No branch of traditional Indian art has suffered more, in an artistic sense, by contact with European influence than that of the gold and silversmith. The customs of the East with regard to the giving of presents and the sporting proclivities of the British race will probably always keep alive a steady demand for gold and silver work, in the shape of presentation caskets for addresses, and race cups or other rewards of athletic or sporting prowess. In this class of work the skill of the Indian goldsmith and the cheapness of his labour should enable him to regard European competition with equanimity. Modern European attempts to improve upon hereditary Indian ideas of art have failed, just as signally as have our nineteenth century endeavours to excel or even rival the artistic achievements of our own forefathers. We need not conclude that the cause of these failures must be attributed to a degeneration of public taste. In the sixteenth century—that epoch so glorious for art—it is highly improbable that the public at large were much better informed in matters of art than is the case now. But in those days artists and art workmen formed a guild that is a caste in themselves. They worked for the public it is true; but the public did not assert the authority over them in matters of taste as they do now. Probably art critics even then existed; the patrons of art, perhaps, asserted themselves as much as they do now in the nineteenth century. But the traditions of art were then too strong to be broken by the caprice of fashion or the whim of a patron. Art had
not sunk to the level of a trade, and art workmen were not compelled by public opinion to supply designs to suit every taste.

When public taste first began to assert itself in India, it pronounced Indian art to be out of date, and in need of regeneration through the study of European models. Unfortunately for Indian art, the European models which the native artisans were invited to study were not the masterpieces of the Middle Ages, but the inanities of the beginning of the nineteenth century. Presentations, testimonials, race meetings, gymkhanas, and regattas brought most business to the existing gold and silversmiths' firms, who of course executed their orders in accordance with the public taste of those days. But within the last twenty years a general improvement in taste has taken place in Europe and has made itself felt in India. It is now generally admitted that art-work produced in India should be Indian. This is a great step in advance; but there are examples of modern Indian gold and silversmiths' work containing horrors which might make Cellini turn in his grave. The painstaking, even painful attempts of the designer to give an Indian aspect to his work will be evident at the first glance. The palm tree, the tiger, the elephant, the monkey, and the cobra, are all conspicuously introduced. There are panels with minute details of Indian life and scenery, scrupulously copied from photographs. The finish, where only mechanical imitation is required, is most praiseworthy. But for artistic expression, for beauty of form or feeling, for ornamental design, you may look in vain. Everything of this class is banal, meretricious, and ugly—so many ounces of precious metal made hideous by blundering designers or misguided workmen.

Many of these atrocities have been perpetrated by Indian workmen, for the most part of the goldsmith caste, who have inherited great technical skill from generations of ancestors who followed the same occupation. They worked under European foremen, who, in their way, are also very skilful. Why, then, do we find such deplorable results? Chiefly because the European foremen have no knowledge of the principles of art design: they are skilled mechanics without artistic instinct. The native workmen, generally, possess inherited artistic feeling; but they have not been allowed to follow the old traditions of their craft. Without knowledge of the principles of art, taken out of their accustomed groove, without sufficient force of character to find a new path for themselves, they have gone hopelessly
astray. The blind lead the blind, with the usual result. If the foremen had been artists, or the native workmen had more force of character, we should probably have had a new and very interesting development of Indian art. The Taj Mahal, at Agra, is an instance of how European and Oriental ideas may be harmoniously blended, so as to form a tolerably original and beautiful style of art. The creations of Indo-European combinations of the last generation are certainly neither original nor beautiful.

The remedy for this state of things rests entirely with the public—Indian as well as European. Public taste has so far advanced as to demand good Indian art instead of inferior European. It should now go a step further, and take care that it gets it. If the manufacturing firms of the large towns will not supply it, there are goldsmiths in almost every village in India who can do so. They will give you, perhaps, clumsy hinges, ill-fitting screws, locks that will not be persuaded to open, joints that gape like an oyster in the oven; but their artistic instinct, inherited from hundreds of generations, has not been wholly blunted; their cunning fingers will make the gold and silver more beautiful with the magic of art. Municipalities, which are frequently voting sums of money for presentations to distinguished visitors, might help much in encouraging and preserving genuine Indian art by seeing that the money is spent more judiciously than is generally the case now. Many other public bodies might do the same. Wealthy Indian noblemen, high Government officials and others, who take an interest in sport and athletics, could exercise much influence in the same direction. If the large manufacturing firms once began to feel a movement of this kind they would be the first to reform themselves. Thus Royal visitors, departing Viceroy’s and Governors, and other distinguished personages, need no longer carry home with them such hideous mementoes of India, as used generally to be inflicted on them. Perhaps it would not be too much to expect, that the improvement in artistic quality would lead to an increased demand in the European and American markets, especially for high class silver work. Any field which gives a prospect of further employment for silver is worth cultivating by all who are interested in India.

G. B. Havell.

The last two sentences of the above express a very reasonable anticipation, and have an important practical
bearing; but there is one artificial obstacle in the way, which must be removed. There can be no "increased demand" in this United Kingdom for Indian gold and silver plate, however artistic, and however much, in the case of silver, the raw material may be cheapened, until the system of compulsory hall-marking, with its clumsy assay process, shall be abolished. This impediment to the free sale of Indian silver and gold art wares in the country—and those to which it might re-export—has more than once been mentioned in this column. At last, we trust, there is some hope of getting this embargo on Indian sunars' work removed. The Council of the East Indian Association, in July, sent to the Secretary of State for India in a memorial all the information and argument needed to condemn the present compulsory system. We subjoin extracts from that document:—

The Council and members of this Association, during many years past, have made great efforts to remove the impolitic restrictions that so long checked the importation and free sale in this country, of the various products of gold and silver plate, and art-ware made by the Indian hereditary craftsmen. They gladly acknowledge that much has been done, and much attempted to be done, to remedy these restrictions.

After description of the peculiarly adverse effect of those restrictions in excluding Indian plate from the open market, the Memorial thus concludes:—

The Council beg to state that, in their opinion, and in that of trade experts whom they have consulted, the remedy for these impolitic restrictions is very simple. In the first place, the practice of hall-marking in the United Kingdom should no longer be compulsory; and, secondly, there should be no longer any restrictions upon the free importation of Indian made plate.

The quality of such plate, if desired to be hall-marked, should be ascertained by means of the modern and scientific process of the touch-stone, or touch-needle, as practised in various assay offices on the Continent, a process which, being as effective as the scrape and parting assay, involves no injury whatever to the finest of fine finished work.

In conclusion, the Council would urge that in view of the fall in the gold price of silver, it is in the highest degree impolitic to maintain laws which may limit its absorption for manufacturing purposes. This is not a time when any artificial impediment should stand between the indigenous handicrafts of India and such spontaneous demand for those products that exist, or may arise in the United Kingdom.

On behalf of the Council of the East India Association,

LEPEL GRIFFIN, Chairman.
Many of our friends will remember the large copper vase as a fine specimen of Indian repoussé work, prepared at the instance of Mr. E. B. Havell, Superintendent of the Madras School of Art. This work was done by an artisan, who, like many others, had been reduced almost to despair by neglect and absence of demand for the produce of his hereditary handicraft. We are glad to learn that this fine example of artistic metal work has been purchased for the Indian Museum at South Kensington.

The subjoined extract is from the Native Opinion of Bombay, an Anglo-Marathi journal of old standing and well conducted. Though the wording of the paragraph is somewhat quaint, its matter shows discrimination and good sense. In this way it may serve as an illustration of that sort of intelligent criticism of the objects and methods of our Society, which we wish to elicit from the Indian Press generally. And this all the more so, when the writers will follow up their general observations by citing such special instances, as may be met with in their respective districts, of art-work handicrafts that are decaying, and of others that may be revived or preserved:

Society for the Preservation of Indian Art.—This Society, which owes its existence to a noble English lady, has recently displayed considerable activity in giving a fresh start, as it were, to most of our dying arts. The attention of some along with hers has been engaged on finding ways and means wherewith to preserve Indian arts in all their distinguishing characteristics, and with this view an attempt is being made to induce Native Princes to take the work of a revival in their hands. Already one Rajput Prince has done much in that way, and others may be tempted to pursue the same course. But the revival of our art means such patronage as will enable, may, tempt, the artist to stick to his characteristic craft. Without efforts in this direction, therefore, the artist must give up his old models and slide down into new ones. To us the change seems inevitable, because those who can pay for the luxury are decidedly for new models, so that the maintenance of a national characteristic is an impossibility. The needs [also the means] of the community, particularly in the Mofussil, are very limited, one result of this being that the cultivation of arts is dying of inanition. Nor is the generality of people sufficiently educated to understand that without their patronage there can be no revival. Of course, pessimism in every matter is bad, but it cannot be denied that without herculean efforts nothing may be done. The direction chosen as a means to give the requisite stimulus is the right one, and efforts on that line alone may crown the Society's efforts with success.
The remark, "already one Rajput Prince has done much" to assist the objects of the S.E.P.I.A., may be taken to refer to H.H. the Maharajah of Jeypore, whose liberality in this respect is beyond praise. There are besides other Rajput princes, such as the Chief of Kotah, who are doing their part to further the work of the Society. Also, as our records show, there are chiefs and other public men in southern India, on the Madras side more especially, who are doing the same. We trust these examples will be followed more abundantly.

In our July number a brief summary of the proceedings at the Annual Meeting of S.E.P.I.A. was given; and since then a full report, including the text of Sir James Linton's address, has been circulated to the subscribers. The following notes on the meeting have appeared in the Indian Spectator (Bombay) from a Correspondent in London; and it is thought they may serve to set forth the subjects, there spoken of, in a popular form:

The S.E.P.I.A. had a good field-day, on the 18th, on the occasion of its Annual Meeting, held at the Imperial Institute and presided over by Sir James D. Linton, who is the chief of the Painters in Water Colours. His address, though mainly from the fine art stand-point, was replete with the doctrine that true decorative and other arts must be indigenous and cannot be imported or acclimatised as an exotic. This view he confirmed by quoting two or three telling passages from Ruskin, to the effect that the artist whose work is to endure must be in accord with his race and its traditions; and this, as you know, is the doctrine and practice which the S.E.P.I.A. ever strives to uphold and give effect to on behalf of your hereditary artisans. Apart from this practical side of the subject, there are two general principles affirmed by Sir James, which might serve for a theme by the President who may open the next show of the Bombay Fine Art Society, and which, if duly pondered over and applied by the judges of the pictures then presented, may even be helpful towards right decisions: these are—(a) the sense of true harmony in colour is so universal in mankind that a collection of works of true art of the most diverse kinds and purposes gathered from every country under the sun—of which he instanced a sufficiently varied group—could never offend the natural taste or grieve the eye of the instructed observer; but (b) with form it is quite different: that must be in accord with the racial instincts, the traditional bias of the country where it is produced. These two principles your critics and connoisseurs must trace out and apply at their leisure. Later on, Sir George Birdwood ventured to apply this dictum as to form in art to the highly and sometimes strange conventional modes in which Indian decorative art has become subject to the archaic and anthropomorphic con-
ceptions of Indian mythology. But, as you know, it is not easy for us laymen to apply Sir George’s transcendental doctrines of this sort to Indian carpets, chintzes, metal work of sorts, wood-carving, and architectural decorations. And yet this enumeration indicates the wide field which this Society has, with so much temerity, set itself to cultivate.

One of the new recruits, who came forward on this occasion, was Mr. George Beechcroft, who, as a member of “that much-abused body the London County Council,” confessed that the only claims he had to stand on the S.E.P.I.A. platform are that he had for grandfather a notable servant of the old Company, one of the Melvills, and that he had recently enjoyed a sort of globe-trotting tour through India. However, he made a good practical speech touching on what he has seen there as to the efforts towards technical education, which remarks, though rather beside the mark on this occasion, may be useful for your promoters of industrial progress. He, also, spoke of the lack of information he found amongst Anglo-Indians as to the art wares of India, and the mistakes they often make in patronising the wrong sort, showing the great need there is for the objects of the Society to be carried out more generally in India. Then, Mr. F. Fawcett, a Madras Civilian, who has well caught its spirit, gave several interesting anecdotes of his experience in seeking out and encouraging the struggling workers in handicraft art. Sir Charles Turner, always fluent and apt, gave certain piquant illustrations of the mistakes that have been made under South Kensington and other exotic influences in leading Indian artisans astray.

