

## PRESIDENT'S ADDRESS.

GENTLEMEN,—The close of another year naturally suggests to those interested in the welfare of our Society a brief review of the labours in which we have been engaged during that time. The recurrence of such Anniversaries affords also a fitting opportunity of resting for a while from the constant strain of current work, and calmly recalling the past, endeavouring to extract from such a retrospect a just conception of what our progress, if any, has been; what our failures, and there are certain to have been some, have resulted from; what our hopes of future success may be. We shall thus be the better prepared to enter on the duties of the coming year; and the better able to face the difficulties we are sure to meet, if we know what is their nature, and what their limits are.

It had been my intention to have taken, on this occasion, a general review of the progress of knowledge in those departments of enquiry, to which the Society has more especially devoted itself during the year now closed; to have seen, how far this Society had contributed to that progress, if at all; how far we were lagging behind in the onward race, and to have enquired also how far, and in what way, it might be practicable to encourage the efforts of our members, to evoke their more zealous exertions, and to facilitate their success. But having held the chair of your Society for only a part of the year, and seeing also that the several contributions to our meetings must all be fresh in the memory of the Members, I think it will be scarcely necessary or desirable to attempt a summary review of the papers which have been read. These will be quite as well known to those interested in such enquiries, as they are to myself. And they are perhaps too recent to admit of a just estimate being formed of their true bearing on the general progress of knowledge. The regular, and rapid issue of the Proceedings of the Society, in which are full reports of the several meetings held during the year, absolves your President largely from the duty incumbent on him of recalling your labours. On the other hand, as now one of the older members of this Society, and as one who from the first year of being in this country,

has never ceased to take a deep interest in its welfare and success, I hope I may be permitted without presumption to take a cursory view of the changes which have taken place in the constitution of our body, and of those which must be anticipated; and I would fain hope that such a review will not be without interest and value.

The report of the Council read to you this evening will have made you acquainted with the numerical condition of our Member list at present. It shews that we have on our rolls now 427 Members of whom 294 are in India, while the large number of 133 represents those away from this country. It will be seen also, on comparing these numbers with those of former years, that there has been a large increase in the number of these absent members, to some extent due to more liberal rules for leave, sanctioned during the year, so that, while we had an addition during the year of 42 new members,—and the total number of members now on the list is larger than it has ever been—there has been actually a diminution in the number of paying members of 11. Hitherto it has been the practice to retain on the Member-roll, the names of those who had been members, but who had left India. Very many of these never had any intention of returning to this country. And the retention of their names in the list largely tended to give to the Society an apparent strength which it in reality did not possess. Such absent members have not been in any way contributing members, and have therefore not added to the support of the Society. The new rules this evening sanctioned will I trust tend to reform this. They provide that any person, who has been a member, can on leaving this country secure to himself, during his absence, the publications of the Society by payment of 12 rupees per annum, and can resume his membership rights on his return; while the names of such as leave the country, and do not within three years from the date of leaving express their wish to continue members, shall be, after the lapse of that time, struck off the rolls. It is hoped, that in this way, the managing body of your Society will be able to know with a much nearer approximation to accuracy, than can now be attained, the real amount of income and support to be derived from the members. The anomaly of continuing on our rolls the names of many, who have ceased to be in any way connected even with India, will be removed, while every encouragement is at the

same time held out to induce others to maintain a real, and I may add a profitable, association with the Society.

I have said that the number now on the rolls is larger than at any previous period of the Society's existence. And in so far as this is the case, we may, I think, fairly congratulate ourselves on the fact. Undoubtedly this has been largely brought about by the wise measure of reducing the amount of the annual contributions required from members, which, long anxiously and earnestly urged upon the Council, was at last sanctioned in 1859; since that time the number of members has increased from 180 to 427. It seems to me that we might, with great wisdom go further still in the same direction. Looking either to the value of the publications of the Society (the only return which non-resident members receive for their contributions), or the amount of subscription demanded from members of similar Societies in Europe, and the comparatively greater advantages which members of such Societies enjoy, I think the Asiatic Society of Bengal would do wisely to reduce still farther the monthly contributions from its members.

But while congratulating you on this increase of number, there seems to me another and a more important point of view, from which to study the numerical results given in the Council's report. Gentlemen, the Asiatic Society of Bengal is to this day, I may say, the only Society in this portion of the Indian Empire, specially devoted to the cultivation of pure science. Its publications, extend in an unbroken series over more than eighty years. Devoted to Oriental Literature, Science, Antiquities, Geography and Art, they form a repertory of the most valuable and curious information on every subject connected with this Empire, and are, as I believe, one of the grandest monuments of British dominion, and one of the noblest proofs of British intelligence in the East. Without them, no student can satisfactorily investigate the learning, the languages, the history of this empire. They contain the life-long labours of some of the greatest discoverers in, and some of the noblest contributors to, Oriental knowledge. The Society is still vigorously pursuing the same course. And yet among the many thousands of educated Europeans in this country, and the many thousands also of well informed Native gentlemen, this, the chief and almost the only scientific Society in this part of the Empire, counts its supporters and contributors by only a few hundreds!

