

172.B.115.

INDIAN CIVILIZATION AND ITS ANTIQUITY

BY

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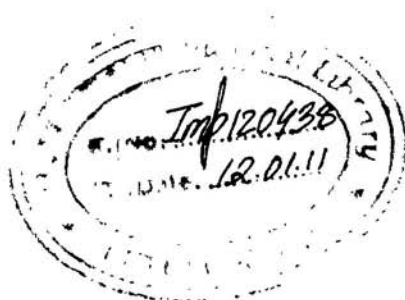
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PREFACE.

The world was created, according to the old Testament, about 4000 years before the birth of Christ. The earlier of the orientalisists, some of whom took to the study of Sanskrit with commendable zeal and industry, set to themselves the arduous task of compiling political and literary histories of India. In so doing, they were confronted with a mass of materials found in the Indian chronicles, called the Puranas, which claim for the Indians a civilization which commenced thousands and thousands of years before the birth of Christ. It is a claim which these orientalisists found it unable to support, in as much as they could not conceive of the existence of the world prior to 4000 B. C. The composition of the Vedas of the Hindus was therefore placed by these scholars between 1500 and 500 B. C., the authenticity of the Puranas was rejected, and the Ramayana and the Mahabharata were treated as mere epics without any historical foundation at all. Advance of knowledge in recent times has served to remove from the minds of present-day scholars the implicit faith in the biblical dogma referred to above. Yet, it is an almost universal belief with the educated people of modern times that the world was created only a few thousand years ago, and that the oldest civilization cannot date farther back than, say, 15 thousand years before Christ. This assumption would seem to be most absurd to those who have entered into the spirit of the ancient Indian culture, unbiased by any judgment passed by modern scholars on the antiquity of such a culture. The idea of the absolute creation of the Universe, out of nothing, at a particular point of time, is more than an ordinary human being can conceive, in as much as it involves an

attribution to God of such human characteristics as desire, want, and striving for the attainment of an wished for object, and thus reduces him to the level of an imperfect and human being. We are, therefore, justified in assuming without entering upon a philosophical discussion of the subject, that the world is eternal with God and creation means nothing more than the re-construction and re-moulding of matter, which, to a certain extent, takes place every moment. If the world is eternal—and it cannot be otherwise—what justification there is for the assumption that the civilization of which we can have only a glimpse, through records of a few thousand years only, is the only civilization known to the world? Is it not quite reasonable to assume that an infinite number of movements of civilization came upon and passed away from the face of the earth? We have, of course, no history of these civilizations, and naturally so. Can history have a record of what takes place during an infinite number of years? Modern people have compiled a history for the last few centuries only. Let them proceed in their present method of compilation for a few thousand years more, and they would find the task to be hopeless. It is physically impossible for a human being to go through a history which contains a detailed survey of all that takes place during, say, ten thousand years, not to speak of a longer period. We may, therefore, safely assume that the idea of keeping a chronological and detailed history of the world must be given up after, say, fifteen thousand years, if not earlier. What would our historians do then? They would, in all probability, cull out of the past history some of the most important facts and arrange them in a method which was followed by the authors of the Indian Puranas. The Puranas are nothing but records of kings, sages, and important events that took place, in some cases, many thousands of years apart from one another. These records have been retained in the

Puranas only on account of their moral, social, and religious significance. The ancient Indians realised the futility of keeping a detailed history of the world which is eternal, and of their own civilization, which, we have every reason to believe, was the most ancient known to the modern world, and had therefore to record ancient events of especial importance in a way which differs from the method followed by the modern historians. That being so, we cannot discard the authenticity of the Puranas and consider them as a collection of mythical legends and anecdotes only.

We look upon the Puranas as having a historic basis. They are, with the Vedas and the Tantras, the most ancient literature of the Indians that have been preserved, after countless acts of destruction of books and libraries by ignorant people. The comparative modernness of the language in which the Puranas and the Tantras were written does not justify the conclusion that they are of comparatively modern origin, in as much as the language of the Tantras and the Puranas have been, for obvious reasons, revised from time to time, and new facts introduced into this group of literature.

According to the Puranas, the world is eternal, creation being taken to mean periodical reconstruction after dissolution. The age of the present Kalpa, *i.e.*, of the world from the time of its last reconstruction to the current year is 1955, 885027 years. This is a figure which is based upon a tradition, as transmitted from generation to generation, through our science, history, and scriptures.

It is not expected that the majority of the modern scholars would accept these views, at any rate, the present generation of them ; but this much can be asserted without the least hesitation that Indian civilization is much older than hitherto it has been considered to be. I propose to furnish the educated public with materials warranting a revision of the ideas hitherto entertained by them with

regard to the antiquity of the Indian civilization. I have touched upon the subject broadly in this paper, under four different headings, *viz.*, (1) Phallism and the spread of Indian culture, (2) Gipsies and the spread of Indian culture, (3) Indian chemistry and its antiquity, and (4) Words borrowed from Sanskrit. Each of these would justify my views that our estimate about the antiquity of Indian civilization is to be revised in the light of a huge mass of materials to be found in Indian books which have not yet been studied at all by modern scholars. As for instance, I may point out that books on astrology and chemistry, the Puranas, and the Tantras have not been studied properly and intensively. It is high time that these books should be studied carefully and their contents utilised with a view to build up a history of ancient Indian culture and civilization. It is a pity that no Indian University has hitherto made any arrangement for the teaching of such subjects as Indian chemistry and medicine, Indian astronomy and astrology, the Tantras, and the Puranas. These are subjects which are more suited to the spirit and genius of the Indians than are some of the subjects on which our educated countrymen have been wasting their time and energy without any appreciable benefit, moral or material, to themselves or to their country.

As regards the extent to which I have availed myself of the works of others, and the portions of the thesis which I claim as original, I have clearly indicated them in their proper places. The following is a rough list of books showing the sources on which I depended mainly for materials for my thesis ;—

1. Encyclopoedia of Ethics and Religion.
2. Encyclopoedia Britanica.
3. Works of Chaucer, Spencer, and other mediaeval English authors.

4. Books on Philology.
5. Some of the Puranas and the Tantras.
6. Books on Indian astronomy and astrology.
7. Books on Indian Medicines.
8. All the available books and manuscripts on inorganic chemistry and alchemy of the Hindus, some of which have not yet been published.
9. History of Hindu chemistry by Dr. P. C. Roy.
10. Chemistry in Iraq and Persia in the 10th century A. D. by H. E. Stapleton M.A. B.Sc. (Oxon).
11. Phallism in ancient worship by H. M. Westroppe and P. S. Wate.
12. Natural History of Language by T. G. Tucker.
13. Life of Paracelsus by Swainson.
14. Life of Paracelsus by Hartmann.
15. Ancient History of the Near East, by H. R. Hall.
16. Virgin of the World by Dr. Anna Kingsford and Edward Maitland.
17. Works of Robert Boyle.

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The 7th March, 1928.

} BHUDEB MOOKERJI.

ERRATA.

			PAGE.	LINE.
Read	"when"	for "whem"	... 4	13
"	समदु	for समन्त 51	6
"	"11th"	for "14th" 73	8
"	"9th"	for "15th" 73	12
"	"evident"	for "evidenced"	... 75	8

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Indian Civilization and its antiquity.

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CHAPTER. I.

PHALLISM AND THE SPREAD OF INDIAN CULTURE.

The Indians have been worshipping the emblem of God, "SIVA", from time out of memory ; but this worship has not been confined all along to India only. There is ample testimony in modern times to the fact that Phallism was prevalent in almost every country, in the dim ages of antiquity. Even to-day, there has not been a total extinction of the rites in connection with phallism from countries like Japan, China, Indonesia, and the Pacific Archipelago. At one time it ran rampant among the aboriginal races of Africa and America, and exercised a considerable influence upon their social and religious customs. The Bible and some other sacred scriptures inform us that in days of yore, phallus-worship found particular favour with the people of Assyria, Judea, Syria, Asia Minor, Babylon, and other countries. Some time ago, several phallic emblems of dieties

Phallus worship has not been confined to India only. It was practised in ancient times in many parts of Asia, Indonesia, Africa, and America.

Reference in the Bible.

Phallic images un-

earthed in
Babylon.

Worship in
ancient
Egypt un-
der different
names.

Phallism
prevailed
almost uni-
versally in
ancient
Europe.

It is still
practised in

were obtained by excavation in Babylon. These were found to bear complete resemblance to the Indian emblem of God, "Siva". In several parts of ancient Egypt, various gods under the names of Khem (akin to Sanskrit, "Kshema," meaning "Siva"), Horus (Sans. "Hara" ?), Osiris (Sans. "Iswara" ?), Sebek (Sans. "Sivaka" ?), Seb (Sans. "Siva" ?), and Sarapis or Seraphis (Sans. "Sarpes" ?), or the same god, under these different denominations, used to be worshipped. In the majority of cases, phallic emblems and, in some cases, tigers and snakes used to be worshipped, in connection with the adoration of the said gods. A lot of phallic emblems are still to be found carved on the walls of the Egyptian Pyramids. It is a matter of common knowledge that Phallism prevailed almost universally in ancient Europe, and that the Christian missionaries had to move heaven and earth in banishing it from that continent. Yet, the rites and practices in connection with phallism have not yet completely disappeared from that part of the globe, even after two thousand years of hard struggle. The habit of worshipping a phallic emblem was so deep-rooted in the minds of the common people of Europe that the ceremonies connected with phallic worship are still observed in Viza (capital of the Thraci

an kings of Greece)* by the Christians as well as the Gipsies of the locality, who are of Indian origin. It has been proved in another chapter of this book that, in ages long forgotten, the fore-fathers of these Gypsies left their primitive home in India, and migrated into the different parts of the world, and especially of Europe. They speak dialects which have mainly been derived from Sanskrit. A lot of phallic emblems are still found to be preserved in several parts of Ireland, and especially inside some of the churches. These images are called "Sheila-na-gig" (Siva linga ?) by the local people. Phallism was prevalent in Italy for several centuries. As a result of excavation in many parts of England and Scotland, a lot of phallic images have been dug out. These are exactly the places where the Roman conquerers of England had built their castles and settlements. It appears from this that the Romans were probably the people who introduced Phallic worship into the British isles. There is plenty of evidence to show that in ancient times phallism figured prominently in the religious practices of the people of Germany and France. It has been ascertained that

Viza in Greece by Christians and Gypsies who are of Indian origin.