As to the work done or attempted by the Society during the year, you will find it in the Report; though many of your readers must, and others ought, to have followed that work as noted monthly in the Indian Magazine & Review—a serial which, on this and other grounds, ought to have much more general support on your side than it receives. Mr. F. H. Corbet, of Ceylon, moved the vote of thanks to the Council of the Imperial Institute for its hospitality in placing the rooms at the disposal of the Society. As you may be sure, strong appeals were made for more general and generous contributors to the funds of the S.E.P.I.A.—an appeal which no doubt you will duly pass on. Due reference was also made to the constant and persevering efforts of Mrs. David Carmichael who has been the life and soul of the Society.

There is another instance of neglect of Indian art which it may not yet be too late to have set right. One of your generous Bombay citizens has given a few thousand rupees for the purpose of supplying mural decorations for the British Indian Conference room at the Imperial Institute. There is great danger, as I understand, of that gift being applied in the form of our fashionable wall-paper. There may be yet time for your citizen and his friends to insist that only genuine Indian designs, worked by Indian artisans, shall be applied for this typical purpose.
A GLIMPSE OF JAPAN.

(Continued from page 396.)

II.

While at Yokohama I went by rail to Tokio, the capital of Japan, a distance of about nineteen miles. The journey occupied less than an hour. A Japanese officer belonging to the Imperial Navy happened to travel in the same compartment with me, and we soon began to talk, of course in English. He was very kind and polite, and asked me to call on him, promising to take me round and show me some places of interest in Tokio, and he gave me the names of others and instructions how to reach them. Some half dozen Japanese gentlemen had made the voyage with me from Vancouver's Island; they were educated intelligent gentlemen, who had been visiting and studying in America and Germany. They had kindly given me their cards and addresses, and had invited me to call upon them if I visited Tokio. I was sorry that time would not permit me to avail myself of their courtesy. As I stepped out of the train at Tokio station, I was greatly amused with the clattering noise produced by the sandals of the passengers. I took a jinriksha to the hotel which had been recommended to me by the people at Yokohama. Its proprietor was a Japanese, but it was furnished and conducted in the style of respectable European hotels. The waiters, however, surpassed the Europeans in civility and attentiveness to the wants of the visitors. After having rested awhile, I engaged a jinriksha for the whole day, as I wanted to see many places in a short time. I rode past the Palace of the Emperor of Japan, who is known to foreigners by the title of the Mikado. It is encircled by large walls. A trench filled with water and crossed by a bridge serves as a protection to the occupants against any attack from enemies. I ordered my jinrikshaman to take me nearer to the Palace, but he refused this in the most decided manner, knowing that if he went nearer than was permitted the consequences would be very unpleasant to him. A special permission is necessary before a visitor
A GLIMPSE OF JAPAN.

can enter within the Palace—a rule found necessary in all countries for the preserving of good order and the due privacy of the inhabitants of a royal abode. The Emperor of Japan is held by his subjects to be a descendant of the Sun, which is worshipped as divine, and the figure of which forms the emblem of the Imperial coat of arms. The Imperial Family boasts of an uninterrupted descent of about 2,000 years, and is, at all events, one of the most ancient of all the royal stocks. I also visited several of the Japanese temples. The wood carving on the panels, with the good combination of various colours, was exquisite. In one of the temples I saw antique dresses and ancient swords, the latter of a length fitted for the use of giants. The tusk of an elephant was also shown, of great length and thickness. Tokio being the capital is, of course, a great centre of activity and of population, and as foreigners are allowed to settle there their influence is very marked. It has a museum, a university, parks, zoological gardens, and such other institutions as one finds in European capitals.

The Japanese appear to be exceedingly fond of theatrical amusements, for their theatres are open both day and night; and, indeed, seem never to be closed. A few coppers purchase admission, and the lowness of the payment may account for the absence of the music and scenery which form a great part of the attraction to foreigners in European theatres. I will try to describe the theatre to which I went in company with a Japanese who knew a little English. I gave him some money to pay for his and my admission, and this he gave to the man at the entrance door. We went to the first floor, and squatted on the boards, which were covered with mattresses. After a few moments a man gave each of us a cushion to sit on. For the hire of them the Japanese gave him some coppers. The theatre was almost full. We had very good seats and a full view of the stage, being just in front of it. The actors came on the stage by a passage running along one whole side of the theatre, and open to the view of the audience. This is technically called the Flowery Passage. As they went along it the actors talked and made various signs and gestures, some indicating stealth, some mirth, and others horror. The play represented a highway robbery. Two bands of dacoits meeting, and not recognising that they were brother professionals, tried to steal each other's belongings. The dexterity exhibited in this was very amusing. At the end they were arrested and punished. The story
of the play I gathered from the Japanese who was with me, but still the gestures of the actors were very expressive of the emotions they meant to show. The scenery is very simple, being painted on both sides of a board, which is turned by a man as the play proceeds. The music, if such it could be called, was supplied by one or two men who sat near the stage, and struck two strips of wood together in a particular manner. All the Japanese seemed to be engrossed with the play, but I found the theatre very hot, and did not remain long. The laughter of the audience had greatly amused me, as did also the manner in which passers-by were tempted to enter. For that purpose a screen was raised that they might see what play was being acted, and catch sight of any of their friends who were present. This does not interrupt the actors, even though the man who raises the screen calls out loudly to the passers by. There were two things in very obvious contrast to European theatres. No women are allowed to act, and, indeed, it is only in quite modern days that actresses have appeared on the English stage. Also, the Japanese play is not marked off in distinct divisions by the fall of a curtain, as is the custom in Europe.

Another day I went to the Bazaar—which is not arranged in divisions as in India, for all kinds of articles may be purchased in the same Bazaar. The price of the goods offered for sale is the same at every stall, and it is apparently regarded as unfair for one trader to charge a different price to the others. In the private shops it is necessary to bargain for each purchase, as we do in India. Foreigners who deal at the shops have invariably to pay more than the natives do.

From Tokio I proceeded by rail to Nikko, a sacred place of the Japanese, being to them what Kashi (Benares) is to us. The journey took nearly three hours. As it means going beyond the limit of the Treaty Ports, I was furnished with a passport. On going to the booking office at the railway station, I was asked at once for my passport before I could get my ticket. Again, while I was waiting at the station for the train, a Japanese policeman politely asked me to produce it. I travelled third class, because I wished to know what accommodation that class of passengers get in Japan, and something of the passengers themselves. I was greatly struck with the cleanliness of the carriages and of the occupants. They are decidedly far superior in this respect to third class carriages in London. The travellers were greatly amused by my travelling with them.
in the third class compartment. Women and men sit in the same carriage, and not in separate compartments as in India. Some of them spoke to me in Japanese, but my Japanese being very limited, I could not understand them. One of them began to examine me, by asking me the Japanese for various things she pointed to, and my pronunciation greatly amused the company. I had often to consult my books, and it amused them much to see how I found the words in them. The rate of speed of the train was not at all fast, and gave a traveller time to get a good view of the country. On both sides of the railroad one could see, as far as the eye could reach, plateaus, low table-land covered with crops of verdant rice and shrubs. The fields were watered by canals. The scenery, though not grand, was pleasing to the eye on account of its greeness. When the train stops at a station men bring refreshments to sell to the passengers. These chiefly consist of cooked rice and fish, the latter being a very favourite dish with the Japs. Fresh "chop sticks" are given to each purchaser, and that he may be sure that they have not already been used they are not split quite apart, so that he pulls them apart for use himself. When the train stopped at Nikko, a representative of the hotel where I was to put up came up to me and asked whether I had any luggage, as, if so, he would attend to it. But I had nothing with me save a hand-bag. He engaged a jinriksha for me, and told the jinriksha man to take me to my hotel. While the jinriksha was moving, the representative of the hotel asked me whether I would like to take two men for my jinriksha, but I refused, without having the slightest notion of the distance or of the condition of the road I was to pass. When I had gone a little distance, I found I had to go up a hill, and that the hotel was not so near as I had expected. Yet further on, and after crossing a stream by a wooden bridge, the ground was of a very sandy nature, and I got out of the jinriksha and walked, for it seemed to me a cruel thing to make the man toil under such circumstances. When I arrived at it (the hotel), I found that the building had no architectural beauty, nor was it imposing because of its size. On the contrary, it was small, and had but one story, and the garden in front of it was in proportion to the hotel. My room faced the back of the hotel, and looked on a small hillock covered with common shrubs and wild plants. Down its side flowed very gently a small rivulet which ran close by the hotel. There was a wooden verandah outside my room, and on it a large, full-length easy
chair. After having a look round my bed room, I went out for a short stroll. The sun had already sunk too low for me to have a good view of Nikko, which, though it is the religious centre of the Japanese, is but a small village. After my meal in the evening I was asked to sign my name in the visitors' book, which lay on the table in the entrance passage to the hotel. I turned over the pages curiously to see if any Indian visitors had written their names in this Japanese hotel record; and I was pleased to find some from the Madras Presidency. Next morning I went out for a walk and was delighted with the scenery, which was at once lovely and grand. Indeed, the Japanese have a saying, “Nikko Kikko,” which implies that a man must reserve the word “Superb” till he has seen Nikko, and I felt they were right. Nikko is situated in a valley through which flows a small stream of clear water, crossed by the wooden bridge over which I had passed on the evening of my arrival. Close to this is another bridge, which is used by the Emperor only. It is painted red, and was built a long time ago. It is supported at either end by two massive blocks of stone, and the entrances are guarded by rails, to prevent any man but the Emperor crossing it. In every country, civilised or semi-barbarous, experience shows that no motive so powerfully urges men to the giving of gifts as does religion. This is often shown in the expenditure of large sums in building temples, and decorating them to the utmost power of the worshipper of the Deity. So at Nikko, the temples, which are raised on piles, show the highest skill of the Japanese architects, painters, and carvers. The whole neighbourhood was beautiful, and I was sorry I could not stop longer to make excursions into it. Returning to Yokohama, I embarked for my homeward voyage, carrying with me many pleasant recollections of Japan and the Japanese.

SAMPATRAO GAIKWAD.
The sun and the moon as they rise above our heads become related to us in a manner which is almost personal. There is no possibility of mistaking the influence of the two chief heavenly bodies upon our daily life. With time, the infinite conception which the philosopher tries hard to grasp, even the sun and the moon count for nothing. But time, moth-eaten time, father time, our time, of that time sun and moon are the very ribs. The day and the night, the dark period of the moon and the bright period, the solar and the lunar year, these categories are our own as much as the atmosphere which envelops our earth. The prehistoric Aryans recognised this relation more dramatically than we do now; they imagined the sun and the moon as two dogs in the heavens, coursing across the sky, and beating about for their daily victims, the men who pass away. And shifting the attitude of their minds the least bit, they imagined the same two heavenly dogs taking turns as escorts in charge of the mortals who had led good lives, conducting them to their glorious destination. And again, with another little turn of the kaleidoscope, the two dogs are watch-dogs, lurking on the road to heaven, very fierce and bloody-mouthed, and lucky is the mortal who succeeds in running past them. These ideas are stated plainly in the Rig-Veda, the Hindu Bible, and the mangled remains of the myth are well known to all of you in the Greek myth of Cerberus, the watch-dog at the door of Hades.

The day and the month, and the year, then, are natural, necessary divisions of time; and, as far as I can see, we derive scant comfort from their persistent presence. They are at once too remindful, too retrospective, and too prospective. They leave not room enough for a peaceful
altruistic enjoyment of the present. Who now is sitting here to-day that does not feel that the count of time bids him make haste unduly; that it heightens the pulse to a feverish degree, and robs him of many a spell of placid peaceful repose?

But if we must put up with these necessary time distinctions, there being no escape from them, why do we human beings ourselves create others in addition? There is nothing in the skies above, or upon earth below, which necessitates the division of time by centuries. The century is an institution pure and simple. A hundred is a large unit of time chosen arbitrarily by primitive man, at a time when it would have been equally or more convenient to have chosen another number, say, 60 or 144. The only excuse for the decimal system is the ten fingers. Traces of a system of counts by 60 instead of 100 are found abundantly in the early history of man. At any rate, the century is a mere scheme; a phantasm, and that, too, a disturbing phantasm. As we approach the dividing line between the 19th and 20th centuries, it assumes in our minds the reality which makes for the school-boy the equator a black girdle around the waist of the earth—and he wonders how the ships get across! And many will ask themselves what century they belong to, answering regretfully that they are with the old, and not the new. Perish the gruesome thought! We should not permit our lives to be divided and conquered by a mere fancy. And what is this we hear about the senile, moribund century? And who is the specious Frenchman who created the word fin de siècle, with its suggestion of surfeit and absence of virile enthusiasm? It is idle fancy, sheer nonsense. The century was not very decrepit when Columbus discovered America, and when the French Revolution relaxed the grasp of despots; and, thank heaven, ours shall die in the traces, alert, active, progressive unto its last gasp. Some of the greatest deeds of history happened at the seam between two centuries; many of the greatest lives have stretched across from one century into the next.