There must be good and sufficient reasons for this, and it is worthy of careful enquiry to ascertain, if possible, what these may be.

Again, during the past year, the Society has lost by retirement no less than 20 members; during the preceding year, 20; in 1866, 19; in 1865, 25. I confess I always listen to these announcements of retirement with great pain, accompanied by a guilty consciousness of having myself, as an individual element in the management of the Society, contributed to the result. I think it may be assumed as a fact, that no one will willingly abandon a position which he considers to be advantageous. There have doubtless been frequently private or pecuniary reasons for such; but in by far the majority of cases, I fear we cannot admit that these have been the cause of the numerous retirements. And we must, I am convinced, seek for a more deeply seated, a more vital reason, and admit that the faults are to a large extent internal in the Society. Have we done what in us lay to render the fact of association with us an advantage to the members themselves? I would not for a moment desire to overlook the consideration, that many join the Society from a desire to promote its efforts and advance its researches, without seeking any individual advantage. We gladly acknowledge that there are many such. But unquestionably the majority of our members do, on joining this, or any other Society, look forward to receiving some advantage in return for their contributions, and do calculate also whether these advantages are worth their cost. Now what advantages of this kind do we offer to our Members? All obtain the Journal and other publications of the Society, resident members have also the opportunity of being present at the meetings of the Society, and of freely borrowing books from the library.

First then as to our Journal. I have no scruples in confessing, although I do so with very great regret, that its appearance has been for many years past too irregular, too unpunctual, and uncertain, to enable members even to know whether they would ever receive it or not. Numbers of one year issued late in the succeeding year; others issued without the plates referred to in them, which plates have appeared in some subsequent year's publication; these, gentlemen, have, I am ashamed to say, been the rule rather than the exception. Would any of us continue our subscription to a periodical issued in this



unsatisfactory way? And are we justified in expecting that our Journal will be appreciated, if such be continued? But beyond this, the contributors to the Journal themselves never knew when their papers would appear; there often was no rule observed as to priority of contribution, giving a claim to priority of publication. The practice had grown up of merely announcing to the meetings of the Society the receipt of papers, of which only the titles were given, and nothing more was heard of them, until they appeared in the Journal, perhaps years afterwards, or were possibly returned to their authors. During the past year I rejoice to be able to announce to you that by the strenuous exertions of your Secretaries, much has been done to remedy these defects. No one here can be more painfully or practically aware of the immense difficulty of providing for the punctual appearance of the Journal and Proceedings, than I am myself. These difficulties are the greater, because the result depends not on the efforts of an individual but on those of many: the printer, the artist, the lithographer, &c.; delays may arise from each and all of these, and in addition there are climatal difficulties which can scarcely be foreseen, and sometimes even, if foreseen, can scarcely be guarded against. But while admitting all these, we felt the delay was not insurmountable, and determined not again to ask the Society to believe it unavoidable. Since I have had the honour of taking the chair, the Proceedings have always been issued to you before the ensuing meeting, the illustrations have always accompanied the paper to which they referred, and the completion of the volume for the year, with title and index, was in your hands, before the close of December. This volume is larger, and has more illustrations than preceding ones. The numbers of the Journal have also all appeared; of the first Part, two completing the issue for the past year, and of the Physical Science Part, four numbers with index, contents, title, &c., have all been issued before the close of the year, although the first number had only been commenced in March. An extra number was also issued containing Mr. Theobald's Catalogue of Reptiles, which had been actually in the press for three years; and meteorological Reports were published, extending over a period of nearly two years.

Further, there has not been a single paper of any kind submitted to the Society for publication, which has not either been read in full,

or of which an abstract has not been given, at the meetings, and in all cases the opportunity at least for free discussion of those papers has been given, and such discussion invited. This I consider of high importance, as one of the great advantages of such an association arises from the opportunity its meetings afford of eliciting the views of its members on the subjects brought forward, and thus generating the glow of intellectual enjoyment and intellectual success, by the friction of mind against mind. This advantage is entirely lost when papers are merely laid on the table. At the same time it was found that there remained over several papers, the printing of which had been ordered long before, but which had been laid aside for the publication of others possessing more immediate interest. These have now been all printed in your *Journal* and, as nearly as the size of the several numbers of the *Journal* would admit, in the order of succession of their dates of submission to the Society. And now I have the pleasure of telling you that the first number of the *Journal*, Part II, for the present year 1869, has this evening been placed upon the table, by your Natural history Secretary. This brings up the publication of papers read to the Society to June last; that is to within six months of the date of issue. Gentlemen, I consider this most highly satisfactory, and we owe much to Dr. Stoliczka for the zeal and devotion he has shewn in bringing about this most desirable change. We hope that the same system will be maintained; that, as far as the funds of the Society admit, all papers, excepting under peculiar circumstances, and by special order of the Council, shall be published in the order of the date of submission, and without any repetition of delays, which have been thus shewn to be avoidable.