Phallic images still preserved in Ireland, and

found in England and Scotland.

Phallism practised in ancient Germany,

* See "Phallism" in Encyclopoedia of Ethics and Religion.

France, and
Lithuania:

the people of Lithuania who speak a dialect containing innumerable Sanskrit words and had retained their heathenism up to the middle of the 14th. century, had pre-eminently been a race of phallus-worshippers till they were compelled to adopt Christianity as a result of their defeat in a fierce and prolonged crusade launched against them by the combined Christian forces of Europe.

Introduced
into Europe,
Egypt, and
Asia Minor,
in connection
with the
worship of
Bacche or
Bacchus
who was represented
as having the
same external
features
as the
Indian God,
Shiva.

Phallism was first introduced into Europe in connection with the worship of the Greek god, Bacche or Bacchus or Dionysus. There was a time when Bacchus was worshipped all over Asia Minor, and especially in Phrygia and Lydia, with great pomp and enthusiasm. In the latter-mentioned places, the god was named "Sabagius" (Sans. "Sabasayi") and Bagaïos (Sans. "Bakes"). In many parts of Greece, the orgies in connection with the worship of this god used to be held at dead of night in temples illuminated with the glare of thousands of burning torches, amidst the revelry of its votaries frantic with wine. In many cases, most abominable practices and mystic rites were performed in connection with such festivals. Among animals, bulls, goats, tigers, and serpents were favourite to this god, who had a sceptre called thyrsus (Sans. trisul?) and a drinking bowl in his hand, and a bull's

horn, called the horn of plenty, hung on his head. The mode of worship of Bacchus and of his symbol, the phallus, is said to have been described in details in a set of secret books called the "Sibylline" books.

Mode of worship prescribed in Sibylline books, not extant.

There is a story in connection with the origin of the word "Sibylline". Once an old woman, named Sibylla, offered to sell a poem, consisting of 9 volumes, to king Tarquinius Priscus for an exorbitant price. On the king refusing to accept this offer, the woman went away and burnt the three out of the nine volumes. She came back to the king and offered to sell the remaining six volumes for the amount originally demanded. This time also the king refused to agree to the proposal of the old woman, who, again, left the king's court, and burnt three more volumes. Again did she approach the king with her offer to sell the remaining three volumes for the price she demanded before. The king, surprised at the strange conduct of the woman, agreed to buy, out of mere curiosity, the remaining three volumes for the price demanded by the woman. These books, which are no longer extant, were held in high esteem by the Romans of old. They are said to have contained a forecaste about the future history of Rome and many other strange matters including the mode of

Story about the origin of the word, "Sybilline."

has long been rejected as a fiction.

Is "Sybilline" a corrupted form of the Indian "Sibling" ?

Traces of Phallism in Tibet and Bhutan.

The prayer-wheel and the sacred text : its meaning.

A strange commingling of Buddhism and Hinduism in Tibet and Bhutan.

phallus worship. According to this story, which has long been rejected as being false and without any foundation, those books were named after Sybilla, the old woman. No one now believes that those books had any connection with the old woman, named Sybilla, who is believed to be a creature of fiction. What then is the origin of the name Sybilline ? It is for us to consider whether the name Sybilline has got any connection with the Indian word "Sibling" or Shiva-linga (Phallus of Siva).

Traces of the influence of Phallism still exist even in Tibet and Bhutan. The Lamas of Tibet are the most devoted to the chanting of sacred texts. During the greater part of the day, these Lamas are found to revolve what are known to be their prayer-wheels and to utter all the time they do so, a sacred text, viz, ओं मणिपद्मे हुँ "Om mani padme hum." The text stands in a very close relation to the worship of the Phallic emblem of the Indian God, Siva. The word "Mani" in the language of the Tantras, means the Phallic emblem of Siva, and "Padma" means the part of phallic image which is known in India to be the "Gouripatta." It appears from the above that there is still a very strange commingling of Buddhism and Hinduism in the religious practices of the people of Tibet and

Bhutan. Those who have been to Darjeeling might have noticed that there are two priests in the temple of Mahakala Siva (in the Observatory hills), one of them being a Nepali Brahman and the other a Bhutia Buddhist. The former performs his worship with the help of sacred texts uttered in Sanskrit, whereas, the latter uses the Bhutia language for the daily worship of the very same God. It has already been said that Phallism was in vogue in Japan also, even during the palmy days of Buddhism in that country. There is another form of religion in Japan which goes under the name of "Shintoism", of which Phallism constitutes a prominent feature. Even to-day, numerous Phallic images are found to be preserved in the Shinto monasteries of Japan.

Phallism constitutes a prominent feature of Shintoism in Japan.

In days of yore, phallic emblems were worshipped in several parts of America, and especially in Mexico, Peru, the Hyti island, etc. On their first entrance into America, the Spaniards found that phallic images were worshipped and preserved carefully in the temples all over the country. A phallic image in Dahomi in Africa is styled by the people as "Lengba", the greatest of the gods.* The word "Lengba" might have

Practised in ancient America, and

in Dahomi in Africa.

* See Phallism in ancient worship by H. M. Westropp and C. S. Wate.

been derived from the Sanskrit "Linga-deba."

Origin of
Phallism.

Is India its
birth place ?

or
did the idea-
occur simul-
taneously all
over the
world,

human
nature being
everywhere
the same ?

The question with which we are now confronted is "In what part of the Globe did Phallism first originate?" Indians in general will naturally come to conclude, from what has already been said, that India is the birth place of phallism, and that it spread, in course of time from India to the rest of the world, especially in view of the facts that it is India where phallism has been systematically practised and is still exercising a very potent influence on the religious lives of the Hindus. However natural and rational this belief may appear to us, we cannot expect the civilized World to accept this theory until a clear evidence is adduced in support of it. On the other hand, some modern scholars are disposed to think that the conception of phallism occurred to the primitive people, all over the world, independent of any suggestion being received by one people from another. The reason on which they base their assumption is that human nature is everywhere the same ; it is therefore natural that the mind of man will act uniformly all over the world. It is a fact which, according to these scholars, can also explain satisfactorily the independence of growth and similarity in character of religious

beliefs and superstitions all over the world. If this is borne in mind, we shall have no justification for believing that a particular country is indebted in this respect to some other country. However cogent and substantial this theory may appear to us, it cannot properly be applied to the genesis of phallism, as will be seen later on. Some scholars have gone a step further and assert that in the primitive uncivilized age, when the power of thinking was still immature, man was incapable of comprehending that there could be any work of creation apart from sexual relations. That is the reason why these scholars think that Phallism had its origin in the uncivilised state of society. If we care to accept this assertion as true, we shall have, perforce, to put implicit faith in Darwin's theory of Evolution, or in other words, we must take it for granted that in the primordial state of society, when men first appeared on the face of the earth, they were utterly uncivilised and led solely by blind impulses of nature, without being acted upon by any thing transcendental or supernatural, and that in course of time, through the instrumentality of natural forces, they succeeded at last in acquiring their present human mind and physique. In the opinion of these scholars, our primitive ancestors,

Did it originate in the uncivilized state of society when creation could not be conceived apart from sexual relation ?

An assumption which follows from Darwin's theory of evolution,

which leaves no room for the existence of God or any other super natural power.

It is an out
and out
materialistic
theory—

a theory
which has
not been
accepted by
great
scholars.

such as Brahma, Manu, Daksha, etc., were mute and barbarous creatures like the ourang outang, and their descendants acquired the power of speech through the blessed agency of natural forces. If we were to give credence to this theory, we must say that neither God nor any supernatural force had ever any hand in the formation and development of man's body and mind. It is needless to say that to many a scholar the forcefulness of this out and out materialistic theory of mundane evolution will appeal very strongly ; but to some of us it will appear to be extremely crude and childish. It might be very difficult to prove the existence of God, but it is not at all impossible to point out numerous indications of the existence of supernatural forces, and their diverse effects. Modern science is powerless to unravel the mystery underlying even an infinitesimal part of the eternal and endless universe. As a matter of fact, Darwin's theory is no longer accepted by the most distinguished of the modern scientists and philosophers. Many of us know how Dr. Martineau and a train of distinguished philosophers have proved it to be untenable, and established its utter worthlessness by a volley of irrefutable logic. However, to avoid prolixity and complexity of details, we refrain from entering into a philo-

sophical discussion of the subject. It would be enough here to mention that if the theories stated above regarding the genesis of phallism were true, the phenomenon of phallic worship would have become more prevalent amongst the barbarous tribes of the modern world, a conclusion which is not at all warranted by facts. India is pre-eminently noted for phallism ; and what do we find here ? It is no exaggeration to say that phallism does not at all prevail among the uncivilized races of India, nor is there any evidence to indicate that it did so, in days of yore. Neither can it be said that it originated from the inordinate lust for sexual gratification of its uncivilized votaries. It can not be said that a predominance of sexuality is a special feature to be noticed among the Indian voraries of Siva, who is never worshipped publicly without being represented by a phallic image. On the other hand, in the majority of cases, the real votaries of Siva are found to be characterised by a strict abstinence and sometimes by a total renunciation of earthly pleasures. These are facts the truth of which has been testified to even by the contributor of the article "Phallism" in Encyclopaedia of Ethics and Religion.

India is pre-eminently noted for phallism, which is practised here by the civilized and not by the barbarous races.