Not the least among great deeds is the rise of the science of Comparative Philology at the end of the last century and the beginning of our own. If you ask for an exact date, I am at a loss. There is a pretty quarrel between the English and the Germans as to who discovered Comparative Philology—the final outcome being that neither of them did it. English scholars claim that
Sir William Jones announced the discovery in 1786 in his inaugural address as President of the Asiatic Society of Bengal. The Germans regard a much later date, 1816, the year when Francis Bopp produced his first systematic treatise on the Comparative Grammar of the Indo-European languages, as the hegira of Comparative Philology. But a French missionary, Father Coerdox, reported in 1767 to the French Academy comparisons between words and grammatical forms in Sanskrit, Greek, and Latin, so just and so extensive as to entitle him quite as well to the name of discoverer. In truth there was no discovery. Every missionary who had learned Sanskrit in past centuries was startled by the cardinal points of resemblance between it and the European languages, and became in a sense a discoverer. There is, however, plenty of propriety in speaking of a hundred years in round numbers. A hundred years carry us back to the heroic age of the science, the days of Sir William Jones and Colebrooke, of Rask and Jacob Grimm, of Frederic von Schlegel and William von Humboldt, of Bopp, Pott and Burnouf; and I regret that my canvas to-day is too small to permit me to sketch even a faint outline of these men, their aspirations, and their achievements. Anniversaries are plentiful and will be plentiful, because men have never ceased to produce good and memorable things, nor ever will. From now on every year will recall to the memory some splendid accomplishment of these masters of a hundred years ago.

But the present somehow distracts our attention. During the past year two of the greatest living scholars in Vedic and linguistic science have celebrated their Doctor jubilees. Fifty years have elapsed since Max Müller and Rudolf von Roth received their degrees from German universities, and, take it all in all, each now has behind him a career glorious enough to satisfy the ambition of any reasonable mortal. Max Müller, more than any other man, gained for these studies the sympathy of the cultured public; he has, too, as much as any other single writer, helped to liberalise and beautify the thought of our generation. Rudolf von Roth was the first interpreter of the Veda, and one of the two authors of the unrivalled Sanskrit lexicon of the Academy of St. Petersburg. Scholars from all parts of the world have united in honouring his festal day by printing a jubilee volume in his honour, and you will be interested to hear that four American scholars have contributed to this volume, more
than from any other country outside of Germany herself. During the past year, too, the American Oriental Society, one of the oldest scientific associations in the country, lived to see its fiftieth birthday, sounder and more active than ever; its fifteen bulky volumes of proceedings and transactions rank among the most valued contributions to linguistic and Oriental science.

But a literary event of even greater importance has happened within the last two or three months—an event which is certain to stir the world of science and culture far more than beatific reminiscences. Some ten weeks ago I received from India a small duodecimo volume in the clumsy get-up and faulty typography of the native Anglo-Indian press. It came with the regards of the author, a person totally unknown to fame. I had never heard his name: Bai Gangadhar Tilak, B.A., LL.B., Law Lecturer and Pleader, Poona. The book is published by Mrs. Radhabai Atmaram Sagoon, Bookseller and Publisher, Bombay. The title is "The Orion; or, Researches into the Antiquity of the Vedas." It will be understood that the entrée of the little volume upon my horizon was not such as to prejudice me in its favour, and accordingly I placed it where it might be reached without too much effort in the drowsy after-dinner hour, to be disposed of along with much other second-class matter, such as reaches a scholar through the channels of the Postal Union. Nor was the preface at all encouraging. The author blandly informs us that the age of the Rig-Veda cannot be less than 4,000 years before Christ, and that the express records of early Hindu antiquity point back to 6,000 years before Christ. Having in mind the boundless fancy of the Hindu through the ages, and his particularly fatal facility for "taking his mouthful" when it comes to a question of numbers, I proposed to myself to continue to turn the leaves of the book with the amused smile of orthodoxy befitting the occasion. But soon the amused smile gave way to an uneasy sense that something unusual had happened. I was first impressed with something leonine in the way in which the author controlled the Vedic literature and the occidental works on the same; my superficial reading was soon replaced by absorbed study, and finally, having been prepared to scoff mildly, I confess that the author has convinced me in all essential points. The book is unquestionably the literary sensation of the year just before us; history, the chronic readjuster, shall have her hands un-
commonly full to assimilate the results of Tilak's discovery and arrange her paraphernalia in the new perspective.

But let me first say a few words as to the chronology of ancient Hindu history. This has always been a tender spot with the devotees of Indology. The Hindus themselves have no reliable chronology reaching back even as far as the Christian era, and their seclusion in ancient times from the rest of the world shuts out all light from without, with the single exception of Alexander's invasion of India. The only two dates in the ancient history of India which are approximately fixed are the date of Buddha above 500 B.C., and that of the inscriptions of the famous Buddhist Emperor, Asoka, about 250 B.C. Behind that lies the entire early Brahmanical history of India, the period of the Vedas, without a single chronological landmark to guide and rest the eye of the investigator. The Vedic literature is vast, and it is stratified into different layers, according to the subject matter and the dialects in which it is written. These stratifications were made the basis of reckonings, and different scholars at different times advanced their beliefs, making the Vedic literature date back from 1200 to 2400 B.C. A middle point between these two dates, placing the earliest Vedic period between 1500—2000 B.C. gradually precipitated itself, and that has been the standard opinion of scholars during the past thirty years. One is struck at once by the extreme modesty of the claim in the light of the claims of other Oriental civilizations, notably the Egyptian, and it now seems as though it were destined that this abstemiousness shall no longer go unrewarded.

The Hindu lawyer, Tilak's discovery is based upon astronomical data recorded in the Vedic literature. I have alluded in the opening to the two familiar rotations of the earth—the daily one around its axis and the annual one around the sun. The latter motion appears to the observer on the earth as if the sun moved once every year around the earth along the sphere of the heavens, among the stars. The motion among the stars is apparently regular and unalterable; every season, every month, every day of the year the sun, and correspondingly the moon, is to be found near the same star or constellation as in the preceding year. The curve along which the sun moves through the heavens is called the ecliptic, and the plane of this curve is inclined to the plane of the earth's equator 23⅓ degrees. The two points in the heavens at which the plane of the ecliptic intersects the plane of the equator projected into the
heavens are the equinoxes, the vernal and the autumnal equinox. But the earth has still another motion. Owing to special manifestations of the attraction of the moon and the sun, the axis of the earth moves slowly around the axis of the ecliptic, producing a gradual, very slow retrograde motion of the equinoctial point in the heavens. In short, the vernal equinox, and correspondingly the autumnal equinox, by scarcely perceptible degrees, change their position in the heavens year by year, performing a complete revolution in the zodiac once in 26,000 years, in round numbers. This is called the precession of the equinoxes. The possible uses which history can make of this astral phenomenon are at once obvious. If it be recorded that any given event took place at a time when the vernal equinox, or any other cardinal point in the sun’s ecliptic, stood in a given star or constellation, a very simple astronomical calculation suffices to fix absolutely the number of years which have elapsed between the position of the sun then and its position now. The huge cycle of 26,000 years precludes errors, because there cannot be in ordinary history question of more than parts of one single cyclic revolution. Tilak’s method consists in carefully sifting the astronomical statements of the two most characteristic strata of Vedic literature—the period of the Hymns, and the period of the so-called Brahmanas, the time when the formal Vedic sacrifices were developed and rigidly defined; and he proves conclusively that the vernal equinox of the earliest period, the period of the Rig-Veda, was in the constellation of Orion—i.e., 4,500 years ago, while in the second period the vernal equinox had receded to the Pleiades, pointing with equal certainty to about 2500 B.C. The strength of Mr. Tilak’s investigation lies in the proofs which he adduces, that the intersection of the colures or heavenly meridians with the heavenly equator or ecliptic, or, in other words, the four cardinal points of the ecliptic, the vernal and the autumnal equinox, and the summer and winter solstices, correspond with these calculations. The Hindu Zodiac is not geometrical, but practical; being divided roughly into twenty-eight stations or constellations, as it were the mile-stones of the heavens; and each time when the vernal equinox is said to be in a certain constellation the summer solstice is found, as it should be, seven constellations further, and, correspondingly, the two other cardinal points, the autumnal equinox and the winter solstice.
To clinch matters, about a month ago there came to hand the Jubilee volume in honour of Professor von Roth, and in it there is an article by Professor Jacobi, of Bonn, in which he has determined by the same method, the precession of the equinoxes, the same two periods of Vedic chronology. He seems to have devised his method, and arrived at his conclusions, in total independence and ignorance of the Hindu's work. He finds the vernal equinox of the earliest period in the star \( \lambda \) Orionis, and the vernal equinox of the second period in the star \( \eta \) Tauri, the same results stated more precisely. Is there not something wonderful in this mode of record? No coins, no tablets, no architecture, no critical historian, nor even a garrulous chronicler; nothing but the fanciful exigencies of a religious ritual, imagining that its needs and desires are favoured or obstructed by the stars, and recording that such and such religious events shall take place when the moon and the sun are among such and such stars—the unerring clock of the heavens has timed the events of the oldest Aryan antiquity. Needless to point out that even this curtain which seems to shut off our vision with 4500 B.C. may prove in the end a veil of thin gauze. The language and the literature of the Veda is by no means so primitive as to place with it the real beginnings of Aryan life. These, in all probability, and in all due moderation, reach back several thousands of years more, and we seem now to have arrived at a time earlier than any which history has hitherto dared to notice. Good old Homer in this perspective is a mere youth, and Horace—he is quite fin de siécle.

I have for some time been endeavouring to answer the following question: What has been the meaning of this 100 years of Comparative Philology, and what is the secret of the fascination which these studies exercise over the minds of men? An unpractical line of study, difficult to extract bread and butter from, difficult to force one's way into, because it is surrounded by a hedge of languages, ancient and modern, every inch of the way rough with gnarled roots. Is it the fascination of the acquisition of languages for their own sake by way of sportive surmounting of obstacles? Very few would be in at the death in so dreary a sport. I hear occasionally some stalwart adherent of another science say that the purpose of philology is to know a language and perchance enjoy its literature, and there is an end of the matter. He who studies Comparative Philology, or any philology, in this spirit, knows of it
in the end—to use a simile of the Buddhist writings—as much as the spoon knows the taste of the soup which is eaten with it. Without attempting to define and classify the purposes of human endeavour at knowledge, I am sure we are on safe ground in claiming that a large part of this endeavour is justly engaged in finding out—if it possibly may find it out—the destiny of man in this world. The desire to know this is constitutional; it is in our blood, the right to endeavour to know it is axiomatic, indisputable. How shall we do it? By prognostications as to the future? The attempt has been made more than once and has resulted in the drearily regular, inorganic, prophetic novel. Any such constructed future will come to pass on the same day when the invertebrate Volapük becomes a real language. There is nothing like the study of Comparative Philology to make one sure that the only institutions which really live are those which have grown up organically. What we may read of our destiny is every time written in the past. Imagine for a moment this knowledge cut off from the present generation. The result would be nothing short of a kind of savagery. We should reel through life paralytically. Our generation would be a solitary vessel of clay instead of being part of a finely wrought metal chain, alive and vibrating with the electric current of all the action and all the thought of by-gone ages; ineradicably instinct with the assurance of a growing and improving future. This, and not merely curious antiquarianism, is what has made all great recoveries of our past history really important practical events for the present and the future. The so-called renaissance, the revival of classical learning in the Middle Ages, brought with it the revelation of what men were and what they did under the influence of other faiths, and other impulses, in distant ages, with different ideals; in other words, it increased the knowledge of humanity; this and nothing more. It did not help to build a single railway or dig a single mine. Yet this recovery of a past, only partially lost, ranks to-day as a truly epoch-making, transforming event in human-life, rivalling in its direct bearing upon men’s destiny the discoveries of steam and electricity.

