evolved from the pre-existing village community of separate peasant holdings.

These are one or two points that I have noticed in this Paper; but I would commend it generally for its suggestiveness, as containing a summary of interesting facts, which may lead the reader to go deeper into the subject.

Captain PFOUNDEN.—The interesting Paper we have had shows how a writer of ability can condense into a small space a number of interesting facts, and probably but for want of space we should have had more. I do not rise in a captious spirit, but simply to add one or two remarks that have been omitted from the Paper probably for the reason I have forecast. We must admit that the Veda, or *knowledge*, was transmitted orally for many centuries and only committed to writing long after writing was in common use, and no doubt this Veda led and excluded the castes which had the privilege of this oral transmission, and they very earnestly resisted any efforts to quote the Veda to the *Prukriti* or to give it to the common people.

Professor H. L. ORCHARD, M.A.—I have often thought that the Code of Manu is largely derived from that of Moses. I do not mean to say by that, that it is a mere copy of the Code of Moses, but it is essentially, in feature, one drawn from the Mosaic Code with, of course, additions, modifications, and also corruptions; and the same thing, I think, applies to the philosophy and mythology, which, evidently much earlier than that of the Greeks, may also be traced to some tradition or instruction still earlier in the world's history.

Rev. R. THORNTON, D.D., V.P.—I am not deeply read in Indian philosophy, but it appears to me that the Paper, if I might

criticise it, has attempted too much, for really to do justice to the subject would require a large volume; but at the same time we must all agree that a sketch of this kind is very useful and suggestive. My own view of the matter is that in such a Paper we have shown to us the fact, which I believe the Institute has always contended for, and I have always contended for it here, that man had a revelation from God before His written revelation to Moses. I am aware that it is held by some that the first Divine revelation was given to Moses, and that before that time man was left to shift for himself. The wonderful similarities which we find between the various religions of the world and also between them and the revealed religion of Moses and of the New Testament, appear to point to the fact that there was a primeval revelation, or perhaps more than one procedure by which the Almighty revealed Himself to His creatures, and that that revelation was handed down by tradition and not by writing. The first *written* revelation was that we call the Old Testament. That written revelation was completed as far as it went; but its completion was superseded, or rather supplemented and strengthened by the more perfect revelation through Christ.

I think from the facts in this Paper we may to some extent see in the general principles of primeval revelation existing in Hindoo philosophy, such principles as are written for us in the Old and New Testaments. The resemblances between the customs of the Aryans in India, and the Semites in Palestine, are rather curious, but when we consider that both, most probably, had intercourse with Egypt, I think we may fairly assume that those principles in which Mosaic and other systems appear to coincide, are owing to contact with a third party, namely, the civilisation of Mizraim.

The CHAIRMAN.—I have lived in India for many years, am much interested in all that is Indian, and have read more or less on Indian subjects. There is so much in the Paper, that it is like an index to a series of volumes on the ethnology, history, and science of India.

The subject that specially interests me is that which appertains to medicine, and it is one that must most deeply interest any physician who considers it. I look upon it in a retrospective way. I look back and see what is its condition now, as compared with what it was in former days, and as I do so, I do not think only of the condition of scientific medicine as it now exists in India, but of

the whole course of that branch of knowledge, and compare the time when the Veda was itself written, perhaps 1500 years B.C.

Many years ago, when travelling in Italy, I attended a lecture at one of the Universities, and the Professor of Archæology began in this way:—

“L'uomo e sempre stato e sempre sarà lo stesso.”

Now if ever that were thoroughly illustrated it is so in the condition of the Hindoo. It is true, as Mr. Thornton pointed out, that modifications have taken place, and wherever the Anglo-Saxon race goes, in these days of railways, modifications will take place. The great centres of population are affected, but I believe the Hindoos are now pretty much as they were 1500 years B.C.; how long it may take to mould and alter the whole it is quite impossible to say. Medicine seems to have been taught in India scientifically, with a considerable knowledge of anatomy, and some physiology, gained not by looking at pictures but by dissection, for although a high caste Hindoo would not now dissect, in the old days he appears to have done so. In fact, it has been pointed out by Brahminical authority in Calcutta, where a Medical College is established, that there is no reason why a Brahmin should not study dissection as lower castes do. There was knowledge of disease long before Hippocrates wrote. We, in the West have returned, I hope, somewhat of what we got from the East. We are wont to say we got medicine from the successors of Hippocrates and the Greeks; but it existed long anterior to that. The Greeks themselves probably got it from the Egyptians; whether they got it from the Hindoos or the Hindoos from them it is impossible to say.

Dr. Wise's learned translations of and commentaries on Hindoo writings shows how much they knew about disease, how successfully they treated it, and how much they knew about drugs and poisons, about sanitation even, and about many things which in the middle ages were altogether lost sight of, but which have revived again now, and will, I hope, by degrees be further developed by science. I trust we are now restoring to Indians that which came originally from their own country, and it is satisfactory to know how well they take to it. In the study of medicine Hindoos are quite equal in all they do, in their power of learning, to their European brethren. Their curriculum of medicine is severe, and

the students go through their studies most satisfactorily, pass excellent examinations, and become thoroughly good and trustworthy medical officers. They possess many virtues, and nobody knows it better than I do, for I was one of their teachers for many years, and I have a great personal regard for them. They are a kindly hearted and loyal people, and if you treat them well they will treat you well; but it is a mistake to judge men of one race entirely from the standpoint of another; you must give and take and make allowances. The natives of India come here and compete with Europeans and often take good places. Therefore in dealing with that part of the Paper that relates to medicine, and which naturally interests me most, I cannot help taking the medicine of the present day and comparing it with that of the past, and feel that we have no reason to be ashamed of our common ancestry. We speak of our Aryan brethren and there is nothing in our common ancestry that we have any reason to be ashamed of. When our immediate ancestors were painted savages, paddling about in canoes in England, learned Brahmins were teaching astronomy, medicine, and other sciences, which at that time, with them, were ancient studies.