Neither is a predominance of sexuality a special characteristic of the Indian votaries of Siva.

There is another class of ethnologists

Did phallism
originate in
Asia Minor ?

No evidence.

who are of opinion that phallism first originated in Assyria and its neighbourhood, whence it spread to India and other countries in the east, and to Egypt and Greece in the west, but they have not been able to adduce any evidence in support of their assumption. So we need not enter into a discussion of their opinion.

It has now to be ascertained, in what part of the globe phallism first originated, and in this connection, a question which naturally arises in our mind is, how did it come to be introduced into Greece ?

Phallism
first introduced
into Greece in
connection
with the
worship of
Bacche or
Bacchus,

It has already been said that phallism was introduced first into Greece, and then, into the other countries of Europe, in connection with the worship of Dionysus or Bacche or Bacchus. Now, Bacche or Bacchus was not a god of indigenous origin to Greece. His worship, which was imported from elsewhere, was established in Greece, after a good deal of resistance from the people. If Bacchus was not indigenous to Greece, we shall have to trace the country where he came to be adored for the first time. It has been ascertained that, in ages long gone by, the worship of Bacchus was celebrated with great pomp in Asia minor, and especially in those parts of the country which were known by the names of Lydia and Phrygia,

the people of which used to call the god, the "*Indian Bacchus*." It has also been known that the annual return of this god from India used to be celebrated every year in spring time in a great festival held in Mount Ymolus in Lydia. If there is an element of truth in these narratives, we shall have to admit that a god, or a human being regarded as such, had, in days of yore, gone over from India to Asia minor, Greece, and some other countries where he subsequently introduced phallic worship with its attendant rites and ceremonies.

called the
"Indian
Bacche" in
Asia minor

We have next to enquire whether any reference to this "Indian Bacche or Bacchus" can be found in our Puranas* or ancient chronicles. If we succeed in our attempt, there would no longer be any ground for the assertion that the story of Indian Bacchus is only an idle myth having no historical foundation at all. Fortunately, our search in this direction has not been in vain.

Is there any
reference to
this "Indian
Bacche" in
the
Puranas ?

In course of our search, we have, quite unexpectedly, come across a passage in Chapter VI of the Bamana Puranam, which

Yes, there is

The Puranas are of a very ancient origin. They contain records of very ancient facts, considered important, not from the point of view of history but from that of society and religion. They have been revised, modernised, and made up to date from time to time.

The Baman Purana says that "Baka" King of Creetha (crete ?)—an Indian by birth, was one of the pioneers of phallic worship.

throws a good deal of light on the origin of Phallic worship. An extract from the passage is reproduced below :—"First of all, Brahmá selected for his own worship a phallic image of the God Shiva as yellow as gold, and then prescribed four different kinds of images for the four different orders or castes of society. In other words, he prescribed, for worship, a phallus of white colour to be used by the Brahmanas, of a red colour to be used by the Kshatriyas, of a yellow colour to be used by the Vaisyas, and of a black colour to be used by the Shudras. Brahmá also compiled four different kinds of scriptures for use by the four different castes in the matter of worshipping the Phallic Deity. Shaktri, son of Viswamitra, adopted the first mode of worship. Gopáyana was his disciple....The sage Apastamba adopted the third mode of worship. Baka, King of Creetha (Crete ?), a Vaisya by Caste, was his disciple."

It is now clear that Baka of the Purana is identical with Bacche or Bacchus

It will be abundantly clear from the above account that an Indian sage, named Apastamba, was an ardent worshipper of the Phallic Deity, and that Baka, King of Creetha, an Indian Vaisya by caste, was his disciple. That Baka was no other than Bacche or Bacchus of the Greek (and Assyrian) mythology, and "Creetha" was no other

than the island of Crete in the Mediterranean Sea would have to be admitted even by the most sceptic of the human beings. Now we see that according to the Indian chronicles, Baka, King of Creetba and an Indian by birth, was one of the pioneer worshippers of the phallic Deity. The same account is corroborated by chronicles and traditions of the west, according to which, the man or god-man who introduced Phallic worship into Greece, Egypt, Asia minor, and the adjoining provinces was the "Indian Bacche" or Bacchus.

of Greek and
Assyrian
mythology,

It was in Greece and its neighbourhood that Phallism was first practised in Europe. Gradually it spread over the rest of the continent. It has already been said that Phallic worship used to be celebrated with great pomp and splendour in Egypt and Asia minor. That Osiris, the chief of the Egyptian gods, was no other than Bacchus in one of his varied forms, was admitted by the ancient Greek historians. Sophocles has remarked that Bacchus exercised such a mighty influence on the minds of the people of Italy that it would be no exaggeration to say that this god was virtually the only ruler of Italy. This god was found to be worshipped under the name of Hebon (Shiva ?) in Campania. The worship of

called Osiris
in Egypt,

Hebon in
Campania.

Hebon was generally accompanied with that of his wife, Hebe (Shiva ?) who was also known by the name of Kore (Gouri ?) and Demeter (Deomata ?). Bacchus had a especial liking for a bull and a tiger. He carried a trident called Thyrsus (trisul ?) and a drinking bowl in his hands, while a horn of ox was found hanging from his head. This is a description which in every detail applies well to the Hindu God, Shiva. It would therefore not be unreasonable to infer from the above that Shiva, the Hindu God, was identical with Hebon or Bacchus, and that Gouri, the consort of Siva, used to be worshipped in the different parts of the western world under the names of Kore (Gouri), Hebe (Shiva), Demeter (Deomata), etc. Now, the question which presents itself is this : If Baka, the Indian King of Creetha was identical with Bacche or "Indian Bacchus", how was it that Bacche or Bacchus is described as having the same external features as Shiva, the god worshipped by Baka ? The answer to this somewhat puzzling question is this, that Baka (Bacche or Bacchus) himself was not the god Shiva or Hebon, whose phallic emblem used to be worshipped in Greece and other countries. Baka or Bacche (or Bacchus) was the votary of the god Shiva or Hebon, who is repre-

Names of
His consort
tally with
the Indian
names of the
consort of
Siva.

Baka or
Bacchus
assumed all
the external
features of
Shiva or
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god whom
he wor-
shipped.

sented as a god always followed by a bull and a tiger and having a trident and a drinking bowl in his hands, with a horn of bull hanging from his head. In accordance with the instructions given in the Hindu scriptures, a votary should try to assume all the characteristics of the god he worships. Agreeably to this instruction, Bacche appears to have assumed all the external features of Shiva, or Hebon, the god whom he worshipped. In course of time, people came to forget the difference between the worshipper and the worshipped,—between Bacche and Hebon (or Shiva)—and came to identify Hebon with Bacche or Bacchus. To sum up, it was the sage Baka, the Indian King of Crete, who was known by the name of “Indian Bacchus” in Lydia, etc, and came to introduce the worship of the Phallic emblem of the God Shiva (or Hebon) into the western countries. It was he who, surrounded by his ardent followers, frantic with wine, took the lead in the nocturnal revelries held in connection with the worship of the phallic emblem of the God, Shiva (Hebon or Dionysus). The god whose worship was introduced by Baka (Bacche or Bacchus) into the western countries was phallus (Sans. Phalesh), Dionysus (Sans. Dunes), or Hebon (Shiva). The word ‘phalesh’ which,

This was in accordance with the Hindu Scriptures.

Subsequent identification of Baka with Hebon or Phallus,

the God whose worship was introduced by Baka.

in Sanskrit, means one who is a giver of fruits, is, according to Tod, author of Rajasthan, and some other scholars, one of the names of the Hindu God, Shiva. It has already been said that the people of the west came to forget, in course of time, the difference between Bacche (Bacchus) and Hebon—between the worshipper and the worshipped, and thus it was that Bacchus came to be identified with Hebon, and worshipped as the god who was represented, in ancient times, by a phallic emblem almost all over the world, and is still so represented in India alone. The word “Dionysus,” according to Westropp, is a corruption of the Sanskrit “Deonishi” (meaning god of night)—an epithet which may be applicable to “Shiva.” To me the word “Dionysus” is a clear contraction of the Sanskrit Dunesha (दूनेश) which is compounded of the two words, Duna and Isha. The word “Duna,” in the language of astrology, means the conjugal relation as indicated by the seventh house, i. e., the house which is 180 degrees off from the ascendant, whereas “Isha” means one who controls. It does not require much stretch of imagination to understand that the God Shiva should be known by the name of “Dunesha,” in as much as he was believed

Derivation of
‘Dionysus’.

to be the supporter and controller of conjugal relations, the combiner of prakriti and purusha—matter and soul, and the originator of the whole universe.

It is interesting to note that there is a marked similarity between the names of the Indian God Siva and those of the gods introduced into the western countries in connection with phallic worship. A little reflection will make it clear that every one of these names is a contracted or corrupted form of some one of the several names of Siva. The names of the gods introduced in connection with phallic worship into Asia Minor were as follows ;—Chemos, Moloch, Merodock, Adonais, Sabazius, Bacchus or Bagaïos, etc. Of these, "Chemos" is probably a contracted form of Khemes (क्षेमेश), meaning "full of bliss." The word "Siva" also means the same thing. This Chemos came to be pronounced as Khema in Egypt. In Sanskrit, Khema and Siva are synonymous. Both "Moloch" and "Merodock" are corrupted forms of "Mrirak" (मृडक), one of the names of Siva. It has been pointed out by Westropp that the word "Adonais" is a contracted form of "Ardha-naris" which is a combination of the images of Siva and His consort "Gouri." The word "Sabazius"

Marked similarity between the names of the Indian God, Shiva, with those of the gods introduced in connection with phallic worship, into Asia Minor,

is possibly a contracted form of "Saba-sayi," one of the names of Siva. "Bacchus" (or Bagaïos) has already been shown to have originated from Baka. It may also have originated from Bakesha (meaning, in Sanskrit, the god worshipped by Baka). The names of the gods introduced in connection with phallic worship into ancient Egypt were :—Khem, Horus, Osiris, Sebek, Seb, Serapiz or Saraphis. It need hardly be pointed out that these are only the corrupted forms, respectively, of Khema, Hara, Iswara, Sibaka, Siba, and Sarpesha—names which are still applied to the Indian God "Siva." Khem, the aforesaid god, was called in Egypt the father god, whereas Maut (Sans. "mátá", meaning mother), his consort, was called the mother god. The same remarks apply to the gods introduced into Greece, Italy, etc., in connection with Phallism. These were Dionysus, Phallus, and Hebon, corresponding respectively to Dunesh, Phalesh, and Shiba—names of the Indian Shiva. The female gods who were worshipped in Greece, Italy, etc, as consorts of Hebon were Cteis, Kore, Hebe, and Demeter, corresponding respectively to Sati, Gouri, and Deomata—names of the goddess "Gouri"—the consort of Shiva.