I see in Comparative Philology another renaissance, the recovery of a greater and deeper history, an extension of our knowledge of the past into regions and times inaccessible to any other mode of research. The biography of the human race must, like the biography of any individual, begin with early youth; there is to be found
the key to most of the riddles of later life. We must trace
the origin and first growth of human thought in order to
understand man; and language offers the best, most
impartial, and incontrovertible testimony. Every word is
a foot-print of thought, every expression a track of
thought, and the comparative philologist is the path-
finder. It is interesting to know from Greek literature
that the Greeks believed in a watch-dog at the gates of
Hades, but after all this is a mere curiosum until Com-
parative Philology reconstructs the pre-historic myth of the
dogs in the heavens. It is one thing to know that the
Greeks of Homer's time craved imperishable glory, but when
we find the same form of expression in the Vedas, we realise
that this ambition was implanted in the bosoms of the pre-
historic Aryans; what a search-light flashes upon the
character of the race through the ages! It is now a
hackneyed common place to say that English and Sanskrit
are but varieties of the same speech, but upon this and
kindred facts rests the entire structure of modern linguistic
ethnology. To speak the same language constitutes a
closer union than to have drunk the same milk; the
capacity to wield and develop properly the same type of
language is the surest sign of intellectual equality. Hindus
like Mr. Bal Gadhar Tilak, or the representative Hindus
who visited America during the Exposition, startle us and
make us look after our laurels, but they are simply
repeating the history of thousands of years ago when the
Hindus had a Panini, of whom it has been said, not
improperly, that if the first five greatest names in history
were to be picked out, Panini's name would figure
among them. And yet Panini was only a poor gram-
marian.

Comparative Philology truly has been a nursing mother
of new human interests, more so than anything since the
days of Greek philosophy. It has gone far to obliterate
that odious distinction between the so-called exact and
inexact sciences by infusing into its transactions the spirit
of calm, waiting inquiry, and by its vigorous co-operation
with anthropology and psychology. Many of her children
have waxed strong, and have gone forth to independent
careers. But all of them carry with them the unmistakable
birth-mark; all of them were started on their way by the
old masters. The science of language is now the common
property of the philologist, the psychologist, and the
average man of culture. Comparative mythology and
comparative religion, touching as they do the highest and last question in the story of man, are looming up more and more at the present time; they are sure for ever of a place among our best interests. Even now the radical elements common to all religions are knitting into a firm texture of incontrovertible scientific principle: an intuition of a superior power, a sense of human dependence, a belief in the interest of the divine power in the government of the world; a distinction between good and evil, with sympathy for the good and antipathy against the evil; and the belief in some sort of betterment at the end of human life—all these we find everywhere, and we shall expect them now wherever man, erect in attitude, is seen, wherever his voice is heard in articulate speech.

I might continue to trace the effect of this renaissance, as I have taken the liberty of calling it, to a point when you would suspect me of being an interested panegyrist of my own calling. Let me instead quote a few words from one of the highest authorities in the world, illustrating another phase of the effect of this revival. The Royal Prussian Academy of Sciences—a more sober body of men never sat in judgment, everybody will agree—presented in 1886 a congratulatory address to the Asiatic Society of Bengal on the occasion of its centenary celebration. A hundred years had passed since Sir William Jones founded and first presided over this society in the city of Calcutta. They say: "There are few domains of historical and linguistic science which have remained wholly untouched by the influence of Sanskrit studies. The Sanskrit language opened up the primitive Aryan period, and originated the science of Comparative Philology. By its aid ancient Persia and the spiritual monuments of Zoroaster were made accessible, as well as the stone monuments of the Persian kings of the Achemenian dynasty, and again, through the decipherment of these inscriptions, those ancient seats of culture, Assyria and Babylonia, were awakened from the death-like sleep of their cuneiform inscriptions, and were made to tell their own story."

Let me now say a few words in conclusion in reference to our own country's relation to these studies. In the first place, as regards the past and the present, there is no reason whatever for complaint. Even now the study of Sanskrit and Comparative Philology has a tradition in our land; we have our own small group of heroes, and we are not slow in investing them with all the accoutrements
becoming to their rank. In fact, we may claim, without fear of contradiction, that, next to Germany, Sanskrit and Comparative Philology are studied more successfully in the United States than in any country on the globe. There are more chairs provided for the study in our Universities than either in England, France, Austria, or Russia, not to mention the smaller countries of Europe. The reason for this is in part accidental and traditional; in part it is founded upon the strong idealistic strain in our national character. Next to being the most practical country on the face of the earth, America is also one of the most idealistic. Ibsen, the Norwegian dramatist, has recently poured the vials of his wrath upon our poor people. America, he says, is a country in which every man disports himself in his own puddle. Without doubt he refers to the countless independent and irresponsible intellectual movements, frequently crude and sometimes impertinent, which are at times the despair of our own sounder thinkers. But he fails to see the fundamental truth underlying all this, the unquenchable desire for the improvement of self and surroundings; the national incapacity to tolerate permanently either real or imaginary wrong; the instinctive thirst for the best; in short, that self-guided idealism which began by giving us our independence and our constitution, and which is now rapidly carrying our institutions of learning to the highest attainable plane. I am afraid the general public is not sufficiently initiated in this latter movement. There is reason to fear sometimes that the reports of University activity which reach the public most persistently lead them to believe that our best institutions are engaged chiefly in cultivating a race of football tigers, or young gentlemen capable of performing a very creditable solo dance. Mind, I am heartily in favour of both these delightful forms of exercise; only I do plead that they shall not absorb the public interest to the exclusion of its appreciation of the less flamboyant charms of University life. A teacher of philology is peculiarly in the position to see another phase which also deserves to hold the public fancy. He sees young men choose a University, far away from home and friends, determined to get what is best; he sees them knock at the doors of the institution, long reverenced from afar, with modest mien, and—frequently, alas! with still more modest means—they enter, and expend some of the best years of their young manhood in work, whose chief reward through life shall be work,
and again work. Not infrequently the teacher himself feels the necessity of toning down the aspirations of these eager young men, when their love of a peculiarly abstract study threatens to lead them away too far from the road towards a livelihood. The story has a flavour and a charm peculiarly its own. But to these young men I would say: If you love some intellectual pursuit, however remote, so that you feel you cannot do without it, proceed boldly and strike hard. Put your trust in that strong love of higher knowledge on the part of your people which has under your very eyes raised institutions of learning that suggest and offer these pursuits; trust that this same people will keep pace with its own creation, and will furnish you with opportunities for a wholesome and happy life in your chosen calling.

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The Council of the National Indian Association have appointed Surgeon-Major Syed Hassan, M.R.C.S., L.R.C.P., Ph.D. (Cambridge), as their representative at the approaching International Congress of Hygiene and Demography, to be held at Budapest. Mr. S. Hassan will read a Paper on the "Effects of Certain Social Customs in India on the Health and Well-Being of the People."
On July 7, Miss Cornelia Sorabjee gave a lecture at the Wilson College on "The Legal Status of Women in India," in the presence of a large audience. The Hon. Mr. Justice Ranade presided, and there were also upon the platform Mr. H. A. Acworth, Municipal Commissioner, the Rev. Dr. Mackichan, and the Rev. R. Macomish.

Mr. Justice Ranade, who was loudly cheered on rising to open the proceedings, referred to the high academical honours Miss Sorabjee had taken. Miss Sorabjee had been to England for the purpose of preparing herself by a course of legal training to assist her native sisters in matters in which they now experienced great difficulties. At the request of many friends she had consented to give a lecture on "The Legal Status of the Women of India," and he would now call upon her to do so.

Miss Cornelia Sorabjee, who was loudly cheered on rising, after a few introductory remarks, proceeded to consider the sources of the law on the subject of women's property in India. In doing this with reference first to the Hindoo woman, she touched on the contest between custom and Brahminism. Lawyers had wrangled ceaselessly as to which had played the greater part in the history and development of legal institutions. Perhaps the safest and truest view to take was that both had been powerful factors—but at different periods. Finally dominant was Brahminism, distorting custom to suit priestly purposes, and giving a religious intentment to every action of life. The Hindoo woman was next considered in relation to property, and the law on the subject was summarised in a popular form. The same was done with regard to the Mahomedan woman, the opinion arrived at being that both had considerable rights (the Mahomedan woman too many, and those too emphatically, perhaps); both were persons in the eye of the law, not things. From this it was
a short flight to the question, how far were such pro-
prietary and personal rights actually enjoyed by the Hindoo-
or Mahomedan woman? Coming to consider the position
of a married woman in India at the present moment, Miss
Sorabjee declined to go into details, which she felt her
audience had better means of discovering than she herself,
but she asked them to recall such details, and to remember
that during all her life, whether under the tutelage of father
or husband, the Indian woman had never been trained to
face life alone. Then, when death came, the miseries of
Indian widowhood followed as a natural sequence. Law-
yers there were of course by the score, but as these had the
good (?) fortune to be males, they were unapproachable.
In managing her property, over her contracts, wills, &c.,
a woman needed some competent legal advice and help.
Instances were then enumerated. A Mahomedan lady
wished to make a will, and procured an interview with
a lawyer for the purpose. The chaperones necessary for
the process were so many that the experiment proved a
failure, as the secrets of the Testamentary Act could not be
preserved. A widowed Hindoo Queen was left to the
mercy of an unscrupulous Indian agent who manipulated
her revenues. No redress was possible. The only help
available (that of a man) being denied to her, her wrongs
were never avenged. There was also a recent case, before
the Privy Council, of a widow from the North, who, having
lost her property in a District Court in the Punjab, started
to carry her woes to the Queen. Meeting a Fakeer in
Bombay, casually, the story was confided to him by her
servant. The Fakeer promised to take the case to the
Bombay High Court on the payment of Rs. 900. Seeing
nothing unusual in this, the woman paid the money and
returned to her home—only, of course, to find in due time
that the whole thing was a fraud. She then made a second
attempt to reach London. There could not naturally be an
appeal from the District Court to the Privy Council direct.
The story, however, showed the need suggested earlier in the
lecture of some one to whom a woman could go for in-
telligent help and sympathy in any of the various troubles
of her life which might be beyond and outside her own
solution—someone who would have the courage to protect
her from the law, as well as to help her to it. Very many
widows' substances were wasted in fruitless litigation. A
well-known lawyer in India said to the lecturer, “Yes, in-
justice does exist; but in 200 years women will come out
of their seclusion, and then here we are to help them!”
The lecturer, however, questioned the need of waiting, when there was a much better way. In conclusion, Miss Sorabjee sketched the sort of work that might usefully be done by women lawyers. She did not want the gentle Hindoo widow to lead the vanguard of advanced womanhood, but it might be possible to do (or prevent) the fighting for her. And in doing this there need be no encroachment on the domains of the stronger sex. "We do not want to 'supplant' men; there is enough to do for us to supplement them," said Miss Sorabjee. In asking men to allow women to give this supplementary aid the lecturer felt she was only appealing to the courtesy and instincts of those who from time immemorial had never failed to protect and succour all who were weak and helpless. Miss Sorabjee resumed her seat amidst loud cheers, after having spoken exactly half an hour.

The Chairman said they had listened with great pleasure to the learned and practical address of Miss Sorabjee. Not only had the legal status of Indian women been defined, but practical means had been suggested whereby Indian women could be helped in a practical way to overcome their difficulties. There was much need for such help, and they saw in Miss Sorabjee a lady who had fully qualified herself to render it. The learned lecturer's Indian sisters—both Hindoo and Mahomedan—would be well advised in obtaining the assistance she offered, for she had evidently mastered some of the most intricate problems of Indian law. The legal profession was one in which there were several departments of activity—there was the barrister, the solicitor, and the conveyancer, and now Miss Sorabjee represented quite a different order. She had shown there were certain departments of law in which practical aptitude could be usefully exercised by women practitioners. If this field of labour was more fully opened to women in India, Bombay would be the city of its inception. He believed the Indian women would in due course avail themselves of the opportunity, and utilise the services of ladies like Miss Sorabjee. On behalf of the audience, he expressed his thanks to the lecturer for enlightening them on the subject of the legal status of women.

In proposing a vote of thanks to the Chairman, Dr. Mackichan said that not only did Mr. Ranade as a Judge represent the whole scope of law, he also represented one of the great communities to whose condition reference had been made. They all recognised in the remarks Mr.
Ranade had addressed to them the earnest sympathy he felt for the movement which the learned lecturer sought to foster in this country. They were, therefore, all placed under great obligation to the learned Judge for his kindness in presiding that evening.

The proceedings then terminated.