The Proceedings of the Society again under this system have been really what they assume to be, and the volume for last year, a goodly sized volume of more than three hundred pages, contains much that is valuable and highly interesting; and will, I feel certain, bear very favourable comparison with the records of proceedings of any other similar institution, as giving evidence of healthy vigour and active progress in the life of the Society.

So far I have spoken of the publications of the Society. The other advantage we offer to our members, in return for their contributions is the Library. And with reference to this, I am much pained to say,

that it has not been in our power to do as much as we could have wished. The Council have been fully impressed with the vast importance of this portion of the Society's efforts, but the absolute necessity of pursuing a system of the very strictest economy has prevented the outlay of a single rupee that could be avoided. The allotment of money sanctioned out of the income of the Society at the commencement of the year has been very slightly exceeded (under sanction of the Finance Committee and Council), but there was much, very much, that we desired to do, very much that we were anxious to add to our library but could not. For the coming year, the Council suggests an allotment of money somewhat larger than that of last year and, I hope, that a good deal may be done to supply deficiencies, and to add to our stock of books. I trust also that the close of the year may not again come round, without some progress being made, in what is so seriously required, a new catalogue of our Library &c.

But if we cannot claim that the Members of our Society receive a full and fair equivalent for their contributions, I would suggest to the Members to consider how far this may be due to themselves, as well as to the managing body of the Society, and how far they have it in their own hands to remove this cause of complaint. And first, I would ask the authors of papers to bear in mind the costliness of illustrations, and the tediousness and delay in their preparation; and to reduce these, therefore, to the minimum extent, sufficient for the just elucidation of their arguments, or descriptions. And I would also ask them to diminish, if possible, the demands on the time of our officers, by always submitting with their papers an abstract, embracing the principal points referred to or discussed, and giving a general view of the argument of the writer. No one can prepare such abstracts so effectively as the authors themselves, and this is the only way in which a certainty of nothing being overlooked can be attained.

And to the Members, who are not contributors to our Journal, I would say, that they must be aware that such carefully illustrated publications cannot be issued, without considerable cost. I would appeal to them to save their executive officers, who thus voluntarily devote much time and labour to their service, without any remuneration other than the consciousness of doing their duty, from the harassing and wearying necessities of considering carefully, how every expenditure may

be reduced to a minimum, how this can be cut down, and that left out, or even to decide whether it be possible to publish at all. At the commencement of my tenure of office, it was very seriously discussed, whether it would not be necessary to suspend the publication of your Journal entirely for a time. And you are, gentlemen, indebted to the liberality of your officers for several of the plates which illustrate your publications, during the past year, which the funds of the Society could not have afforded. This is not as it ought to be : and I would throw myself on the feeling of justice and honour of the members, and ask them to prevent a repetition of it. There was at the commencement of the year, a total amount due from different members to the Society, very nearly equal to a whole year's income ! Strenuous exertions have been made to call in these sums, but with only very partial success. We have reduced the amount by only about  $\frac{1}{3}$ th of the whole. I would ask your aid in this matter. Letter-applications have been made repeatedly to all who are thus indebted to the Society, but believing that such have frequently miscarried, or been overlooked in the pressure of other business, the Council have resolved to print now and send to all the members of the Society, a list of the names and of the amounts due ; and we hope that the attention of the members may thus be drawn more effectively to the facts.

Gentlemen, if the Society could now realize the amount due to it from its members, not only would all existing debt be at once removed, but we could add considerably to our actual and permanent income ; we could greatly enlarge the Journal, and improve our library, and could thus greatly extend the advantages which we offer to our associates. In connexion with this question of income and expenditure, I may announce to you that, with the hearty co-operation of the Finance Committee of your body, a new system has been introduced of calling in all bills, and discharging them, monthly. You will see in the accounts an item of income derived from the savings thus effected by the payment of cash for work done. But the main advantage resulting from this system is, that the Council know exactly from month to month, how the affairs of the Society stand, and can at once prevent any accumulation of liabilities. The necessity for such a step will be obvious, if I mention that on urgently calling for the immediate submission of all outstanding accounts, several were produced, which



dated even five years back, and which had been allowed to stand over, never having been submitted even though asked for.

It depends, therefore, entirely on the members themselves, how far their advantages as members, can be increased. The Executive of the Society have done what in them lay to promote their interests.