Egypt,

Greece,
Italy, etc.Names of
goddesses in
the West
correspond
to those of
the consort
of Siva.

It has already been said that the books

which contained the details of procedure followed in connection with the worship of Hebon, Hebe, etc, were called the Sibylline books. That being so, it would not be improper to hold that the word Sibylline was only a corrupted form of the Indian word "Siba-linga," meaning a phallic image of Siva. The African name, "Lengba" appears to be a corruption of the Sanskrit, "Linga-deba," meaning a phallic god.

Such being the case, sibylline cannot but be a corrupted form of Sib-ling (Siva-linga).

In view of all the facts discussed above, we have no hesitation in concluding that Phallism originated in India, whence it spread all over the world, in after ages. It can therefore no longer be maintained that the phenomenon of phallic worship originated amongst the savages in ancient times. The theory of an independent growth and parallelism of ideas does not stand in the case of Phallism.

Phallism must have originated in India.

In tracing the origin of Phallism, we have lighted upon a piece of historical fact which would be of supreme importance to us. We have found that in pre-historic ages, an Indian Vaisya, named Baka, a disciple of the Indian sage, Apastamba, reigned in the island of Crete, in the Mediterranean sea. Most probably, the Vaisya (merchant) king came to the island of Crete in course of his commercial adventures and

succeeded in conquering the island, where he reigned as king. It is also probable that the island of Crete was a colony of the Indians and the fore-fathers of Baka had settled in that island, although they did not cut off their spiritual and social connections with India. Whatever that may be, it is quite clear that, in pre-historic ages, and long before the dawn of Greek civilization, Indian merchants used to go to Europe and establish kingdoms in that continent. We have also a sufficient reason to conclude that Indian sages also used to go abroad in those days in order to initiate people into the tenets of the Hindu creed.

Conclusion :
Indians of
old used to
go to Europe
even in
pre-historic
times on
commercial
and cultural
expeditions.

CHAPTER II.

THE GIPSIES AND THE SPREAD OF INDIAN CULTURE.

The surprising discovery of Sanskrit by Sir William Jones and some of his less reputed contemporaries was followed by a tendency in some of the European scholars to assign to this national language of India such an antiquity as has not yet been claimed for any other language known to the world. Of course, the estimate of relative antiquity which these early orientalists felt constrained to make with regard to Sanskrit and the Indian culture falls very far short of the idea of antiquity entertained by the Indians themselves with reference to their ancient language and civilization. Side by side with this tendency, there prevailed, almost universally, a kindred notion that India was the original abode of all social, religious, and artistic culture, found existing in the west. This view is borne out by testimonies given not only by the ancient and mediaeval historians but by the Scriptures themselves. Of late, there has arisen, among Modern European scholars, a counter-tendency to view the aforesaid theories with a bit of cynicism, and to consider the views of the early orientalists,

Some of the earliest orientalists considered Sanskrit and the Indian civilization to be very old, though not so old as the Indians themselves consider them to be,

yet, a band of modern scholars are not prepared to accept even the

moderate
views of
those
orientalists
and deny the
possibility
of the East
ever
contributing
to the
civilization
of the West.

Object of
present
enquiry :

such as Sir W. Jones, and Schlegel, as exaggerated, so much so that Dr. Tucker complained that both Biblical and profane history had made inveterate a habit of looking to the East for the origin of all civilization found existing in the West. Attempts have been made in recent times to refute the theory of Asia being the primitive home of the so-called Indo-European stock. I am not however going to enter here upon a discussion as to the relative merits of these conflicting theories, and to offer my views on the tenableness of a theory of primitive Indo-European stock and their common abode. All that I propose to attempt here is to point out a most important, but hitherto unnoticed, source from which, in ancient time, the West received its civilization from the East. It is to be remembered that the days of advancing strange and uncritical hypotheses on insufficient data are no more. If we maintain that the West is indebted for its civilization to the East, or vice versa, we shall have to substantiate our statement by adducing evidence mainly drawn from language, literature, fragments of history and mythology, and consuetudes which are unfortunately the only authentic evidence now at our disposal.

The first thing which calls for a serious

consideration in the programme of the proposed investigation, is the question whether and how far the Gipsies have influenced the movements of European civilization. In some of the ordinary books on comparative Philology, we find it stated that the Gipsies are of Indian origin and speak an Indian dialect. Unfortunately, our information about the Gipsies is still very meagre ; none of the hitherto published books deals comprehensively with all the different dialects into which the language of the Gipsies has subdivided itself. Yet, a careful examination of the materials at our disposal cannot but produce an impression that the Gipsies have played a more important part in the history of European civilization than has hitherto been recognized.

The Gipsies are a nomadic tribe, scattered all over Europe. They are also to be found in Egypt, Asia Minor, Armenia, Persia, China, and even in America. The number of those living in Europe is estimated at not less than 700,000, in addition to those who have already been assimilated with the people among whom the Gipsies have lived for centuries. The origin of the Gipsies was a matter of controversy till the year 1782, when their language, which had hitherto been regarded as a thieves' jargon,

Whether and how far the movements of western civilization have been influenced by the Gipsies who are of Indian origin and still speak an Indian dialect.

They are a nomadic tribe scattered all over Europe and other places, and are more than 700,000 in number at present.

When and
from what
part of India
did they
migrate ?

was seriously studied, and found to be an Indian dialect. It is now admitted on all hands that the Gipsies are of Indian origin, and that in "Romani" (the name given to the language of the Gipsies) we have an Indian tongue. The questions which now present themselves for solution are these :—When and from what part of India did these people migrate ? To what of the several modern Indian tongues is the Gipsy dialect specially traceable ? We understand that these questions have engaged the attention of several orientalists, who have not yet been able to arrive at any definite conclusion. All that they have been able to assert is that the Gipsy dialect "stands in the relation of a sister, not a daughter, to the seven principal new Indian Dialects. Its forms are after all more primitive than theirs ; sometimes than those of Pali or Prakrits."* The following instances, which can be multiplied indefinitely, will be found interesting in this connection :—

Gipsy Hasta (hand)—	Sanskrit Hasta—	Pali Hatha,
„ Kasta (wood) —	„ Kasta —	„ Kastà.
„ Otha (lip)—	„ Otha—	„ Otha.
„ Tras (fear)—	„ Tras—	„ Tas.

* The quotations are from the Encyclopaedia Britannica, 9th Edition, on which I have drawn largely for my materials.

Now, it will be worth our while to proceed to a critical examination of the Gipsy dialect and to consider its relation with some of the modern Indian tongues. Our attempts in this direction are likely to be thwarted by an insufficiency of data, for the Gipsy language, as we find it now, is not the original tongue which the Gipsies brought with them from India. Naturally enough, the Gipsies have borrowed largely from the languages of the countries in which they have lived for many a century, so much so that many of the Gipsies know no cases or verb endings other than those of the lands of their adoption. Moreover, our knowledge of the modern Gipsy dialects, which are said to be not less than fourteen in number, is still very scanty and meagre. Yet, the little that I have been able to pick up warrants, I think, our arriving at a provisional conclusion as to the exact relation in which the standard Gipsy dialect stands to the modern Indian tongues. The following is a specimen of the language current among the German Gipsies :—"Miro Bara Devala dela berschindo"—i.e., My great God gives rain. It will be interesting to note that this particular sentence will appear to be familiar, on account of its affinity to their own dialects, to most of the modern Indians speaking dialects derived from Sanskrit ; but

Difficulties that stand in the way of a smooth enquiry :

(1) The Gipsies have borrowed largely from foreign languages,

(2) Our knowledge of the Gipsy dialects, more than 14 in number, is very scanty.

A provisional conclusion is therefore all that is now possible.

Specimen of a Gipsy dialect.

It is intelligible even to the most of the Sanskrit-

tongued
Indians of
modern
times.

Examination
of each of
the words
constituting
the sentence
quoted
above shows
that the
Gipsy
tongue is
the most
akin to the
Bengali
dialect.

the question, to which of these dialects the Gipsy tongue, as exemplified in the above sentence, is most akin, cannot be solved without a careful examination of each of the words constituting the sentence quoted above. Let us therefore proceed to put each of these words to a minute scrutiny, and pass our verdict. The first word, *viz.*, 'miro' is retained intact in Nepali only, while it has undergone slight variations in its form in Bengali (which has 'mor' as its equivalent), Hindi (which has 'merà' as its equivalent), and the other Sanskritic dialects. The next word 'bara' is pre-eminently Bengali, while it has undergone a slight modification in Hindi and some other dialects, in which it has taken the form of 'Barà'. Next comes the word 'Devala,' which is more allied to Bengali in its form than to any other dialects. If we are to render the two words 'Bara devala' into modern Bengali, they will stand thus, 'Bara deva.' No other dialect than Bengali can claim such a close similarity with the Gipsy tongue in regard to these two words. The fourth word, 'dela' is still in use without any modification in some parts of Murshidabad and in the north eastern part of Burdwan, while, elsewhere in Bengal, it is in use with a slight variation in form, *viz.*, dila or dilà.