The Paper is very interesting, and embraces an enormous amount of matter which has given rise to some valuable discussion; therefore I ask the meeting to return a hearty vote of thanks to Dr. Gordon, which I hope will be conveyed to him by his son, Mr. Gordon, who has read the Paper so well.

The vote of thanks was carried *nem. con.*, and Mr. Gordon having, on behalf of his father and himself, cordially expressed his acknowledgments to the Chairman and to the Members,

The Meeting was then adjourned.

REMARKS ON THE FOREGOING PAPER.

The Rev. F. A. WALKER, D.D., F.L.S., remarks in regard to Appendix B, ("On Comparative Mythology,") para. 1 :—The cult of Dionysos celebrated in Greece, especially in Athens, where four annual festivals were held, would appear to have been oriental, and not to have commenced in Greece; and this for many reasons. First—the fact that the tiger, lynx and panther (all Eastern animals), were among the creatures sacred to him, and he hated the sight of an owl, the sacred bird held in special reverence in Greece. Secondly, the so-called Theban Bacchus is often seen, in ancient art, seated on one of these Eastern animals. Thirdly, he is represented as a manly god with a beard long and soft, is commonly called the Indian Bacchus, and is represented as an oriental monarch, clad in Lydian robes richly folded. Fourthly, Smith's Classical Dictionary says the extraordinary mixture of traditions respecting the history of Dionysos seems evidently to have arisen from the traditions of different times and countries referring to analogous divinities, being transferred to the Greek Dionysos. The worship of Dionysos was no part of the original cult of Greece, and his mystic worship is of comparatively late origin. Fifthly, the same authorities referring to the deity's legendary history, that before his return to Europe, (when he visited Thrace, Thebes, Argos, and the Island of Naxos in succession, where he incited the inhabitants of those places to frenzy, discreditable orgies, and acts of violence) he went to Egypt, where he was hospitably received by King Proteus; he then proceeded through Syria, where he flayed Damascus alive for opposing the introduction of the vine; he then traversed all Asia, teaching the inhabitants of the different countries of Asia the cultivation of the vine, and introducing among them the elements of civilisation. The most famous part of his wanderings in Asia was his expedition to India, which is said to have lasted several years. Sixthly, another great argument for the Indian origin of the worship of the Wine-God is the fact that after the time of Alexander's expedition to India, the celebration of the Bacchic festivals assumed more and more their wild and dissolute character. Seventhly, at the theatre of Dionysos, in Athens, in its lowest tier, sixty chairs or more of marble, were reserved for the priests of the different shrines, while the populace all sat in lower seats above—the larger central chair being reserved for the priest of Dionysos; this chair rests on lion's paws, as an emblem of the god. The lower portion of its front is carved with two figures, clearly in Eastern dress, and throttling two winged lions, an additional proof that the worship of Dionysos was imported from the East. I may add that there is no possibility of mistaking the said lions for those of African species.

On the second page of Appendix B, the following passage occurs: "Bhawan, consort of Mahadeo," &c.

It is perfectly true that Isis was represented as the Egyptian Venus, with cow horns, and under the title of the Goddess Hathor or Athor, worshipped accordingly in her celebrated temple at Denderah. But it is no less true that her attributes, legendary history and annual cult present quite as great analogy to the popular myths of the Greek Demeter. Possibly it is not always easy to distinguish between Isis as tantamount to Venus, and again as she is represented and worshipped in her likeness to Demeter.

Among the considerations that serve unmistakably to identify Isis with Demeter. Demeter (= *γηνμητορ*) is the earth-producing mother, or, in other words, the Roman Ceres, the goddess of harvest, and similarly in the temple of Isis at Denderah there are various side chambers appropriated to the offerings of the different nomes of Upper and Lower Egypt respectively, to offerings moreover of fruits of the earth. These offerings were also carried by the priests at their solemn feasts to the summit of the temple by the northern staircase, as betokened by its bas-reliefs. Again Demeter and Persephone are not always together; the daughter spends half the year in the lower regions as symbolised by the alternate appearance and vanishing of earth's annual crop. Similarly Isis and her son Horus live apart; according to Egyptian mythology, each pays the other a visit once a year; one half-year Isis comes up stream to visit her son at his temple at Edfou, and during the next half Horus proceeds down the river to see his mother at Denderah; and in one of the chambers of the temple of Isis were kept the four sacred boats which took part in the procession as so frequently depicted in Egyptian mural painting. I am not aware whether others have remarked on the analogy between Isis and Horus and that of Demeter and Persephone, but it has struck me forcibly. Yet again, Isis is the wife of Osiris, that is to say of the Lord of Amenti, the unseen realm. And similarly Persephone is the bride of *Ζεὺς χθόνιος*, Pluto in other words. Osiris, however, occupies a higher position in Egyptian mythology than that which Hades held in the Greek.

With reference to the last paragraph but one of Appendix B, beginning "Lakshmi," &c.;—The lotus and papyrus are figured together on the capitals of temple columns in Upper Egypt, and dried lotus buds and stalks may be found on the necks of ancient mummies. I have seen a representation of Isis crowned as we may conceive Lakshmi to have been.