In the *Punjab Magazine* for May, just received, we are glad to notice an article on the importance in education of Drawing. Several points in its favour are urged—as, that Drawing is one of the surest means of acquiring accurate knowledge; that it lays the foundation for technical training, and is thus essential to the artisan; that it cultivates the imagination; and that it is a study peculiarly adapted to children, whose mental activity is aroused through the senses. The writer also refers to the great value of Drawing to the teacher, for illustrating his lessons, and thus rendering them more intelligible and more attractive.
REVIEWS.


This entertaining collection of acute sayings, poetical epigrams, riddles and humorous anecdotes, is of wider scope than its title indicates; for though the compiler may have found all the contents of his book under the garb of the beautiful language of Persia, much reference is made to desert Arabs, Afghans, and people of Turkistan, to Moghul Emperors, Sultans and Ameers, as well as to Persians and Shahs. The stories may probably include the whole period from the extension of the Musulman faith over Western and Central Asia—near the date of the Parsis' self-imposed exile from their native country—to the decline of Arabian learning and influence, and the signs of decay in the Moghul Empire in India; rather more than the period which, in regard to Europe, we used to call the Middle Ages. It would have added to the value of the volume if references had been supplied. The writer acknowledges his indebtedness to Beale's Oriental Biographical Dictionary, and to the works of Ouseley, Fraser, and Malcolm. But one wants to learn how the tales and proverbs are related to each other, both as to history and as to race; and with some difference of arrangement much information on these points could have been easily supplied, and the title could have been altered in accordance with such a change. The book, however, is very interesting. Mr. M. N. Kuka has been fortunate in securing the effectual aid of some Bombay friends, especially that of Mr. Hyder Cumruddin Tyabji, to whom the work is dedicated; so that he has been able to add unpublished contributions to the stories with which his readers will find they are already familiar.

A pretty clear idea of men's ways of thinking and doing is always likely to be gained by study of the criticism enveloped in fable and in witty speech, and these Eastern tales prove an excellent mirror of their times. We see the effects of the Muhammadan doctrine of the equality of all men before God, in the brotherly recognition which per-
mitted, on the part even of despotic rulers, freedom of speech in their subordinates. But we also perceive that the absolute sway assumed by Muhammad was still the ideal of government, so that a ruler was expected and allowed to carry out his wishes and his will in an unrestrained manner. Such a ruler was, however, keenly alive to a reproof, especially if it was administered under cover of polished flattery. Indeed, in the countries governed by the successors of Muhammad, the best way of gaining one's end was through ingenuity, whether of words or of acts; and the knowledge that cunning was a successful policy, gave a curious audacity even to a mean man, for he felt that he was in the possession of a weapon which, used with extreme care, was as effective as a sword. Not only could he thus gain his object, but he might even be applauded by those he had foiled. Thus, acuteness of mind, however employed, was held in great esteem. Poets, who helped to beguile the weary hours of intense sunshine, or the wakeful hours of refreshing moonlight, and were spoiled like charming wayward children, often abused the license accorded to them. But here again ingenuity was specially advantageous. If a poet had gone too far, and even ran the risk of losing his head, he could recover his royal master's favour through the skill with which he managed to retreat from the point of danger to which his presumptuous impertinence had hurried him. It appears, however, that lookers-on saw through the false claims of pretentious poets (and many seem to have answered to this description), as amongst definitions given in Mr. Kuka's book is: Poet — *A proud beggar.* Several of these definitions help one to realise the state of society. A truthful man—*One who is regarded by everyone as his enemy.* Bribe—*The resource of those whose cause is lame.* Sick man—*The slate on which the physician learns his alphabet.* Epistle—*A half-visit.* Guest—*One who is impatient to hear the clatter of the dishes.* Soporific—*Reading the verses of a dull poet.* Flatterer—*One who drives a thriving trade.* Salutation—*A polite hint to others to get up and greet you with respect.*

Of course, as nimbleness of wit was so serviceable and so admired, stupidity became the frequent butt of storytellers, and numerous instances of absurd dulness of intellect, or absence of common-sense, are given in the book before us. It is singular that some of these tales recall those puzzling mistakes that we call "Irish bulls," in which it almost seems as if the mind suddenly comes to
a full stop, and after arranging the superficial or external part of an action fails to go further, and thus misses the essential point. But why is it that this peculiar mode of thinking belongs chiefly to quick-witted races? Perhaps their wits are so very agile that before they have perceived the whole of a subject they have already passed on to something else. Irish girls are by no means stupid, yet how strange—and it is a true story—that one who could not read, and was engaged to a soldier, on asking her mistress to read out his letter to her, requested her first to put cotton wool in her ears lest she should hear its contents! The following is an Eastern tale to match. A Syrian ordered a new door to his house, and as the carpenter required to know its breadth, he measured the doorway with his extended arms, and started to go back to the carpenter's workshop with arms out-stretched. But on the way he was seized hold of by a man, who for fun turned him flat on his back. The one who was thrown down without relaxing his arms, began to call on the passers-by to pick him up. But fearing that they might take hold of his arms he called out to them not to destroy the measurement, but to pick him up by his beard. This they did, and he went on his way very happy at the thought that, in spite of all difficulties, he had preserved the measurement of his door!

Many instances are given in this book of the wire-drawn analogies, the wordy exaggerations, and the mechanical rhyming in which Persian poets delighted, and which are still much esteemed and associated with literary cultivation. No doubt these tricks of art are ingenious and difficult of execution, but to European minds the far-fetched similes and the evident unreality point to a waste of power and of time on the part of the author. Hafiz, and other great Persian poets, used fancy more naturally, as the vehicle of true poetic feeling. Even they to our taste, carried illustration too far. In their imitators there is machine-like action—without aim, force, or living emotion. A little practice in this line may sharpen the capacities, but there is danger lest at the same time the difference between sincerity and artifice may not become somewhat blurred. Westerns feel such as the following comparisons to be forced: "The pen and the inkstand will not suffice for writing down his praise, for the one is a mouth without a tongue, and the other a tongue without a mouth." "The sky turned up its eyes: the dark part became invisible, and the white part appeared
—i.e., the day broke.” “The flute is an Abyssinian bride, who has in attendance round her ten ladies of Khutan (the fingers), and who has on the head a cross made of the Askari sugar-cane (the ivory mouth-piece of the flute).” Some of these short sayings are, however, very striking and appropriate. “The tongue in the mouth of a wise man is the key of the door of the treasure-house of his wisdom. When the door is locked how can any one know whether the owner is a jeweller or a mere pedlar?” “Help thyself, and do not seek the assistance of any one: for to an elephant his own ears are better than the fan of peacock's feathers for driving away mosquitoes.” “Even in disappointment there is hope, for the fringe of a dark night is white.” “Thou hast acquired knowledge with mere worldly motives. Take care then, for when the thief comes at night with a light, he can take away the choicest of the goods.”

In the first part of this book, which consists of wit and humour embodied in verse, the original Persian is given. Some of the poems are of recent date. A wise discretion seems to have exercised in the choice of specimens. Many of the Persian authors, even those of a thoughtful nature, mixed up much that could not be suitably reproduced in a work of this kind, with what was beautiful and philosophical. We congratulate the compiler on the skill he has shown in his collection, which is a serviceable and attractive addition to Eastern imaginative lore.

THE SWEeper-CASTE OF INDIA.


In the Magazine for last February, attention was called to a collection of traditions of the Pachpirya sect, which had been noted down and translated by Mr. Greeven. This gentleman has continued his useful work by gaining information concerning the despised Sweeper-caste of India. He succeeded in overcoming the scruples of the high priest of the fraternity at Benares, and that functionary placed at his service the manuscripts and traditions which had been preserved in his family for generations; and, furthermore, patiently expounded to him the meaning of
the doctrines, and admitted him to the religious ceremonies of the sect. The little book now offered to the public is therefore a record of the very highest authority on the subject, and although it contains no great wealth of matter, what it does state is altogether new, and gives the first insight into a previously sealed book.

The Sweepers are usually termed Mehtars, but that is the name of only one of the sub-castes. There are seven sub-castes, six of which are Hindu, and one is Musulman. They consider that these sects were founded by the seven sons of Jiwan, who was himself converted to Sikhism by Guru Govind, and subsequently founded the Sikh Sweeper caste known as Mazabis. It is thus seen that the Sweepers comprise Hindus, Musulmans, and Sikhs, in their community. It is interesting to note that Jiwan is said to have been the son of Bālē Shāh, which is one of the names under which Ghāzī Miyān, the patron Saint of the Pachpiryas, is known. The Pachpiryas are also distinguished by comprising both Hindus and Muhammadans in their fraternity; and thus we have the curious fact that both the Unionist sects of India look to the Ghāzī Miyān, or nephew of the Musulman conqueror Mahmūd of Ghazni, as the revered patron of unity.

The Sweepers regard their calling as a sacred function, spiritual cleanliness being symbolised by their daily operations. Their founder is reported to have taken to sweep the road and sprinkle water from humility of heart; and to have been raised to heaven for his piety, where he is engaged in cleansing the Almighty Throne from the filth caused by Satan. When the last stains shall have been washed away, the millenium will come, all men will become alike pure and holy, universal peace and charity will reign; the Prophet will re-appear upon the earth; to the Sweepers he will appear as Bālmik, to the Christians as Jesus, to the Musulmāns as the Mahdī, and to the Hindūs as Mārkandeya. The ceremonies of the sect are peculiar, and generally take place at midnight, and a pipe is passed round, at which all the members take a whiff. Mr. Greeven has given the traditions in the original as well as a translation, and has done a kindly work in raising one of the humblest classes of humanity to a position of respectability, by explaining the high ideal which inspires the Sweeper caste. It is probable, however, as Mr. Greeven points out, that the Sweepers came to their office as the humble slaves of a conquering people, and the spiritual ideas were added to the facts afterwards.

F. P.
ALCOHOL NO TONIC.

I HAVE no desire to prolong these remarks, and merely wish to point out that Dr. Francis still misses the whole tenor of my observation. I did not say that Dr. Francis thought only of the body, but that my statement referred to the mind, and that he answered it by observations applying only to the body. I said nothing to imply that I deemed my fellow-countrymen intellectually torpid. I spoke of "all the advanced nations of the world," and made not the slightest allusion to England, except as understood to be comprised under that general expression. The special instances of individuals cited as personally abstaining from alcohol, do not touch the question. I admitted their existence by the remark "The result of excess or abstention on individuals is no test of the effect of permanent abstention on a whole nation." It is the latter point which deserves serious consideration. Two great facts stare us in the face: (1) No nation has hitherto risen from barbarism without alcohol; (2) Three great masses of people abandoned alcohol under religious influences, and in each case the result has been intellectually disastrous. Prudent people may not unreasonably give thought to the possible effects of long-continued abstention on Europeans also. The statement that advanced nations possess alcoholicly developed brains does not imply that any number of brain-workers depend upon alcohol for their individual successes. All the teetotalers of Europe enjoy the advantage of alcoholicly-developed brains inherited from their progenitors; and the fact that for ten or twenty years, or during their whole lives, they personally have abstained from alcohol cannot deprive them of their inherited natural advantages. Teetotalers have repeatedly pointed to the fact that the drunkard's brain is transmitted to his offspring. I admit the truth of their statement, and ask them to take note of the mental capacity of modern Europe after long ages of alcoholic indulgence, and invite them to compare it with that of nations which for some centuries have abandoned alcohol. Which is the more encouraging example?

FREDERIC PINCOTT.
A controversy has lately taken place in regard to what rights the Buddhists in Ceylon, Japan, and elsewhere have over the Maha Bodhi Temple at Budh-Gaya, in Behar, which is very near to a Hindu temple. The Buddhist temple is supposed to be on the site of the "most hallowed spot, where Prince Sakya Sinha (Buddha) sat in meditation, and at last founded the religion which now sways the destiny of one-third of the whole human population." [We quote from the petition of H. Dharmapala, General Secretary of the Maha-Bodhi Society, to Mr. Macpherson, District Magistrate, Gya.]

This temple was lately restored by the Government, and the Burmese King (father of King Theebaw) built a "rest home" for the priests. The Buddhists of Japan, too, began to take interest in it, and they sent, on behalf of the Japanese nation, an historic image of Buddha, carved by a great artist, to be placed in the Temple. Here, however, the contest began, for when Mr. Dharmapala went to Budh-Gaya in charge of the image, the Mahant (the person in authority) at the neighbouring Hindu temple, although it seems he had before stated that he had no objection to the proceeding, forbade the placing of the image in the Buddhist temple, locked its gates, and assembled some armed men to prevent entrance. The matter is still, we believe, under discussion.