The Nepali substitute for the word is 'dia' and the Hindi substitute is 'diā.' With regard to the last word, *viz.*, 'berschindo,' it will be seen that it is a slightly corrupted form of the Sanskrit 'barsa-bindu,' *i.e.*, rain drops. Nowhere in India do the illiterate people now use this compound word, in order to indicate rain drops. Every educated Indian can, of course, understand it easily, but, it is only in literary Bengali, which approaches more nearly to Sanskrit than any other modern Indian dialect, that we can still use the expression without any charge of obscurity or pedanticity on our part. That being so, the Gipsies, especially those in Germany, appear to have migrated from Bengal, rather than from any other part of India.

An examination of some of the customs still retained by the Gipsies may also confirm us in our belief in the Bengali origin of these people. We are told, as for instance, that a German Gipsy may not cook for four months after child birth. This is a custom the spirit of which is still observed, more or less, everywhere in India. A Hindu woman is regarded as unclean, and is not allowed to touch everything belonging to the household, for sometime after child birth. But, as regards the exact duration of the period

Some of the customs still retained by the Gipsies confirm us in our belief in the Bengali origin of these people

for which the custom in question is to be observed, it is the same as that which still prevails in some parts of Bengal, where the time limit is 3 to 4 months. We are told of another custom still in vogue among the German Gipsies, *viz.*, a vessel touched by the skirt of a woman's dress is considered defiled. It is notably in Bengal that the skirt of a woman's garment is accounted unclean, so much so that if, by chance, the skirt were to touch the head of a man, it would be thought unlucky ; and in that case, he would try to avert the evil by treading it. Such customs, however, are gradually disappearing before the growth of a tendency to depend exclusively on commonsense, especially in those parts of Bengal where the influence of modern western civilization is growing more and more markedly prominent. In view of all this evidence, we are justified, I think, in concluding that the forefathers of the Gipsies lived in the plains of Bengal, which they were compelled to leave, under circumstances which I do not propose to examine here.

The Gipsy
tongue
appears to
be a very
ancient
Bengali
language.

We can therefore assert without much hesitation that in the Gipsy tongue, at least in that current in Germany, which appears to have been affected very little by foreign elements, we have a very ancient Bengali

tongue, more ancient than anything found in the manuscripts of ancient Bengali literature hitherto discovered. It is hoped, therefore, that our increasing acquaintance with the Gipsy dialects will throw more light on the state of the early Bengali language.

There are, no doubt, certain other facts which may equally claim for the Gipsies a Behari origin. We are told that the Gipsies call their males by 'Rom' and their females by 'Romni.' "Ramani" is the general Indian name for a female; so, there is nothing noteworthy in this epithet; but the word "Rom" will present an appearance of supreme importance to the philologists. It will be seen that the word has proved to be a puzzle to the orientalisists. It is connected by G. A. Paspatis with the name of the Indian god "Ráma", while Miklosich identifies it with the Sanskrit 'dome' or 'domba', a low caste musician. But neither of these conjectures is correct. Let us see whether the word is still in use in any part of India. The reply will be in the negative; but, one who has an intimate acquaintance with modern Indian dialects will not hesitate to declare that the Gipsy 'Rom' is still in use in a slightly modified form, in Behar, where the epithet for a gentleman is

Facts which can claim for the Gipsies a Behari origin.

Gipsies call a female by "Romni" and a male by "Rom."

"Ramani" is still the general Indian name for a female, whereas "rom" is used at present only in Behar (in a slightly

modified form, viz, roumá

(रौमा)—

a contracted form of "ramya" (meaning a beautiful person) to indicate a gentleman,

'Roumà' (रौमा), a contraction of the sanskrit 'Romya' (the beautiful), exactly as 'Babu' (contraction of "bhabya," the gentle,) is in Bengal. Derivations of both these words, *viz.*, 'Babu' and 'Roumà,' have been a matter of controversy with the Indian philologists. None of them has hitherto hit upon the true solution that both 'Babu' and 'Roumà' denote the very same thing, *viz.*, a respectable person, the former being a contraction of 'bhabya' and the latter that of 'romya.' Each of these is, therefore, employed by common people to denote a man of noble birth. Denoting, as they do, the idea of a beautiful and gentle person, both these words point to a period of the Indian history, when the dark-coloured aborigines presented a very sharp contrast to the newly arrived Aryans of a very handsome appearance. It appears that such an epithet was in frequent use in the early history of the Aryan colonization in India. But, with the gradual incorporation of the aborigines into the Aryan society, though at lower strata, the social difference between the two races was not much felt. The result is that such an epithet does no longer exist outside Bengal and Behar; and even in those provinces, the epithets have lost their original significance. All

an epithet
coined in
ancient
times to
denote an
aryan as dis-
tinguished
from an
aborigines.

these facts converge to the conclusion that the Gipsies migrated from Bengal and Behar ; and probably at a time when these two adjoining provinces had a common tongue. Even if we suppose that at none of the stages of the linguistic development of India, had these two provinces a common tongue, we shall have to admit, at any rate, that the Gipsies migrated from both the provinces, and especially from the tract lying between the two.

Whatever that may be, they left India at a time when the distinction between the Aryans and the Aborigines was still observed very keenly and with much ostentation. This agrees well with the view of Bataillard, who maintains the pre-historic origin of the Gipsies. The same conclusion cannot but force itself upon every one familiar with the spirit of Indian tongues.

Enough has been said to show that 'Romani' approaches Sanskrit more nearly than even 'Pali.' Yet, a little more discussion of the subject will not be found quite uninteresting here :—

The Romani 'bearengaro' (Sanskrit, 'baryankara') means a sailor ; and Romani 'bearo' (Sans, 'barya' derived from 'bari' *i.e.*, water) means a ship. Similarly, Romani

The Gipsies appear therefore to have migrated from a tract of land lying between Bengal and Behar, at a time when the distinction between the arjans and aborigines was still observed very keenly and with ostentation.

A conclusion which agrees with the views of Bataillard who maintains the pre-historic origin of the Gipsies.

Romani or the Gipsy language approaches more nearly Sanskrit than Prakrits do.

Examples.

‘Petulangaro’ (Sans. pittalankara) means a smith (from pital, brass), and Romani ‘sivamangaro’ (Sans. sibamankara, *i.e.*, the maker of a thing sewn) means a tailor.

In all such words, the inflections are peculiar to Sanskrit only and not to Prakrits. Again, the Romani ‘Ishom’ (I am) approaches Sanskrit ‘Asmi’ more closely than the Prakrit ‘Ahmi.’ In view of all these facts, Miklosich’s theory that the emigration could not have taken place till the Prakrits were formed, can not be maintained. Of course, there is no denial that there is “some agreement of Romani in its phonetic laws and system of case-endings with the modern Aryan languages of India,” but such an agreement is inevitable from the nature of the case. Since, Sanskrit passed into Romani, which, in its turn, developed into Prakrits and, modern Indian dialects, it is natural that there should be some agreement in case-endings and phonetic peculiarities between Romani and the modern Indian dialects, as between Sanskrit and Romani. Hence, we are led to conclude, from more than one reason, that Romani is the modern development, in foreign environments, of a language spoken by the people of India especially of Bengal and Behar, long before the Prakrits came into being. The Gipsies

The Gipsies
appear
therefore
to have
migrated
from India
before the
formation of

appear, therefore, to have migrated from India not later than 1000 B.C.

the Prakrits
i.e. before
1000 B.C.

The question then presents itself, when did these people appear for the first time in the history of Europe? Nothing has hitherto been found to gratify our curiosity on the subject. There are of course a few doubtful references to the Gipsies in some of the writings of the 8th or 9th century A.D., but we have not yet come across any definite mention of the Gipsies in the history of Europe, prior to the 12th century A.D., which has therefore been considered by some of the European scholars to be the probable date of the entrance of the Gipsies into Europe. Taking for granted that the Gipsies appeared in Europe about the 12th century A.D., after they had left India at least 1000 years before the birth of Christ, we are naturally led to ask what these people were doing in the period intervening, *i.e.*, before we meet them in the history of Europe. In view of the fact that the Gipsy dialects contain a good many words which are decidedly of Persian and Armenian origin, it is admitted universally that, in course of their migration, the Gipsies had to pass through Persia, Armenia, and some other adjoining lands. It is not therefore quite improbable that the Gipsies had lived at

They entered into Europe presumably about the 8th century A.D.

Where had they been from, say, 1000 B.C. to 1000 A.D.?

Their language contains several Persian and Armenian words. They had probably lived for several

centuries
in Persia,
Armenia,
Egypt,
Phoenicia,
etc. where
many of
their
descendants
still live.

Number of
Egyptian
Gipsies,
who are
of non-
nomadic
habits, are
about
100,000 at
present.

Egypt,
Phoenicia,
etc. must
have
received
at least a
part of their
reputed
civilization
from the
Gipsies.