In connection with the question of the publications of the Society, I should fail in my duty did I not make known to the Society, that I have had several, I might say numerous, appeals from members of the Society, to induce a reversion to the old system of publishing all papers, no matter what their subject, in the same number of the Journal, doing away with the division into two series, as now, a change first introduced in 1865 on the motion of Lt. Beavan. On the other hand, other members are equally strenuous in urging the continuance of the present system. I think much may be urged on both sides. And were I content to anticipate only a continuance of the present extremely limited amount of funds at the disposal of the Council, for such publications, I would decidedly urge the abandonment of this division of the Journal. I think we must confess, that the conditions of the case are quite changed since first the Journal was issued. The facilities of communication with Europe and America have been immeasurably extended; Societies have multiplied at home; and there is now, no difficulty whatever for any one to find a fitting medium of publication for any researches he may undertake, the record of which is worthy of being published. A large and special audience is thus at once insured; and delay in making known his results avoided. We cannot now, therefore, look forward to our Journal being, as it has been in past years, the record of the life-long labours of any member. Even the most zealous contributors to its pages find it desirable to send to Societies at home their most valuable papers. And it is consequently difficult to maintain the high character of the Journal, and the fitting publication in two distinct series of the year's contributions. During the year just closed, only two numbers of Part I have been issued; simply because there were no more papers to be printed; while it may, I think, fairly be urged at the same time that the Physical Science papers, in Part II, would have been in no way injured or diminished in value, by the appearance, in the same number, of the oriental papers. The attempt to form two

distinct volumes for each year has failed, because there has not been material enough, or funds enough, to produce two volumes, and each series has, I think, lost in general interest by being isolated. Moreover the Proceedings now absorb all the smaller papers which are of interest, while the issue separately of all these parts, numbers, and volumes adds to the cost.

My own opinion, therefore is, that if we are to have only a continuance of the present state of things, it would be wiser to revert to the old system of publication of all papers in one series, issuing the numbers of that series at regular intervals, of say two months. But if, on the other hand, as I think we are justified in anticipating, we do receive such an accession of strength, as will place the funds at the disposal of the Society, for such publications on a much more satisfactory footing; then, I believe the Council would be able to secure the fitting publication of sufficient material in both series to form two concurrent volumes. In this case, the division would be advantageous. In this matter also, the decision entirely rests with the members of the Society at large. A reference to the accounts of the Society will shew you, that the Council have been fully alive to the importance of improving and enlarging your Journal and Proceedings. They have steadily increased the allotment to such purposes out of the general funds of the Society, so far as was consistent with the other demands on these funds. If you go back only a few years you will see that in 1864, the allotment for publications was only 3,500 Rs.; this was also the amount in 1865; in 1866, this sum was increased to 4,400 Rs.; and in 1867, and 1868, to 5,000 Rs. This is very nearly one-half of the whole income of the Society. And I would also ask you to remember the fact, that were that income doubled, there would be very little increase in the cost of establishments for management: and that more than a half of that increase would be available for the extension and improvement of your publications. Cannot this be accomplished? Are we to sit down in despair of seeing our finances in a more flourishing state? Are we to be content to see the most valuable papers seek for publication elsewhere, because we are unable to pay for their illustrations here? I would appeal to my fellow members of the Society, and ask them to aid their Council in this respect. I

*will* not believe that you look upon the efforts of the Society as a mere pastime, that you come here for the idle purpose of passing an hour, or of merely gratifying intellectual curiosity, however laudable such might be. I would rather be convinced that you feel, that by the very act of enrolling yourselves on the list of this, or any other institution for the promotion of science, you accept the position of joint trustees for the great treasury of truth, and are in all honour bound to see that the talents thus committed to your charge receive no diminution, but rather bear fruitful increase, at your hand. If then, each member of the Society, would but induce one single new member to join—and surely it is not assuming too much, that one at least in the acquaintance of every one of us, would take an interest in our pursuits,—I say, if each member of the Society added only one to our lists, and thus doubled our numbers, the difficulties under which we now labour would disappear, the utility of the Society would be largely increased, and the circle of its influence might be still further widened, by reducing the amount of contributions demanded from each of its members.

During the year just closed, the Society at large has unanimously sanctioned the formal transfer of its collections of Natural History, Antiquities, and of miscellaneous objects, to the Trustees of the Indian Museum, incorporated under Act XVII of 1866, to be by them held in trust, for the Society, to form part of a general Museum, freely accessible to all, and to be located in a building specially erected for this object. This building, as the members of the Society are aware, is now in progress. It is situated in the very best locality in Calcutta, facing the large open maidan; it will be large, roomy, and we trust admirably adapted for the purposes for which it has been intended. Pending the completion of this building, the collections still remain in the rooms of the Society, and in a house in an adjoining street, rented to provide the necessary additional accommodation. Full lists of those collections have also been prepared by the zealous exertion of two of our members, Dr. Stoliczka and Mr. V. Ball, who acted as Curators of the Indian Museum during the absence of Dr. John Anderson with the expedition to Yunan. And the Council are now therefore authorized and prepared finally to

hand over the collections to the trust-charge of the 'Trustees of the Indian Museum.'