The following letter has thus special interest at the present time. It was written over 50 years ago by Mr. William Adam, whose Reports—the first ever made—on education in the Bengal mofussil contained new and valuable information respecting indigenous schools in the crowds of small villages far away from Calcutta, the village system, and Sanskrit places of learning. Mr. Adam is known also as having been a friend of Raja Rammohun Roy. The letter was written to Mr. William Speir, then living at Calcutta, whose widow many years after wrote "Life in Ancient India," and later, as Mrs. Manning, "Ancient and Mediæval India," both standard works on Hindu Religion, Philosophy, and Literature.
Dear Mr. Speir,

To the eye of an Indian antiquarian this district possesses a singular interest, and even to the inquirer into modern customs and manners it presents many peculiar objects of curiosity. My public duty receives, of course, my chief, almost exclusive attention, and in the prosecution of it, the unfortunate season of the year has prevented me from visiting many important localities which would have afforded ample materials for general observations and reflections. It would only be with the certainty of sacrificing my health to the climate that I could move about much at present in the open country. Still my enquiries are incessant on questions, I mean, un-connected with my primary duty; and Gaya and Buddha Gaya alone present abundant scope for remark.

Buddha Gaya, about five miles from Gaya, is held sacred by Buddhists as having been either the birthplace or residence of that great prophet and legislator, and is still visited occasionally by natives of Ceylon and Burmah, where the Buddhist doctrine prevails. Gaya is held sacred by the Brahmanical Hindus, and it is annually visited by thousands of pilgrims from every part of India. The origin of the estimation in which they hold it is thus explained by Hamilton, borrowing from the unpublished manuscripts of Buchanan: *"Gaya, an Asoor giant and infidel, by some penance attained divine favour, and subjugated the three worlds (heaven, earth, and hell) to his power. The demigods, bereft of their dignity, implored the assistance of Vishnu, who entered into a long contest with the Asoor, but could not overcome him. The monster, however, was so well pleased with Vishnu's prowess that he promised to give him whatever blessing he should ask; and the latter, in consequence, requested him to descend to the infernal regions. The giant consented, but begged he might be helped down by Vishnu's foot, which was accordingly done, and the scene of action has ever since been reckoned sacred for the space of several square miles."* I would not have quoted at length such an apparently absurd legend, but for the opinion I have formed that it is a mythological description of an important historical fact intimately connected with the progress of religious opinion throughout India, and the surrounding countries of Asia.

My conjecture is that this is a Pauranic, or mythological description of the introduction, triumph, and prevalence of Buddhism over Brahmanism, not only in this district, but throughout India, represented by the infidel Gaya subjecting the three worlds to his power through the divine favour acquired by religious austerity; of the unsuccessful attempt made by the inferior or less numerous sects of Brahmanism to check and overpower the new religion, until the more numerous and powerful sect of Vishnu took up the contest; and of the long and doubtful warfare which was carried on between the two systems of faith—Bouddha and Vaishnava, which, apparently, led to something of the nature of a
compromise, of which advantage was taken by the Vaishnavas completely to subdue and expel their opponents. The local version of the legend which I have heard adds that if a daily sacrifice is not offered to Vishnu in the temple of the Vishnupad at Gaya the infidel giant would recover his power. This was evidently a device, perhaps necessary at the time, to rally the adherents of the orthodox faith at this seat of heresy in order fully to secure the victory that had been gained.

If I had time and opportunity to refer to the Gaya Mahatmya (?), which contains all the details of the legend, I think it probable that I should find many circumstances to corroborate the view I have given of its meaning. At present I will mention such as occur to me without the examination of that work. 1. The first is the existence of two places, five miles from each other, both bearing the same name, and respectively regarded as sacred by the hostile sects of Buddhists and Brahmans. 2. Another is the existence of numerous Buddhistic remains, not only at Buddha Gaya, but in other localities of the district, their dilapidated condition, and the absence of Buddhists, compared with the flourishing state of modern Hinduism, and particularly of the Vaishnava sect. 3. The apparent greater antiquity belonging to the Buddhistic remains compared with those of Brahmanism. The Brahmanical religion is, I think justly, considered more ancient than Buddhism, but the Buddhistic remains are here apparently older than anything belonging to Brahmanism, which is what might have been expected when Brahmanism triumphed over Buddhism at the principal seat of its power. 4. In the legend itself it is worthy of special note, that although Gaya, the giant, is described as an enemy of the gods, it is not meant that he was an impious and wicked person in a moral sense, but merely an opponent of the Brahmanical religion; for he is at the same time represented to have been so holy as to have inspired the gods with fear that their authority in the world would be superseded by its subjugation to him through the power of penance. This clearly marks a state of hostility between two religions, of which one was the Brahmanical and the other the Buddhistic; for the gods to whom Gaya was opposed were Vishnu, &c., the gods of the Hindus, and the subjugation of the three worlds is precisely the sort of religious merit and power ascribed to the Buddhas. 5. Māgādhā was the ancient name of the district when it was under Bouddha sway—Māgadhi was the name of the language, and Māgādhā the name of the inhabitants of the country.

It is not generally known that at the present day in this district there is a large class of the population with several sub-divisions called Magadi, all now Hindus of the Brahmanical faith, and probably the descendants of converted Bouddhas. The Raja of Tickary, the principal Zemindar of the district, is, I am told, of this caste, and if we could trace the genealogy of some such family, it would probably throw much light on the past history of the district. I am confirmed in this opinion by a statement made
in 1786 by Mr. James Grant in his analysis of the Finance of Bengal (Fifth Report, p. 260). He says that "the petty chiefs of Bishampoor, who were probably vassals of the great Rajahs of Behur, pretend to have conquered this district (Bishampoor) near 1,100 years since, and show a genealogical table minutely exact in name and time, tracing their descent in regular uninterrupted succession down to the actual representatives of the family." He afterwards adds, in curious coincidence with the preceding speculations about Gaya, that "the claim to antiquity set up by these Zemindars may be very well founded; for about the period referred to there is some reason to believe that a revolution, introductory of the Brahmin religion and the sway of new rulers happened, at least in that part of Bengal where the native inhabitants were the budohistes, and wholly uncivilised." If we could by such, or by any other means, fix the date of the introduction of Brahmanism consequent on the overthrow of Buddhism, we should gain, I believe, a new and important point in chronology for the illustration of the religious and political history of India and of the surrounding countries, to which last, it is probable, Buddhism spread synchronously with its expulsion from India.

Mrs. Speir and you will perhaps smile at the earnestness with which I dwell upon a question of mere antiquarian curiosity, but in fact it is not so much so as it seems. One means of disabusing the minds of the Hindus of the superstitions to which they are at present addicted, is to show the historical meaning hid under them. Of course, this is no part of my present object, which would be injured by any attempt at religious proselytism, but I have occasionally an opportunity for observing the effect. About three weeks ago I gave my pundit leave of absence for about ten days to visit Gaya as a pilgrim, by which he supposes he has acquired much religious merit. On his return I explained to him the historical meaning which I attach to the legend respecting Gaya. He admitted its probability, but added with a feeling of dismay that, if true, it would strike a fatal blow at the practice of pilgrimage thither, by reducing the event that had taken place there to the level of the common incidents of life.

Believe me, with much esteem, yours most sincerely,

W. A. Adam.
OBITUARY.

THE LATE BHOODEB MOOKERJEE.

So many many years have elapsed since I last saw my deceased friend that it startled me to see an obituary notice of him in the July number of the Indian Magazine & Review. I had supposed that he had long passed away from this life. Through more than forty years of silence on both sides, I have never forgotten him. He was my first Indian friend, and I have seldom known a finer soul. He made a deep impression on me in those first years of my Indian life, and I naturally desire to say here how much I have always cherished that impression.

It may, perchance, gratify some who knew him—and are still living—to read these few poor words in his honour. Our acquaintance began when he was Head Master of the Government School in Howrah, a suburb of Calcutta, on the west bank of the River Hooghly, and when I was beginning my days of service as a civil officer. I see, as clearly as if it were yesterday, that tall and dignified figure, in his pure white robe, and those handsome features of fair complexion. He was somewhat older than I was, and spoke with that thoughtfulness and gravity which mark the Hindoo of high caste. His conversation was inspired by that strong ethical perception which is also habitual to a Hindoo of Brahmin descent. There was in him a quiet readiness to accept all the higher ideals of life, without any cant or surface profession; he was too full of grave self-respect, and endowed with too high a moral sense for any insincerity. He recognised to the full the responsibility of his task as a teacher of young lads, many of whom were preparing for a college education; but he never chattered about it. He seemed incapable of saying a word more than he felt, or of resorting to flattery or obsequiousness to his English visitor and official superior. He could not be ignorant, however, that if he pleased that visitor, it might not improbably be an advantage to him for his whole life.

When, in after years, I heard Englishmen talk glibly about "native untrustworthiness and duplicity," I used to
tell them of Bhoodeb Mookerjee, my Indian friend, who could not tell a lie, or fawn—or, indeed, act otherwise than with the utmost uprightness. I used to add that I would, with the utmost confidence, place in that man's hands bonds or certificates "payable to bearer," representing all I possessed in the world, and without asking for a receipt. Yet, all this time he was a typical Hindoo, in his wonderful dignity and his almost feminine gentleness, with entire absence of self-consciousness and absolute reliableness. I am certain that these qualities were not peculiar to him; but that they belong to his race. It was this acquaintance with Bhoodeb Mookerjee that made me, ever afterwards, long to see the existence of close personal relations, deep and hearty friendships, between the men of the West and the men of the East, alike in India and in England. The gain would indeed be great on both sides. Nothing could be better for India or for England than complete confidence and co-operation between the two races in all the fields of social, political, and religious progress. The qualities of the two should supplement one another. In time it will be so, under the controlling destinies marked out by the Creator of both.

Hodgson Pratt.

The death has been recorded, on July 20, of Sirdar Khan Bahadur Padamjee Pestonjee, a leader of the Parsi community of Poona. His father was a mail contractor in Western India before the time of railways, under the British Government, and for carrying out his work 700 horses and other conveyances were employed. Mr. Padamjee assisted his father in these arrangements, and during the Mutiny, when other mail lines were interrupted, the two managed to do much beyond the original contract. Lord Canning awarded to both father and son a gold medal, the title of Khan Bahadur, and the sum of Rs. 10,000 in recognition of the great services they had rendered. The Parsi community were much gratified by the bestowal of these honours, and they raised a fund (to which K. B. Pestonjee Sorabjee and his son contributed) for establishing a public dispensary at Poona, which was opened as "the Khan Bahadur Pestonjee Sorabjee Poona Charitable Dispensary." It relieves 20,000 poor patients yearly. Mr. Pestonjee Sorabjee and Mr. Padamjee
expended altogether over a lakh of rupees in public charity in the Deccan in Guzerat. Mr. Padamjee was for some time Chairman of the Poona Municipality, and he sat for two years in the Bombay Legislative Council. When the Prince of Wales visited Poona in 1875, Mr. Padamjee was elected President of the Reception Committee, and he had the honour of reading the address of welcome to His Royal Highness. He had for the last ten years led a retired life, owing to ill-health. He was remarkable for his geniality and courtesy, and was held in high respect by all who knew him.

LECTURES TO HINDU LADIES AT MADRAS.

About a year ago, some Hindu gentlemen in Madras determined to organise lectures for Hindu ladies.

Their aim was to provide both educational and social advantages for those who attended. The lectures were to be on instructive and interesting topics, and each was to be followed by a little social intercourse. Eight of these lectures have now been given, and it is believed that a brief account of the experiment will be found interesting.

In order that the arrangements might be strictly in accordance with Hindu customs, none but women were present. The lectures were arranged by Mrs. Brander, the Inspectress of Schools. The lecturers were Mistresses in girls' schools, and the lectures were delivered in girls' schools and at Mrs. Brander's house. In addition to the Hindu ladies who formed the audience, visitors interested in the movement have been present from time to time. Among these may be mentioned Miss Macphail, Mrs. Firth, Miss Billington, Miss Milne, Miss Ive, Miss Arnold, Mrs. George Stuart, and Mrs. Brander.