The name
Gipsy or
Egypsy was
given to
them as they
said that

least for 2,000 years in Persia, Armenia, Phoenicia, Egypt, and some other adjoining-lands. Descendants of the Gipsies are still to be found in all these countries, and specially in Egypt and Asia Minor, where their number is estimated at about 100,000. The Egyptian Gipsies, unlike their European kinsfolk, are found to lead a non-nomadic life. It will not therefore be quite dogmatic to assert that the Egyptians, Phoenicians, and Babylonians, who are said to have attained to a high pitch of civilization at a very early age, received at least a part of their civilization from the forefathers of the Gipsies, who had migrated from India at a pre-historic age, and had settled down in all these countries. Whether Egypt, Phoenicia, Babylon, and Chaldea were indebted to the Gipsies for all the civilization these countries could boast of is more than can be safely asserted; but it is proved, beyond the shadow of a doubt, that the Gipsies had lived for many centuries in some of the countries lying between India and Europe; and carried with them to those countries at least a part of the Indian culture. It is said that the name 'Gipsy' was given to these people by the Europeans on account of their connection—real or supposed,—with Egypt. The Gipsies are said to have maintained,

on their appearance in Europe, that they came from Egypt, or according to another version, from a country which they called the 'Little' Egypt (Phoenicia or Babylonia?). For several centuries, the Europeans were satisfied with this history of the genesis of the Gipsies; but of late, they have come to call these statements of the early Gipsies in question, on the ground that these people are evidently of Indian origin. "Thus Gipsy or Gypsy itself ('Egypsies in the 16th century)," says the *Encyclopaedia Britannica*, "magyar Pharaoh Nepick (pharaoh's people), and Turkish 'pharaonic,' preserve the belief in its Egyptian origin, a belief which finds no confirmation except in the casual resemblance between 'Rom' and Egyptian 'Rome' (man)." What the European scholars have hitherto ignored is the fact that it was quite possible for the Gipsies to have been Egyptians as well as of Indian origin. There is no reason to disbelieve that the earliest Gipsies, on their arrival in Europe, called themselves Egyptians; otherwise the name "Egypsies" would not have been given to them. It is for us to consider whether the Gipsies told a deliberate lie or they were justified in calling themselves "Egypsies." It will not however be very easy, at this distance of time, to ascer-

they were
Egyptians.

At that
distance of
time they

could
not call
themselves
Indians.

tain whether and how far the earliest Gipsies, on their entrance into Europe, had any memory of India which their ancestors had left many centuries ago. It was at least 2,000 years since the ancestors of the earliest European Gipsies had left India. It is not therefore quite unreasonable to suppose that they had little or no memory, when they found themselves in Europe, of India being their primitive home. Even supposing they possessed a very nebulous idea that their ancestors had come from India, it was not possible for the Gipsies to claim India as the land of their birth. It was quite natural that they would name, as their original home, some other country where they had lived for such a considerable length of time. As they maintained, and we have no reason to suppose otherwise, that they had come from Egypt or Little Egypt, they had surely come from Egypt, Phoenicia, Babylon, and the adjoining lands, where they had lived for centuries. No other conclusion can be drawn from the foregoing data. The resemblance between the Gipsy 'Rom' and the Egyptian 'Rome' is not merely casual, as maintained by the Encyclopaedia Britannica. This resemblance points no doubt to the fact that both the

The
Egyptians
also call
their males
by "Rom"
(Gypsy
Rome).

The
Egyptians
and the
Gipsies

Gipsies and the Egyptians were of the same origin.

are of the same origin.

The recent discovery in Egypt of an image of the Hindu Goddess, "Durga," (with an inscription at the base, "Duggamma," corresponding to Bengali "Durgama") cannot but lend support to this view. It will also be interesting to note that it is in Bengal that the Goddess Durga is worshipped more extensively than in any other province of India. This strengthens our guess that the Gipsies are of Bengali origin. The Egyptian 'Rome' and the Gipsy 'Rom' is nothing but the Indian 'Roumá' or 'Romya.' The earliest name given to Egypt was Misar or Misra, which is assuredly an Indian name, and so is Nile, i.e., blue, the name given to the great river. These are not Arabianised Indian names, but are pure Indian words which had been in use long before the Arabs took possession of the country. For 'Nile' the Arabs substituted their own name, when they established their sway in Egypt. It follows therefore that the Indians came into contact with Egypt, at a certain period of the pre-historic times ; and their intercourse with the original inhabitants of the land gave rise to a mixed race, as the name "Misra" (i.e., mixed), seems to imply. An

The recent discovery in Egypt of an image of the Hindu Goddess 'Durga' supports this view.

attempt will hereafter be made to enter into a minute examination of the subject and to consider whether India contributed, to an appreciable extent, to the civilization which grew in Egypt, Phoenicia, Babylonia, and the adjoining countries.

S o m e
political
disturbance
must have
compelled
the Gipsies
to leave
Egypt, Etc.
and to take
refuge in
inhospitable
Europe.

For the present, we rest content with the broad fact that the Gipsies were the descendants of those Indians who had domiciled themselves in all those countries, and that it was some political disturbance of a serious nature (of which we meet with many in all these lands in mediæval ages) that constrained them to kick the dust of the land of their adoption off their feet and take refuge in Europe, in spite of the inclement rigours of its climate and the obdurate inhospitability of its people.

Even in
degeneracy
they have
shown signs
of a very
intelligent
race.

I shall next consider what role the Gipsies played in the growth of civilization in Europe. We are told that in spite of the most cruel and inhumane treatment to which the Gipsies have been subjected by the people of Europe for several centuries, these unfortunate people have not failed to show, even in the present state of their hopeless degeneracy, signs of a very intelligent race. "Everywhere Gipsies ply an endless variety of trades. In Egypt, they monopolize the art of serpent charming,

in France and Spain they sit as professional models Everywhere the men have three principal callings—workers in metal, musicians, and horse-dealers Gipsies have long been famous as copper and iron smiths in South Eastern Europe, where their horse-shoes are reckoned unrivalled. In England, the surname “Petulangro* smith, alone recalls the day when Gipsies surpassed the Gentile in the Farrier’s craft. Liszt ascribes to the Gipsies the creation of Hungary’s national music. “The Gipsy’s favourite instrument is the violin (Sanskrit, “Bahulin”), but few are the instruments he has not successfully essayed.” Their women are pleasant dancers. “Quick and versatile, all Gipsies readily adapt themselves to any state of life; they have so wonderful a gift of tongues that formerly it was reckoned against them for a proof of sorcery.” It will appear from the foregoing remarks that the earliest Gipsies were a highly cultured people and brought with them at least a portion of the Indian culture which they naturally disseminated throughout Europe, at a time when that continent was deeply immersed in barbarism and superstition. *It*

They have been famous as good smiths, snake charmers, musicians, etc.

They created Hungary’s national music.

Quickness, versatility, adaptability to any state of life, and wonderful gift of tongue are their special characteristics. Knowledge of metal was introduced into Europe by the Gipsies.

* Sanskrit “Pittalankara”, from pittala—brass. The word “Petal” has acquired a secondary significance in England, viz., horse shoe.

has almost universally been admitted that the knowledge of metal was introduced into Europe by the Gipsies. Such was the magnitude of the influence exerted by the Gipsies on the early European societies that the country Roumania has taken its name after "Romani" and not after Rome, as is generally supposed to be the case.

Roumania
has been
named after
"Romani"—
the Gipsy
tongue.

"Scarce one of the folklore of the Gipsies has yet been published but its counterpart may be found in Grimm's, Ralston's or other collections of European folklore." This resemblance of Romani to Gentile may, according to the Encyclopædia Britannica, be satisfactorily explained only by the fact that the European nations have received their stories from the Gipsies.

Europeans
received
their folk
lore from
the Gipsies,

The marked resemblance of many of the European words to Indian ones has hitherto been explained by the theory of a common origin—the assumption of a common Indo-European stock from which both the Aryan Indians and the Europeans have descended. Without questioning the validity of the theory, at this early stage of my investigation, I should state that an examination of the Gipsy words at my disposal has made me believe that the Gipsies have contributed largely to the enrichment of European vocabularies. That the Europeans bor-

who have
contributed
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the enrich-
ment of
European
vocabulary.

rowed a great many of their words from the Gipsies is evident even on a superficial examination of the Gipsy dialects, hitherto available to us. At present, our knowledge of the Gipsy dialects is far too scanty to warrant an exhaustive treatment of the question, and we shall have to wait for further materials before the final conclusion is arrived at ; but the materials already at our disposal will be sufficient to justify the assumption of the indebtedness of the Europeans to the Gipsies for the development of the former's language. Let us refer to a few instances which can be multiplied indefinitely :—

A few instances of the linguistic debt owed by the Europeans to the Gipsies :—

(1) The infinitive verb in Sanskrit ends invariably in 'tum' as in kartum, jatum, etc. This 'tum' is changed into 'te' in Bengali, as in karite, jaite, etc. It will be interesting to note that this "te" is also in use in the dialect of the Gipsies, e.g., Gipsy "te ja"—Bengali, "jaite"—to go, Gipsy "te kerra"—Bengali, "karite"—to do (make). It will be seen that the position of 'te' in the Gipsy dialect is not the same as it is in Bengali. While an infinitive verb ends in 'te' in Bengali, it is not so in Romani, in which 'te' is preceded by the verb. In other words, the order of the verb and the particle 'te' is reversed in Romani.

The normal sign of infinitive in Anglo-Saxon was not the preceding 'to' as it is in modern English, but the ending 'an' which was subsequently changed into 'in' or 'ien' in mid-English. It is only in the English of the second period (A.D. 1100 to about 1250) that we find that 'to' is sometimes used before infinitives. We meet no doubt with the word 'to' in Anglo-Saxon, but it is in a different sense, viz., in the sense of motion, rest at, etc., and sometimes to form adverbs. It is, therefore, quite possible that the particle 'te' which is the sign of infinitive in Romani has passed into the English 'to', at first as a sign of dative infinitive, and subsequently as that of an infinitive proper.

(1) Gipsy
"te" has been
transformed
into the
English "to".

The contrary assumption that the Gipsy 'te' has been borrowed from English 'to' is disproved by the fact that the Gipsy 'te', as stated above, is the same as the Bengali 'te' which is only a variation of the Sanskrit 'tum.'

(2) Let us pick up a sub-sentence from the dialect of the Welsh Gipsies. It runs as follows :—

(2) English
"mad" has
been derived
from the
Gipsy
"matay"
(Sans.
matta).

Te ker tomen Matay (Bengali, Karite tomake matta or matal; Sanskrit, kartum twum mattam)—to make you drunk (mad). Does it not appear that the word 'mad' has been derived from the Gipsy 'Matay' ?