This transfer of our collections to an institution, where they are certain to be fully cared for and properly exhibited, is, I believe, the most important change which has affected the Asiatic Society for the last half century. It was not, until after much deliberation, that the Asiatic Society of Bengal ever commenced the formation of a Museum. There were strong and weighty reasons urged against the advisability of that course, derived from the experience of several associations elsewhere. The unavoidable increase in the cost of maintaining such collections was urged; the inability of any limited Society to meet this, or even to provide accommodation for such collections if formed; the terrible waste and destruction of objects of Natural History in this climate; all these difficulties were considered. And in the face of all, it was still determined to commence a Museum. In the wisdom of that determination, under the circumstances, I entirely concur. There was at that time in this city no collection whatever available for the students. Individuals who were interested in special branches of enquiry, had provided themselves, at great cost, with series such as were required for their own immediate researches. But these were, of course, not accessible to the public, or to other students. Now, for the success of this Society, it was absolutely essential that such collections should exist, and most wisely, therefore, did the members devote their energies to the formation of a Museum. For years, unaided by public contributions, steady progress was made. But the truth of the warnings they had received soon made itself manifest. So long since as 1837,—a whole generation since,—it was seriously discussed whether the attempt should not be abandoned. In the following year, it was agreed that either the Museum should be given up, or the publications of the Society. An earnest appeal was then made to the Government of the day for aid. A grant of 200 Rupees per month was sanctioned, and the collections were saved. At various times subsequently the amount of the grant was increased, and effort after effort was made to bring the collections into better order and arrangement. The Society made constant sacrifices to obtain proper means for their exhibition and preservation. But the demands still increased. Mr. Blyth was appointed Curator towards



the end of 1841, and at once the Zoological department of your collections began to assume an importance and value which they had no claim to before. From the time of his appointment, until, in 1862, broken health compelled him to seek a more favourable climate, your Journal bears continuous testimony to the wide range of his knowledge, to the carefulness of his labours, and to the enthusiasm and devotion he brought to his studies. In truth, I know of no series of papers, the contribution of one man, which have tended so largely and so thoroughly to illustrate the fauna of any one country as those of Mr. Blyth do that of India. Mr. Piddington also had for many years contributed largely to our knowledge of the resources of this country, and continued in charge of the Mineralogical and Geological portions of your collections, until in 1856 the establishment of a systematic Geological Survey of the country, and the necessity of providing a depository for its collections, which the Society could not give, led to the founding, in a separate establishment, of the Geological Museum.

But, notwithstanding the liberal contributions of the Government, it was still found that the Museum was a source of constant expenditure, which the limited resources of the Society could not meet, and of constant anxiety. If care were given to one division of the collections, all others were necessarily neglected; no sufficient staff could be maintained; no sufficient space could be afforded. And if additions were made in one direction, they could only be accommodated by the exclusion of some other class. It was not, therefore, surprising to find serious complaints frequently urged of the way in which valuable collections had been treated. In fact, such was inevitable; we had neither the room nor the funds required for the greatly increased collections. After much discussion and careful deliberation, it was determined to appeal to the State, to establish a proper and efficient Museum chiefly illustrative of the Natural History resources of India. Some time elapsed, many difficulties intervened; the disturbed state of the country; the pressing demands on the public revenues for other objects; the changes in the *personnel* of the Government; all tended to delay the final decision of the question. But the Society was gratified in 1862, by the announcement that "in the opinion of the Governor-General in Council, the time had arrived when

“the foundation of a Public Museum in Calcutta, which has been generally accepted as a duty of the Government, might be practically realized.” There were still many details of arrangement to be gone into; and in 1866, an Act of the Indian Legislature was passed, providing for the erection of a proper building, and formally sanctioning terms on which the Asiatic Society of Bengal should be prepared to hand over to a Board of Trustees their collections, to be held in trust for the Society. To the Society was also secured the right of nominating, through its Council, four out of the whole number of Trustees (13) and certain other privileges were also granted. The vote of the Society at large, taken in November last, confirmed the proposed transfer of the collections, which can now, therefore, be formally carried out.