The lectures were delivered in Tamil. They were on the following subjects, and most of them were copiously illustrated by
slides in the magic lantern, by diagrams, and by simple experiments:—

A Trip to England.
Domestic Economy.
Scenes in Scotland, Switzerland, and Italy.
The Earth.
The Moon.
The Solar System.
The Management of Children.
Nursing the Sick.

Examination questions were put by the lecturer during, and at the end of each lecture; the members of the audience were encouraged to state freely every difficulty that occurred to them, and lively discussions and conversations frequently took place. After each lecture some time was spent in conversation, and occasionally in hearing music.

Each member of the audience paid a small admission fee, and an honorarium of Rs. 7-8-0 was given to the lecturer at each meeting. The lectures were organised by and under the auspices of the Hindu Social Reform Association, but attendance at the lectures in no way pledges the ladies or their guardians to an endorsement of the views of the Association.

Omitting visitors and children, the smallest audience numbered 7 Hindu ladies, the largest 40, and the average was 20. Considering the novelty of the experiment and the difficulties in its way, it is thought that it may, so far, be considered very fairly successful for a beginning.

It is felt, however, by its promoters that the scheme has in it the seeds of much further development, and that the time has come when it may be better organised and a knowledge of it more widely spread and its scope extended. To this end a committee has been formed consisting of four English ladies and four Hindu ladies. Mrs. Arundel has kindly promised to be the president of the committee, which will, in future, organise the lectures, and while continuing the general arrangements on the same lines as hitherto, will endeavour to make the lectures as useful and attractive as possible.

Hitherto, as was almost inevitable in an experiment, the lectures have been somewhat desultory and disconnected, and the audiences have been small and fluctuating. In future it is intended to give not only single lectures, but also from time to time, short courses of lectures, and to make the teaching conveyed by these more thorough by holding written examinations after each lecture and at the end of each course. It will be optional with the members of the audience whether they are examined or not. Those who are examined will have their papers corrected and returned to them, and to those who answer sufficiently well on a whole course, certificates for that course will be awarded.

By special request, a short course of lectures on Elementary Physiology is being prepared by one of the ladies on the committee,
and it is hoped that this course will be the basis of others on Health and on Sickness. Other lectures which are under contemplation are Lives of Eminent Women (beginning with the Life of her Majesty the Queen Empress, and including perhaps those of Paudita Ramabai, Miss Nightingale and others); Indian and Foreign Counties, Elementary Natural Philosophy, and the Management and Training of Children. Whenever it is possible the lectures will be illustrated by slides in the magic lantern, by other pictures, charts and diagrams, or by experiments.

It may be remembered that, when the movement for Higher Education of English Women was in its infancy, one of the means adopted for its promotion was lectures to ladies. One of the first was delivered by the Rev. Charles Kingsley, Canon of Westminster. He congratulated his audience on the fact that a course of lectures on Elementary Physiology and Hygiene was to be delivered to them by a lady. His remarks are so wise and so applicable to the present enterprise, that it seems appropriate to quote some of them here. He said, "The question of the better or the worse education of women is one far too important for vague sentiment, wild aspirations of Utopian dreams. It is a practical question on which depends not merely money or comfort, but too often health and life as the consequences of a good education, or disease and death—I know too well of what I speak—as the consequences of a bad one. . . . A little knowledge of the laws of light, for instance, would teach many women, that by shutting themselves up, day after day, week after week, in darkened rooms, they are as certainly committing a waste of health, destroying their vital energy and diseasing their brains, as if they were taking so much poison, the whole time. A little knowledge of the laws of heat would teach women not to clothe themselves and their children after foolish and insufficient fashions which sow the seeds of a dozen different diseases. If women act upon what they learn in these lectures, and having women's hearts, they will act upon it, there ought to follow a large decrease of sickness and increase of health, especially among children; a thrift of life, and a thrift of expense besides. For, let me ask you, ladies, with all courtesy, but with all earnestness—are you aware that more human beings are killed in England every year by unnecessary and preventable diseases than were killed at Waterloo or at Sadowa? Are you aware that the great majority of these are children? Are you aware that the diseases which carry them off are for the most part such as ought to be specially under the control of the women who love them? . . . Now in the face of such facts as these, is it too much to ask of mothers, sisters, aunts, nurses, governesses, all who may be occupied in the care of children—that they should study thrift of human health and human life, by studying somewhat the laws of life and health? . . . One word more, and I have done. Let me ask women to educate themselves, not for their own sakes merely, but also for the sake of others. For, whether they will or not, they must educate others. I do not
speak merely of those who may be engaged in the work of direct teaching. That they ought to be well taught themselves who can doubt? I speak to those—and in doing so I speak of every woman, young and old—who exercise as wife, as sister, or as friend, an influence, indirect it may be, but still potent and practical, on the minds and characters of those about them. How potent and practical that influence is, those know best who know most of the world and most of human nature."

These Tamil lectures to Hindu ladies are being organised for the same purpose, and in the same hope, as those lectures to English ladies were organised long ago. It is earnestly hoped that all educated Hindu gentlemen in Madras will encourage the ladies of their households to attend these lectures, and to profit by the advantages which they offer. Should a sufficient number attend to justify the expense, the lectures will be given every fortnight, otherwise they will be given once a month. Miss Ive, Principal of Bishop Corrie's Girls' School, Black Town, has kindly consented to lend one of her school-rooms for the lectures on the first and third Saturdays of each month. The next lecture will be given there towards the end of July. A notice of the exact time and date and of the subject will be issued shortly.

The terms of admission will be 6 annas a lecture to those who take tickets in advance for a whole course, and 8 annas a lecture to those who take tickets for single lectures. Tickets and all information can be obtained from M. R. Ry. A. Subba Rau Avergal, B.A., 18 Singarachari Street, Triplicane, Madras.
PUZZLES.

I.

RIDDLE BY CHARLES JAMES FOX.

Formed long ago, but made to-day,
Employed while others sleep;
What few would like to give away,
And none would wish to keep.

II.

ENIGMA (FROM THE PERSIAN).

Which is that city populated by lifeless men? It is sometimes flourishing, and sometimes desolate. You will see it prosperous in time of war, and desolate in time of peace.

III.

"BURIED CITIES."

Some of our readers probably know this game. It consists in making a sentence which shall contain the name of a city or any other geographical term divided up among successive words, but always so that the spelling runs straight on. Examples: 1. Can you remember line 14?—Berlin. 2. A critic owes some courtesy to authors.—Cowes. 3. It was a grand sight.—Agra.

We give the following as a puzzle. It contains four buried geographical names:—

Ah, Monsieur! Open your mouth and shut your eyes, as I am telling you, and you shall taste a fricassee of chicken, light as gossamer, I can assure you!

ANSWERS TO PUZZLES OF FORMER MONTHS.

I.

A snail was climbing up a wall 20 feet high. It climbed five feet every day, and fell back four every night. How many days did it take in reaching the top of the wall?

Answer.—Sixteen days; because on the sixteenth day the snail would have reached the top, and would not again fall back.
II.

DOUBLE ACROSTIC.

Fated to meet in constant strife,
They wage their warfare still;
The last maintained by teeming life,
The first by strength and skill.

Each, well supplied with blades, renews
The combat year by year,
And I, had I old Homer's muse,
Would sing those combats here.

One, the foes' blood, e'en to the lees,
Will quaff, when slain are they.
While this the oppressor's head will seize
And tear his brains away.

Ferocious savages! yet lo!
From evil still springs good;
Each deadly foe as friend you'll know,
When rightly understood.

1. Of inches few, I ween,
   But every inch a Queen.
2. O greatest of thy race!
   Yet last in time and space.
3. With hands uplift and face intent,
   He gazes on the firmament.
4. Without legs or arms complete,
   But well supplied with feet.
5. Low in estate and worth;
   The scum and dregs of earth.
6. I boldly send the ball,
   And yet I shrink from all.

Solution.—Mowers; Barley.

   1. M
   2. O
   3. W
   4. E
   5. R
   6. S
   A
   B
   2
   3
   4
   5
   6

M.
THE GEOLOGY OF THE MADRAS PRESIDENCY.

[The following Paper was read by Dr. WARTH before the Association of Women Teachers, Madras. We have often had occasion to refer to this useful Society, the Fourth Annual Report of which we have lately received. Dr. WARTH's paper followed one (at a previous meeting) by Mrs. Brander, in which the elements of Geological Science were explained with remarkable clearness, and it was shown how the familiar action of rain, waves, and rivers illustrates the nature of the strata formed in the distant past.]

It gives me great pleasure to address a few words to you on the Geology of the Madras Presidency. My task is rendered much easier, because Mrs. Brander has already made you acquainted with the general principles of geology.

I have here some specimens of rocks and fossils to show you, and the map of the Madras Presidency, geologically illustrated, hangs on the wall. I will treat the subject in strictly chronological order, beginning with the metamorphic rocks, which form far the largest portion of the land surface, and which also cover the whole island of Ceylon.

Speaking of chronological order implies that the rock strata which we see in different colours on the map were formed and consolidated at different periods. The time which was occupied in this process is very considerable. It is quite out of proportion as compared with our historical time. The time which elapsed from the first man on this earth to the present day is a trifle compared with the figures we shall have to deal with. The latter are not thousands but millions of years. I do not think it is so very wide of the mark if we assume that 10 million years elapsed since the gneiss rock, of which I hold a sample in my hand, was first deposited.

I hope I shall not be misunderstood about this matter. If we perceive records in the rocks which point to God's work of creation in far gone ages, I trust that we are justified in studying these records. We may be allowed to follow
up the marks of changes on the earth's surface and the early dawn of life on the earth. We may be permitted to accept the past history of this planet as extending over millions of years, and, with this the proof, that time itself existed during these millions of years.

By allowing a practically indefinite time the phenomena of geology are most easily and naturally explained.

We begin with the metamorphic rocks, of which this specimen, a piece of gneiss, is a good example. It is a hard and durable rock, which owes its condition to long continued heat and pressure. These rocks are often interspersed with dykes of black eruptive rocks, and sometimes with masses of granite, which can be seen interlacing on the sides of many a rounded mountain peak, that stands aloft over the undulating country or plain, like the Trichinopoly Rock, and others.

The generally stratified condition of the metamorphic rocks shows that they must once have been sediments, most likely settled on the floor of an ocean.

The first observed stage of the history of Southern India is therefore that of a sea covering its surface, the floor of the sea accumulating sediment carried thither from some pre-existing land. The second stage is most likely the rising of the sea bottom with its superincumbent sedimentary layers, to form land, and this land appears to have remained more or less stationary until this present time, when it forms the margin of the great Asiatic continent.

The metamorphic rocks contain numerous valuable minerals. I have to show rock crystal from Vellore, of which pebble spectacles are made, mica from Nellore, which is a most wonderful mineral, an elastic glass. It is largely exported to Europe for use in ovens and electrical apparatus. Corundum, the mineral which is used for polishing gems, is found in no less than nine districts; iron ore, chiefly the magnetic kind, in great abundance, layers of 100 feet in thickness, extending for miles. The metamorphic rocks formed, perhaps, at first mountains of great height, extending far beyond the present limits of the land. In the course of ages they were worn down, leaving comparatively low plateaus and hill ranges.

We have examples of the wearing of these rocks now. The softer schists are gradually washed away, and the gneiss rock, losing its base, breaks up into great and small blocks. The blocks by the action of the weather become rounded and remain perched in peculiar positions on larger ones. Certain younger but still much metamorphosed
rocks, which Mr. R. Bruce Foote has called the Dharwas, are characterised by gold-bearing quartz veins. To these belongs the auriferous area near Kolar, in Mysore, where many shafts have been sunk, and the finely distributed gold is extracted out of the quartz by crushing and amalgamation.

The first sedimentary rocks are shown on the map as the Kuddapahs and Kurnools, named by Dr. W. King after the towns of these names. They contain beds of limestone, quartzite, also diamond-bearing conglomerates, but no fossils have been found in them, and they may perhaps belong to fresh water formations.

Of the coal period, we have not, strictly speaking, an example; but the Singareni field comes close to the boundary.

This coal period found India as an island, perhaps we may say continent. It must have had land connexion with South Africa and with Australia to account for the identity of plant species found in the coal measures of the respective countries. The northern limit was about in the present position of the Himalayas, where marine carboniferous deposits accumulated. Thus the land of the Madras Presidency, about this time, formed a central portion of a very extensive land area. Of this region of the earth, we also happen to know that, just before the coal measures began to form, it was visited by a period of great cold, similar to the later glacial period of which Mrs. Brander gave you details. We have the proof of this ancient glacial period in the shape of striated blocks and pebbles, which are at this day found in great perfection with glittering polished surfaces and minute striation.