(3) Similarly, Gipsy 'bootee', meaning "work" (Sanskrit *britti*) is akin to English 'booty,' meaning "spoils" (of war or plunder).

(3) Sans.
'britti'
= Gipsy
"booti"=
Eng. 'booty'.

(4) Gipsy 'tras' (Sanskrit 'tras') meaning "fear" may have given rise to 'terror.'

(4) Eng.
'terror'=
Gipsy 'tras'.

(5) Gipsy 'ishom' (Sans. *ashmi*) i.e., 'I am,' may have been transformed into 'I am.' It will be seen that the word 'am' is not found in early English.

(5) Sans.
'ashmi'=
Gipsy
'ishom'=
Eng. 'I am'.

(6) The word 'devil' (Old English, *devel*) has evidently originated in the Gipsy 'devel' (god). No wonder that the God of the Gipsies who were looked down upon as heathens and sorcerers should be given a very low character, leading to the conception of an anti-divine being existing in mere fiction.

(6) Sans.
'deva'
= Gipsy
'devel'=
Eng. 'devill'.

(7) It is evident that the word 'Barge' has been derived from the Gipsy, 'bearo' (Sanskrit, *Barya*), meaning a ship.

(7) Sans.
'barya'
= Gipsy
'bearo'=
Eng. 'barge'.

Innumerable examples of a similar nature can be cited ; but I refrain from doing so, till I am in possession of a comprehensive information in regard to all the Gipsy dialects.

But what has already been stated leaves very little room for doubt that the Gipsies have played a very prominent part in the spread of civilization in the west.

CHAPTER III.

INDIAN CHEMISTRY AND ITS ANTIQUITY.

In his "Chemistry in Iraq and Persia", Mr. Stapleton has observed that most of the knowledge regarding metallic and inorganic Chemistry found in Indian treatises actually originated from outside India. He has based his conclusion on the fact that Ar-Razi, the Persian Chemist, wrote a little earlier than the 10th century A.D. the date assigned by Dr. Sir P. C. Roy to the composition of what he considers to be the earliest work on

Mr. H. E. Stapleton M. A., B. Sc. (Oxon), Director of Public Instruction, Bengal, has been taking much interest in ancient chemistry. His illuminating paper on the "chemistry in Iraq and Persia in the tenth century A.D." (*vide* Memoirs of Asiatic Society of Bengal, Vol. VIII. No. 6) which he has written in collaboration with the late R. F. Azo and Shamsul-ulama H. Hidayat Hossain, has been devoted to a critical study of the works of the celebrated Persian chemist and physician, Ar-Razi, who died late in the first quarter of the tenth century. In making a very able and careful survey of the work of Ar-Razi, Mr. Stapleton has been forced to conclude from a comparison of the facts that have been brought to light in his paper with those given in the History of Hindu chemistry by Sir P. C. Roy "that the earlier and possibly autochthonous system of Indian alchemy based almost entirely on the use of vegetable juices was superseded sometime between 500 and 1000 A.D. by a system of external origin which was

primarily based on the use of mercury", and that most of the knowledge regarding metallic and inorganic chemistry found in Indian treatises on alchemy actually originated from outside India.

Hindu Chemistry, viz., Rasa-ratnakar of Nagarjuna.

Mr. Stapleton has based his conclusion mainly on the ground that Ar-Razi and some of his Persian predecessors were acquainted with a good deal of metallic chemistry before the composition of what he considers, on the authority of Sir P. C. Roy, to be the earliest treatise on the metallic chemistry of the Hindus, viz. Rasa ratnakara, which, according to Dr. Sir P. C. Roy, was compiled in the tenth century A. D. Mr. Stapleton, however, admits that Ar-Razi was acquainted with Charaka and Sushruta, the two well-known treatises on the science of vegetable chemistry and medicine of the Hindus, and even made use of them in his medical works. It is, therefore, only in the field of metallic chemistry and alchemy, and not in the field of vegetable chemistry and medicine, that Mr. Stapleton claims priority for Ar-Razi and a few of his more ancient countrymen.

He however holds a different view about the organic Chemistry of the Hindus.

This is a view taken by Mr. Stapleton prior to the publication of my Rasa-jala-nidhi (Ocean of Indian chemistry and alchemy), a

Mr. Stapleton's work was published before the

publication
of my *Rasa-
jala-nidhi*,
in which
I have
claimed
a great
antiquity
for Indian
Chemistry,
organic and
inorganic.

comprehensive and scientific treatise on the subject, meant to be completed in about 10 volumes, of which the first two only have been out. In the preface of vol. 1 of my book, I have maintained that chemistry and alchemy began to be cultivated by the ancient Indians even from the dawn of Indian civilization, which, according to the Puranas, took place sometime after the commencement of the present Kalpa, *i.e.*, about 1950,000,000 years ago. This will appear to be incredible to many people.

Whatever that may be, the report of Mr. Stapleton's scholarship and love of culture, and specially of the interest he has been taking in ancient chemistry made me present him with a set of my publication which he has kindly appreciated. He has, however, made the following remarks, in respect of my claim to the antiquity of Indian chemistry:—
“What everybody is anxious to obtain is some historical proof that there was a metallic Ayurveda before the time of the Muhammedans; or whether mercury preparation, for example, came to be known in India only after the time of the celebrated Persian physician and chemist, Ar-Razi.”
Mr. Stapleton had the kindness to present to me a copy of his valuable work, referred

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quarter of
the 10th
century
A.D.

to above, which I have studied with much interest and profit.

In order to satisfy Mr. Stapleton, whom I regard to be an excellent type of a modern scientist and a chemical historian of great ability, I propose to deal with only a few of the points justifying my conclusion that metallic chemistry and alchemy, based on the use of mercury, was known to the Indians, long before the time of 'Ar-Razi, who died late in the first quarter of the tenth century A.D. :—

Charaka, Sushruta, and their predecessors.

There have been, from time out of memory, four different schools of medical treatment, flourishing side by side in India, *viz.*, treatments with (1) mercury and metals, (2) vegetable drugs (3) spells and incantations, and (4) surgical instruments. Both Charaka and Sushruta belonged to the second and the fourth classes of physicians, and have all along been the most popular, and widely known, though by no means the best and the earliest, of Indian authors of medical treatises. The cheapness of vegetable drugs and the facility of preparing such drugs are some of the reasons which account for the popularity of Charaka and Sushruta. Belonging as they did to the organic school

Charaka and his predecessors, Bhela, Harit, etc. belonged to the herbal school of medicine, and paid greater attention to vegetable drugs than to minerals ;

yet they
have made
use of
several
metals
and other
minerals.

of Ayurvedic chemistry, both Charaka and Sushruta paid more attention to herbal than to metallic drugs, and did not encroach much upon the domain of the metallic chemists. Yet, the medicinal use of metals and minerals was not quite unknown to these compilers. Both of them were acquainted with the medicinal use of many of the metals and ores. There is a distinct reference to the use of mercury in Sushruta, although Charaka is silent upon it.

They
flourished
in the
prehistoric
age.

The diction and style of Charaka approaches more closely to the Vedic language than to the language used in such books as the Ramayana and the Mahabharata. It appears therefore that Charaka flourished in the pre-historic age.

The same
remark
applies to
Sushruta
also who
has been
referred to
in the Maha-
bharata,

The same remark also applies to Sushruta. There is a clear reference in the Mahabharata to Sushruta, son of the sage Viswamitra, who learnt the science of medicine from Divodas, king of Kashi, and compiled a medical treatise in his own name. There is a sufficient evidence to show that Sushruta, referred to in the Mahabharata, and Sushruta, the author of the famous compilation are one and the same person.

This leads us to an enquiry into the age of the Mahabharata, which was undoubtedly composed long after the Sushruta Sanhita had

been composed and widely known. There is a well-known passage in the Mahabharata, which furnishes some clue to the probable date of the composition or recasting the great epic, *viz.*,

माघोऽयं समन्तप्राप्तो मासः

सौम्यो युधिष्ठिरः—इत्यादि ।

The gist of this passage is that Bhishma died just on the close of the month of Māgha (*i.e.*, the month in which the sun was in the sign of Capricornus) and that it was exactly the day on which the winter Solstice * took place in that particular year. To arrive at a proper understanding of this passage we shall have to digress upon the domain of elementary Astronomy.

Astronomers have conceived a great circle running through the heavens from east to west, which is called the equinoctial line, because, whenever the sun in his apparent course through the heavens comes to this circle, days and nights are equal all round the earth. This happens twice a year. At other times, the sun declines from the line, sometimes to the north and sometimes to the south. Similar is the case with other planets, but none of the planets

which contains a passage saying that Bhishma died just on the close of Māgha—on a winter Solstice.

Equinoctial line.

* Winter Solstice is the day when night is the longest and Summer Solstice is the date when day time is the longest in the year.

The Zodiac
and the
signs.

ever reach beyond 10 degrees on either side of the equinoctial line. Hence, another great circle is conceived in the heavens extending ten degrees on each side of the equinoctial circle, within which are confined all the planets. This circle is called the Zodiac and is divided into 12 equal parts of 30 degrees each, called the signs, *viz.*, (1) Aries (Mesha), (2) Taurus (Vrisha), (3) Gemines (Mithuna), (4) Cancer (Karkata), (5) Leo (Sinha), (6) Virgo (Kanya), (7) Libra (Tula), (8) Scorpio (Vrischika), (9) Sagittaris (Dhanus), (10) Capricornus (Makara), (11) Acquarius (Kumbha), and (12) Pisces (Meena).

Two ways of
taking the
starting
point of the
Zodiac.