I cannot but congratulate the Society most heartily on this highly satisfactory termination of a long standing, and ever-increasing, difficulty. They have secured the maintenance of a well-arranged and extensive Museum in Calcutta; they have obtained a public and legislative guarantee for the support of this; they have secured a continuance of their interest in such collections, so that there is little fear that the objects which the Society originally had in making these collections shall be forgotten or neglected; or if they are neglected, it will be the fault of the Society itself; and by doing this, they have relieved the Society from a heavy and increasing demand on its pecuniary resources. On the other hand, I think we must all gladly acknowledge the obligations of the Society towards the Government of this country, for the liberal support they have given to such objects, and for the gracious and ready acknowledgment which their doing so has expressed of the unflinching exertions which the Asiatic Society of Bengal, through good report and evil report, in times of plenty as in times of difficulty, had, through the long lapse of half a century, devoted to what they justly considered a necessary and essential element in the satisfactory investigation of the history of this country, and of its resources.

There still remains another important change, contemplated in the arrangements to which I have just alluded, which must be sanctioned by the Society at large, before they can be terminated. That is, the proposal that the Society should leave its present premises, and take up

its abode in rooms to be set apart for it in the general building devoted to the Indian Museum. Under this proposal, the Society is to retain its property in the present house :— another and a very marked instance of the liberal view which the Government of the country have taken of the labours of the Society. There can be no question, that immediate advantage in a pecuniary point of view would result to the Society from such a move, as we should, in addition to our income from subscriptions, receive whatever rent would be realized for the house we now occupy. And yet I confess that, individually, I look forward to such a move, if carried out, with anticipations of nothing but mischief. The house we now meet in has been the abode of the Asiatic Society since long before any of its present members can remember. All our memories, all our associations, are with it. It has afforded accommodation to the Society for two generations and more. If the Museum be removed, which now occupies more than three-fourths of the whole house, there will be ample, and more than ample, accommodation for the Society's property, and for any extension of its Library which can be contemplated or accomplished for the next century. We would therefore abandon at much cost and risk to our books, maps, paintings, &c. in removal, a house most admirably situated, and in which we have had a long, successful, and independent existence, in order to take up our abode in rooms which, necessarily designed as a part of a building intended for a general Museum, are not, and cannot be so well adapted for the purposes of a Society like ours, as our present rooms are. By doing so, we would I think, cease to have that independence of existence, which is so desirable. We would become but the smallest and least influential part of a great whole, and I cannot but consider it a certainty that in the unavoidable extension of the Museum, and of its demands for space, the Asiatic Society would simply be screwed out again, and be compelled to return to its present abode, or seek a domicile elsewhere ; or what is just as likely, would be absorbed in the general extension.

I have always felt, and I know that this feeling is shared by other members of the Society also, that if once the Society comes to occupy rooms forming a small portion of a large public building, the natural consequence will be a conviction that it also has become a part of a Government establishment, and is supported by Government. And the result

of this will be, a large withdrawal of support from individuals. Indeed, I found it very difficult to persuade a member of the Society the other day that this was not the case *now*, and to induce him to continue his contributions. I confess I anticipate this result with some dread, and I would seek to avert the evil. The case would be different if the proposition were to construct a separate abode for the Asiatic Society, which could be specially adapted to their wants. But this is not the case: the proposition is, that the Society should take up its abode in a corner of a great building designed for other purposes, in rooms that beyond a question will soon be needed for other purposes. I venture to think, that the Society would be vastly more benefited if a pecuniary equivalent for the proposed rooms were secured to them, and they continued in their present abode. There is, however, ample time for the consideration of this question, as the move cannot be made for some years yet.

You will, gentlemen, have heard with regret of the loss of seven of our members during the past twelve months by death. Of those seven, one only, Mr. Foster Hill, had been a contributor to our meetings. Mr. Hill joined the Society soon after his arrival in this country to take up the important duties of Professor of Civil Engineering in Calcutta, and we looked forward with much hope to his increasing interest in our common pursuits. Of the others, whose decease has been announced to you, some had filled prominent positions, as citizens and rulers in the land, with high honour and credit; one especially, Prosonno Coomar Thakur, we would name as having long and earnestly shewn his appreciation of the value of knowledge by actively engaging "in the holy cause of enlightening his countrymen;" but this is scarcely the place to consider their history in such a light. As members of the Asiatic Society, they had not been contributors to our Journal, but they had for many years proved by their constant membership, that they appreciated the importance of science, and were impressed with a sense of that duty which devolves on the wealthy to maintain and support, by their wealth and by the sanction which their names and public station give, those means of co-operation, by which the progress of the real labourers in science is facilitated. In this they had offered an example worthy of imitation to a wider extent than it has hitherto claimed.