I am showing the diagram of one of these pebbles which I found in the Punjab; I am also handing round a very delicate fossil fern from the coal measures of Central India.

During the Mesozoic period, Jurassic* and Cretaceous times, the land connexion with Africa was severed, and the eastern continuation of land decreased successively, so that, by the end of the cretaceous time, the east and west limits of the Peninsula were near their present positions.

The East Coast is remarkable for the cretaceous rocks in the Trichinopoly District. They were deposited whilst the Bombay and Central Indian area was being covered up with an enormous sheet of volcanic rock. This rock burst

* Jurassics near the mouth of the Godavery.
out in successive liquid layers, until they had accumulated to the thickness of a mile, over an area 450 miles square.

This great outburst of liquid rock did not extend to the Madras Presidency. We have, however, ample marks of earlier eruptions in the form of dykes of black basalt, which continue for miles over hills and plains. Some of these dykes are 100 feet thick, and of great length. One of the largest is in North Arcot, reported to be 100 miles in length.

The Cretaceous rocks of the East Coast, in the districts of Trichinopoly and South Arcot, are marine deposits, and they contain very numerous fossils. These fossils make up for the deficiency in other rocks of the Presidency. Seven hundred and seventy-four species have been described. Sixteen per cent. of the species were found identical with the species of the European cretaceous strata. As there are not many people collecting fossils, the specimens may be obtained by thousands. During a few days stay in the Trichinopoly area, I was able to procure for the Madras Museum ten large cases full of fossils, besides 1,000 specimens which were sent to Dr. Waagen, in Vienna, for examination.

Some examples are exhibited for inspection. Echinus or sea-urchins; some sharply dentated oysters; some spirally tapering gastropods; some hundreds of minute dice-shaped gastropods. Then ammonites, the most common *A. rotomagensis*, the small *A. sugata*; also a section of a larger ammonite with well marked ornamental suture lines. There are also here some casts of ammonites from the Himalayas, of Jurassic age. These are the kind which are often worshipped in this country by certain Hindus and called saligrams. The Jurassic ammonites are a proof of a Jurassic sea on the northern portion of the present Himalaya Mountains. Further, we have, from the Trichinopoly cretaceous rocks, the cigar-shaped belemnites; also teeth of sharks and teeth of a large reptile—*Megalosaurus*.

A species of this same genus was described from Europe with serrated teeth. As the cretaceous rocks belong to the age of reptiles, it is quite to be expected that a reptile should be dominating.

With the fossils from the Trichinopoly District I exhibit also some peculiarly shaped lumps or nodules which have the appearance of ordinary limestone or mudstone. They consist, however, of phosphate of lime which may be utilised for chemical manure, and which exists in abundance
amongst the cretaceous strata. In the subsequent Eocene times, the sea covered the greater part of the present site of the Himalayas, as shown by deposits of Eocene age, on the southern slopes. There are also some deposits with undoubted marine fossils (nummulites) at a height of 16,000 feet above sea level. These marine strata are not represented in Southern India.

We have no equals in the Madras Presidency to the celebrated Sewalik strata which formed as a fresh water deposit, at the foot of the Himalayas, after the Eocene Sea had been driven back and the chain of mountains raised up. Instead of strata with such a splendid assembly of the mammalian remains, with eleven species of elephants and mastodons, with the huge four-horned Sivatherium, and with the gigantic turtle, and many other animals, most of which are extinct but several still living, we only have a belt of sandstones called Cuddalore sandstones, which, up to the present at least, have yielded nothing but a few plant remains. These are fossil trunks of coniferous trees.

It is remarkable that these latest deposits form a regular belt along the East Coast of the Madras Presidency. This would indicate, if the strata are marine, a gradual rising of the peninsula on the East Coast, which process has been observed to continue up to the latest time.

There is a map by Mr. R. Bruce Foote, which shows the raised beaches along the present Eastern Coast. The land is also shown, in recent geological times, to have been raised between India and Ceylon, forming the so-called Adam's bridge. The destruction of the bridge and formation of a shallow ocean passage at the Island of Pamban, about the year 1840, is historic. The former rising of the sea bottom finds its uncertain record in the mythical Hindu stories of a bridge made by an army of monkeys.

To repeat, we have thus had, in earliest times, sea over Southern India.

Then, in early palæozoic times, land subjected to much erosion. Then a continent during the time of the coal measures. This continent had its northern limits in the Panjab and along the present site of the Himalayas, where deep sea existed. The continent was connected by land with South Africa and with Australia.

In Jurassic times this continent became disconnected from Africa, and the sea partially approached the present East Coast, but land remained in the south-east.

In Cretaceous times the land became more limited, the
sea exceeding its present limits on the East Coast and encroaching on both sides of the Himalayas.

The Eocene Sea extended in Northern India to the present southern slope of the Himalayas (Miocene).

Pliocene. Fresh water lakes formed the site of the Sewaliks. The sea then retreated until its present limits were reached. The successive stages of land and sea are illustrated by diagrams.

So much about the depth of the rocks and their treasures. The greatest treasure, however, is the tiny thin covering of soil, gathered from weathered débris of the rocks, the basis of the agriculture of this country.

[It would be interesting if other parts of India also could be popularly described in regard to geological history. We would suggest that Mr. P. N. Bose, of the Geological Survey, might be kindly willing to supply some short articles on this subject.—Ed. I. M. & R.]
The Secretary of State for India has appointed a distinguished graduate of the London School of Medicine for Women, Miss Annette Benson, M.D., London, First Physician to the Cama Hospital, Bombay, in succession to Mrs. Pechey Phipson, M.D., resigned. Miss Benson has lately held an acting appointment as Resident Medical Officer at the Claybury Asylum, under the London County Council.

Lady Elgin has written a letter of congratulation to the Principal of the Campbell Medical School on the occasion of one of the students, Miss Hemlati Sen, having passed with great distinction from that Medical School. Miss Sen has received the award of the Viceroy's Scholarship and also another scholarship.

Mr. Framjee Dinshaw Petit has made a donation of Rs. 2000 to the Alexandra Native Girls' English Institution at Bombay.

It is stated that the Kashmiri Pundits have established at Srinagar an Association, under the presidency of H.H. the Maharaja, which has for its object to introduce social reforms in their community. They have already put a stop to extravagant expenditure at marriages and other festivities, and they have now under discussion a social law for preventing child marriages.

It is well known that Rai Bahadur V. Krishnama Chariar, of Madras, has laboured for several years in the preparation of pictorial books in Tamil and Telugu, suited for children's reading in school and at home. His monthly magazine, the Maharani, has been much appreciated in families, and several of his publications are now used for prize books, instead of the dry, uninteresting books that used to be distributed. We are glad to learn that the Superintendent of Native Army Schools and the Commanding Officers of Native regiments in Madras are adopting some of Mr. Krishnama Chariar's Home Series reading books in the Regimental Schools, and that they have decorated the blank walls of several of the school-rooms with his picture cards.

Dr. Ernest Hart, President of the British Medical Association, and Mrs. Hart intend to visit India in the next cold season. One of their objects will be to investigate sanitary questions, and to try to organise systematic arrangements for the spread of sanitary knowledge.
Surgeon-Major K. R. Kirtikar, M.R.C.S. England, L.R.C.P. London, has been appointed Acting Professor of Botany in the Grant Medical College, Bombay. Dr. Kirtikar has made a special study of Botany, and has given valuable lectures before learned societies on Indian trees and plants.

Mr. M. T. Quinn, M.A., has been appointed Principal of Pachaiyappa's College, Madras, on the resignation of Mr. John Adam, M.A.

We regret to have to record the death of Rai Bahadur Hardial Singh, who was held in great respect in the Punjab, as well as in the Jodhpur State, with which he had official connexion. His son, Mr. Roda Mull, left England last year, after being called to the Bar.

Mr. T. C. Lewis, M.A., Inspector of Schools, Lahore Circle, Punjab, has been appointed to succeed Mr. Nesfield as Director of Public Instruction N.W.P. and Oude.

The famous Mosque at Delhi, known as the Juma Musjid, which was built by the Emperor Shah Jahan, was unfortunately struck by lightning on July 16, and considerable damage resulted, especially to one of the minarets.

We are glad to hear that it is proposed to start a school for the education of purda ladies in the N.W.P. and Oude. The plan was originated by Raja Jai Kishen Das, of Oudh, and it has the support of Sir Charles Crosthwaite, the Lieut.-Governor, who has suggested that a fund for the purpose should be raised by the Raises and Taluqdars. The institution is to be named after the Empress of India. A Committee has been formed to collect subscriptions, of which Raja Jai Kishen Das is President, and Muushi Nawab Kishore, C.I.E., treasurer. Considerable support has been already promised to the movement. A women's school is to be opened, at Lucknow, next January, under an English Lady Principal, for the training of teachers, and for giving preparatory education to ladies who may wish to take up the profession of medicine.

A meeting was lately held at the College of Science, Poona, Dr. Bhandarkar in the chair, for perpetuating the memory of Dr. Theodore Cooke, who was Principal of the College for 28 years, and who now holds a post at the Imperial Institute. It was decided that the memorial should take the form of residential quarters for the students, and a Committee, with Mr. Dorabji Padamji as Chairman, was appointed to carry the resolution into effect.

The Tribune gives the following instance of presence of mind of a Bengali lady of Calcutta: A correspondent writes to us in
praise of a young Bengali lady, Miss Kumudini Ghose, who, at Nalhati, the other day, saved the life of a little boy who had been bitten by a cobra. The two had gone for a walk, and when they were nearly a mile from home a cobra suddenly coiled round the leg of the boy and bit him near the ankle. When Miss Ghose saw that it was a cobra that had bitten him, she on the spur of the moment tore her saree and tightly bound the boy's leg just below the knee-joint. Then she sucked the poison from the wound and carried him home on her back. The boy is now quite well.

A Library, called, from its founder, the Tullockchund Maneckchund Library, has been opened at Palitana, Kathiawar, one of the sacred places of the Jains. H.H. the Thakore Sahib was present at the opening ceremony, and expressed his interest in the encouragement of learning and of education.

The Advocate of India states that a Rajput Chief, Kunwar Rushal Pal Singha, has taken the degree of M.A. in the Calcutta University, from the Agra College. His father is Thakur Umrao Singh of the Kotla State. It is expected that the student may come to England for further study.

The Behar Times announces the marriage of Mr. Satchidananda Sinha, of Bankipore, Barrister-at-Law, with the daughter of the late Mr. Seva Ram, Barrister-at-Law, and granddaughter of the late Rai Kanhyal Lal Bahadur, Executive Engineer, Lahore. The marriage was celebrated at Lahore on July 8th. It is said to be the first inter-marriage between two sections of the Kayastha community, and, as such, it has a bearing on the social reform movement.
PERSONAL INTELLIGENCE.

Bai Rukhmabai has passed the L.R.C.P. and C. Examination of the Glasgow Royal College of Physicians and Surgeons.

In the recent Intermediate Examination in Medicine of the University of London, Jamsetji N. Bahadurji, University College, passed in Physiology.

Gilbert Paira Mull, London Hospital, passed in Chemistry and Physics in the first Examination of the Royal College of Physicians and Surgeons under the "five years'" Regulations.

Mr. F. C. Davur, L.D.S. and L.M.S. of Bombay, has been elected a member of the British Dental Association. It is said to be the first time that an Indian has been thus honoured.

Mr. D. M. Seth, Barrister-at-Law, who obtained last year a Scholarship in his College (Ayerst Hall) at Cambridge, has been obliged to return to India; but he hopes, at a future time, to come back for continuing his degree course at the University.

We regret to have to announce the death, on July 27, at Waltair, Madras, of Miss Jagannadham, L.R.C.P., late House Surgeon Cama Hospital, Bombay, aged 30, daughter of the Rev. P. Jagannadham, London Mission, Vizagapatam.

Arrivals: Mr. Behramji M. Malabari; Munzerabad Pallegar Krishnaswamy Naik, a young chief from Mysore; the Rev. Mr. Nikambé and Mrs. Nikambé.

We acknowledge with thanks: Report on the Census of Travancore. By V. Nagam Aiya, B.A., Dewan Peishcar, Census Commissioner, 1894.

Erratum: In August Magazine, page 437, line 14, for "others are Brahmin Hindu" read "others are non-Brahmin Hindu."