There is a difference between the way in which the Europeans take the starting point of Zodiac (*i.e.*, the commencement of Aries) and that in which the Indians do it. There was, of course, a time when day and night were equal on the 14th of April. This was when the ecliptic or sun's track in the Zodiac crossed the Equinoctial line at the beginning of the fixed star, "Aswini". Indian astronomers take the starting point of Aries from that point, whereas European astronomers take the starting point of the Zodiac and of the Aries, for a particular year, from the point where the ecliptic crosses the Equinoctial line in that year. At present,

day and night are equal on the 22nd of March and the crossing point of the equinoctial and ecliptic has preceded about 22·8 degrees from its original position when day and night were equal on the 14th April. This is what is meant by the precession of the equinoxes by 22·8 degrees from its original position when day and night were equal on the 14th April. It follows then that the beginning of Aries and, for the matter of that, of every other sign is fixed, according to the Indians, whereas, it varies according to the Europeans. At present the starting point of Aries is about 22·8 degrees behind the point which is taken by the Europeans as the starting point of that sign. The Indian year therefore commences on the 14th of April and the duration of the 12 months (solar) is calculated according to the apparent coincidence of the sun with the 12 signs. The month of Mágh (solar) is the month when the sun appears to be in the sign of Capricornus, calculated according to the Indian method.

Precession
of the
equinoxes.

In the light of all these explanations, let us see what the passage quoted from the Mahabharata indicates. It tells us that winter Solstice took place on the thirtieth day of Mágha, and that was the day when Bhishma

Winter
Solstice
took place
on the 30th
of Mágha
when
Bhishma
died. In

the current year it takes place 52 days earlier. The Mahabharata must have been composed about 1816 B.C., at the latest.

expired. In the current year, winter Solstice took place on the 8th of Pousa (i.e., the month when the Sun coincides with the sign Sagittaris, calculated according to the Indian method, explained above.) The winter Solstice, therefore, took place in the year of Bhishma's death about 52 days earlier than it takes place at present. Astronomically, this difference of 52 days can take place only in $\frac{52 \times 60 \times 60}{50}$ or 3744 years. The compo-

sition of the Mahabharata, therefore, appears to have taken place about 3744 years back or 1816 B.C., at the latest.

If we are justified in drawing the above conclusion, Sushruta must have been famous and widely known before 1816 B.C. It will therefore not be unreasonable to assert that Sushruta must have flourished prior to 2,000 B.C. The native tradition assigns a far earlier date to this author.

Bhela, Charaka, Sushruta, etc. were only compilers and not original authors.

As regards Charaka, his language is more archaic than that of Sushruta. Hence, it is believed that Charaka preceded Sushruta by several centuries. Charaka was, however, not an original author, but a mere compiler. His treatise is nothing but a synopsis of the highly voluminous works of Bhela, Agnivesha, Harita, etc., who preceded Charaka by several centuries. These authors were also

acquainted with the use of metallic medicines, as will be evident from a reference to the works of Bhela, recently published. Of ancient India, we have no history in the proper sense of the term. It is therefore very difficult to ascertain the dates of such authors as Bhela and a long line of his predecessors. The only course left open to us is, therefore, to rely upon the Puranas which assign to these authors such ancient dates as would not be accepted by the modern scholars.

It would be interesting to note in this connection that not even the slightest portion of the medical principles and pharmacology found in Bhela, Charaka, etc. has been discarded by later authors as incorrect or defective. If this fact is borne in mind, the question which would naturally arise in our minds is this—could such a highly developed system of chemistry and medicine (mainly herbal), as found in Bhela and Charaka grow all on a sudden? The reply is, of course, in the negative. The experimental stage of Indian Chemistry and medicine must have covered many a century of observations, experiments, and formation of hypotheses and theories.

Whatever that may be, a careful study of Sushruta, Charaka, Bhela, etc. cannot but prove beyond the shadow of a doubt that

Nothing in Bhela, Charaka, etc. has been proved to be incorrect.

This shows that Indian Chemistry, organic and

Inorganic,
was more
ancient
than those
authors.

the ancient Hindus possessed a highly developed knowledge of chemistry and medicine, organic and inorganic, many thousand years before the time of Ar-Razi.

Chemists of the Metallic School.

An attempt
to identify
some of the
Chemists
mentioned
in Rasa-
ratna-
samuch-
chaya.

We shall next turn our attention to the chemists who were pre-eminently of the metallic school. In doing so, we can do no better than to make an attempt to identify as many as possible of the chemists and authors of chemical treatises mentioned in the Rasa-ratna-samuchchaya, a book probably compiled in the twelfth century A.D. (see below). The author of this book says that his compilation was based on the treatises of the authors named below, as well as on many other treatises of minor importance :—

(A)

(1) Adima, (2) Chandra-sena, (3) Ravana, king of Lanka, (4) king Rama Chandra, who killed Ravana,* (5) Kapali, (6) Matta,

* There are two different readings on this point, viz.,

१। लङ्केशस्तस्य घातकः ।

२। लङ्केशश्च विशारदः ।

The chemist, according to the first reading is Ramachandra. He is "Visharada," according to the second. In view of other evidences showing that king Ramachandra was a distinguished chemist, we have accepted the first reading.

(7) Mandavya, (8) Bhaskara, (9) Shurasena, (10) Ratnakosha, (11) Shambhu, (12) Satvika, (13) Narabahana, (14) Indrada, (15) Gomukha, (16) Kambali, (17) Vyari, (18) Nagarjuna, (19) Surananda, (20) Nagabodhi, (21) Jasodhana, (22) Khanda, (23) Kapalika, (24) Brahma, (25) Govinda, (26) Lambaka, and (27) Hari.

The twenty-seven persons named above were renowned authors of chemical treatises as well as great Siddhas or chemists themselves.

These were
great
chemists
and authors.

(B)

(1) Rasankusha, (2) Bhairava, (3) Nandi, (4) Swach-Chanda Bhairava, (5) Manthana Bhairava, (6) Kaka-chandiswara, (7) Bāsu. deva, (8) Rishyashringa, (9) Kriya tantra samuchchayi, (10) Rasendra tilaka, (11) Jogi, (12) Bhaluki, (13) Maithila, (14) Mahadeva, (15) Narendra, (16) Ratnakara, and (17) Hariswara.

The above 17 were better known as compilers of chemical treatises than as original chemists.

These were
compilers of
chemical
treatises.

Bagbhat, the compiler of "Rasa-ratna-samuchchaya" says that he consulted the treatises of all the authors named above. It is unfortunate that most of these treatises

Most of these works are no longer extant.

have been lost to us. To compile a systematic history of Hindu chemistry appears therefore to be a hopeless task. We shall however try to utilise the materials available to us at present, and deal with only those of the authors named above who have not yet passed completely into the region of oblivion.

(1) *Adima.*

He is the earliest of the Chemists whose works were extant at the time of Bagbhat, the junior, (12th century A.D.).

He was known to the Sabians also as the earliest of the Chemists.

He appears to be the earliest of the Siddhas and to have left a treatise which was extant up to the time of Bagbhat, at least. His reputation appears to have spread beyond the boundaries of India. We find in page 399 of Mr. Stapleton's book that there was a belief prevalent amongst the Sabians that the science of alchemy was bestowed by God upon Adimum, the 'Shith'. We are inclined to identify the Indian Adima, the Siddha or Sidh with the Sabian Adimum, the Shith. The epithet of Siddha or Sidh has two meanings in India, *viz.*, a prophet and a chemist. In the latter case, it is a contraction of Rasa-Siddha. The Sabian "Shith" appears to have the same significance and is only a corruption of the Sanskrit word "Siddha". According to the Indians, "Adima, the Sidh" was the

first of the chemists, whereas, according to the Sabians "Adimum, the Shith" was the first of the chemists. Such being the case, it will not be unreasonable to infer that the doctrines of Adima, the Siddha, who was manifestly an Indian, came to be spread, in course of time, amongst the Sabians also, who appear to have a cultural connection with India, even from the pre-historic times. We find in Charaka that one of the several sages who attended a medical conference, which was held by the sages in India at the time of Bharadwasa, was the great sage Kankayana of Balkh. The name Kankayana is evidently of Sanskrit origin. We also find in the Puranas and in the Ramayana and the Mahabharata that there was a close social intercourse in the pre-historic ages between India and the territories to the west of India, such as Afghanistan, Balkh, etc. As for instance, Gandhari, the mother of Duryodhana was the daughter of the King of Kandahar. Soma Dutta, King of Balkh came to attend a Shradh ceremony at Mutra in India. He was a devout worshipper of Siva. His son Bhurishrava became an ally of Duryodhana and fought in the great war at Kurukshetra which took place more than 5000 years ago. In all probability, all these territories formed a part of India in

Proof of cultural and racial connection of India in ancient times with Kandahar, Bactria, etc. is to be found in the ancient books.

those days, at least from the racial and cultural point of view.

Adima, according to the ancient Sablans, was a pupil of 'Akhnuh' who was probably "Ushanash" or the sage Shukra of the Hindu Chronicles.

We also find in Mr. Stapleton's book that Adimum, the first chemist, obtained his doctrine from "Akhnuh" who may be identified with the sage "Ushanash" or Shukra who was a great scholar and physician, and is said to have attained mercurial body even during his life time. It will be seen in the Puranas that the sage Shukra, although a Brahman by birth, came to be a spiritual guide and preceptor of the javans or non-Indians and of the Asuras or people who did not belong to the race of the Aryas. It is to be pointed out, in this connection, that the letter "S" is often pronounced colloquially as K; as for example, Vrisha (meaning bull) is pronounced as "Vrikh." No wonder, therefore, that Ushanash has been pronounced as "Akhnuh".

(2) *Chandra Sena.*

Chandra Sena, the founder of the Chandra dynasty, may be identified with Chandra Sena, the forger of the

The second name in the first list is that of Chandra Sena. He appears to be the chemist king who forged the famous iron pillar of Delhi, which, according to the short inscription embossed on it, was erected by king Chandra Sena on the mount of Visnupada (in Gaya). This king Chandra