There are hundreds who from various causes, can assist and support science in no other way than by their purse; but I would urge that this aid is a duty; a duty, even enhanced by self-interest, which will certainly not lose its reward. How forcibly and yet how quaintly Bacon says "Knowledge is not a couch for the curious spirit, nor a terrace for the wandering, nor a tower of state for the proud mind, nor a vantage ground for the haughty, nor a shop for profit and sale, but a storehouse for the glory of God, and the endowment of mankind." I know that the standard of mental culture among the educated classes in this country, whether European or Native, is too high, to allow me for a moment to think that they are insensible to these claims of science on their support. I would rather suppose that these claims have not as yet forced themselves on their notice. I would not degrade knowledge by making it "a shop for profit and sale," in asking the consideration of the individual gains to be acquired by its patronage, but I would recall to you, that science has ever been the most powerful minister of national power, the most effective guide to national wealth, "the true handmaid of religion, the one manifesting the will the other the power of God," and I would urge that the neglect to encourage and sustain this, and such other kindred institutions, is the neglect of a duty which we owe to ourselves, to our successors, to our country. It is mainly, gentlemen, by the combined efforts of such Societies, by the co-operation of their members, by the increased interest which attaches to common studies pursued with a common object, by the minor intellectual contests which arise from the challenge of mind to mind in the working of such institutions, that the soldiers of science are trained in the use of their weapons, and enabled to go forth, clad in the panoply of scientific truth, as loyal knights to do battle with the terrors of superstition and to scatter the hosts of ignorance.

We have all, gentlemen, other and more pressing claims on our time; other and onerous duties to perform. Rarely indeed has it happened, that science has been able to obtain the undivided attention and time of any of her cultivators, but we can contribute, each according to his own ability. There is not one, if he be only willing and humble enough to attempt it in the right spirit,—letting his "mind, like a pure mirror, reflect nature without distortion"—who cannot

add something to the pile of knowledge; who cannot pick up a branch here and there; a dry twig from the trees around. Others perhaps will tie these into faggots, and add them to the pile (and the lowest menials in the service of science can aid in this) and at last some other devout worshipper will come, and touching the heap with a spark of Promethean fire, will call forth all the secret light and heat it contains, to illumine the temple of knowledge. It is only thus by the useful combination of many, that true progress is obtained, and even had our Society not existed, we should have been compelled in other ways to unite the efforts of many, before we could arrive at the solution of our problems.

It was, gentlemen, with convictions of this kind, that extended education, and the general diffusion of science, more especially as applied to the industrial arts, were among the most effective means by which the social condition of this country could be improved; that by encouraging the cultivation of the natural or inductive sciences, it was possible to exalt the tastes of the educated youth of this land; that I was led to consider how far it might not be possible for this Society, through its Council, to aid in facilitating the attainment of this desirable end. In the valuable address delivered from this chair, at the close of the previous year, your President, Dr. Fayrer, remarked on the serious discouragement with which these studies had been met in this country. He truly said: "If ever we propose to educate the people thoroughly, to lead them from lower to higher truths, it can only be by making them acquainted with the subjects included under the comprehensive term of 'Physical Science' \* \* \* by imbuing them with a comprehension of those general laws by which all physical phenomena are regulated." He went on to say, "It is not here, though, that the elementary knowledge could be imparted, but in the schools where the youthful mind is trained to observation and comprehension of laws, the results of whose operations are recorded and verified here." Entirely agreeing as I did in these views and in the opinion that this was a subject worthy of the consideration of the Society, I lost no time, on taking your chair, in urging the Council to aid in this good cause. I am happy to say, the proposition met with their earnest support. A committee was selected, and entrusted with

the discussion of the best means of bringing the matter to the favorable consideration of the authorities who would have to carry out any proposed changes; and also to consider what, and how great, those changes should be, in order to ensure the successful attainment of the object. The question was fully discussed, and it was decided to address His Excellency the Governor-General, in the matter. As Patron of this Society, and at the same time Chancellor of the University of Calcutta, we felt confident of the interest which His Excellency would take in the question. And, as to the means which appeared to us the best adapted to accomplish the end in view, we were quite agreed, that any change must be gradually introduced, since the agency by which these subjects could be taught must in this country be to a large extent created, before there could be any very large extension of such studies. And seeing, not only in this country but in Great Britain, that the Universities were the great object of ambition with all the better class of students, and that the curriculum of studies in the vast majority of Schools was almost entirely regulated by a reference to the University standards,—even when the large majority of the school pupils never intended to proceed to the higher grade of an University training,—we have urged the very simple addition of an elementary knowledge of Natural or Physical Science to the course required from every candidate for matriculation in the University of Calcutta. We were satisfied that if this were demanded, and rendered obligatory with the pupils, the information would be acquired; that the earlier students would soon become themselves better qualified to teach others; and that thus gradually, but most surely, a large amount of knowledge would be disseminated, the good effects of which we did not venture to doubt. In this spirit, we addressed His Excellency, and we have since been informed, that His Excellency has laid the question officially before his Council, where, we doubt not, it will receive full and just consideration.

I conceive that this has been a most legitimate exercise of the influence which the Asiatic Society ought to possess; and I trust the effect may be as beneficial as we anticipate. And indirectly, I trust also, it may be of essential advantage to the Society itself, in bringing into our ranks, a large number of new recruits, ready to take up arms in the cause of truth. But let us not forget at the same time

that while we urge upon others the necessity of such extended education,—if our youth are to be trained up as useful citizens and men,—let us not forget, I say, that our Society itself forms the necessary complement to this early training, let us view ourselves even more than we have been wont to do as an educational body, and as devoted as much to the improvement of others as to the advancement of our own information. Let us all be fellow-labourers in the great search after truth, fellow-pupils in the school of nature, fellow-students of that “great first book—the world,”—all I trust ready and anxious to communicate to others any knowledge we may ourselves possess; ready and anxious also to learn from others all that they can communicate. And by no means the least advantage arising from such studies consists in the inevitable result which habits of observation must produce, namely, that they call into existence, and provoke the exercise of, a process of self-education, without which no man is well-taught. True that in every physical science, where the great means of acquiring knowledge is by observation, much must be accepted on the authority of others,—unless we would have the human mind remain stationary, and allow the accumulated stores of one generation of men to be lost to another,—still each must for himself go over these observations, must trace the successive steps in the reasoning based upon them, and must, if he wish to apply them, stamp those reasonings with the impress of his own individuality; each must observe, each must compare, each must discover, for himself. Material forms and arrangements must be seen to be understood clearly, and the students are thus forced to consult the great book of the world itself, if they desire their information to be accurate; they are compelled to be the “children of nature and not her grandchildren.” And if such habits of observation and comparison ever be produced, we may rest assured that they will continue to be exercised. The great secrets of nature are not proclaimed in the market-place; they are not open to all, but are hidden in her inmost sanctuary, and if we would be honoured by her confidence, we must devote ourselves to her service. New methods of enquiry, new modes of research are called into play. The questions to be solved here, are not of our own imagination, they are ready prepared to our hands. We cannot here start from our own suppositions, and laying down



definitions, demonstrate identities as determined from a reference to such definitions. We must compare, we must determine resemblances by a reference to type and establish similarity in effects by their analogy with known results of known causes. And this practice of reasoning from analogy, this necessity for estimating degrees of probability, and for balancing varying amounts of evidence, and the habits of thought thus educed, constitute one of the marked advantages of the Natural Sciences as part of a system of education. They thus fill a blank by calling into active and continuous operation habits of thought, and by educating powers of mind, which neither the study of literature nor of the mathematical or social sciences sufficiently exercise.

We have had during the year the pleasure of welcoming back from Abyssinia our able associate, Mr. William Blanford, who had been attached as Geologist and Naturalist to the force engaged in that country, for the release of the prisoners confined there. During the progress of his interesting trip, the Society had received several communications giving brief accounts of his progress, which were full of interest, and at the last meeting (Dec.) Mr. Blanford completed these sketches up to the date of his return. At the same meeting, a considerable part of the valuable collections which he had brought back with him, illustrative of the Natural History and Geology of Abyssinia, was placed on the table, and bore ample testimony to the energy and enthusiasm which he had brought to bear on his enquiries. Since his return, Mr. Blanford has been engaged in the more careful examination of his collections, and in the preparation of his detailed reports. I sincerely hope that these may be, under the sanction of the Government of India, given to the public in a fitting form, with ample illustrations. It is true that the Natural History of Abyssinia has been perhaps better worked out, than that of any other equally unfrequented part of the African Continent, and that in consequence, the number of novelties brought back by Mr. Blanford has not been very large. But he has been fortunate in meeting several and in obtaining specimens also, which throw additional light on the structure and history of other animals the existence of which was known, but not with sufficient accuracy. Further, although many papers of high importance have been published in other languages treating of the Natural

History of Abyssinia, there is scarcely a single one in English, and certainly there never has been any attempt to give a general statement of the facts in our language. I feel also that the publication of such researches, under the editorship of the original observer himself, would be an object worthy of the patronage of a great Government like that of this country, and would be a fitting supplement to the enlightened interest which they have already displayed in, and the liberal sanction they have already afforded to, such scientific enquiries in the country they were compelled to enter. We look forward with great interest to Mr. Blanford's detailed reports, knowing how well prepared he was for the investigations he has been engaged in, by his long and eager study of the Natural History, and his intimate acquaintance with the Geology, of India. It was to me a great pleasure to urge the special fitness of my esteemed and able colleague for such a duty when at home last year, and I have no hesitation in expressing my conviction that the importance of the results will fully justify these anticipations. Of course, the extent of Mr. Blanford's acquisitions must be considered with reference to the very brief duration of his visit, and the necessity, under the peculiar circumstances, of his confining his researches to the immediate neighbourhood of the line of march of the force which he accompanied.

Another of our members, Dr. John Anderson, had been despatched with the expedition from British Burmah to Yunan, and also returned towards the close of the year. We have not yet had any detail of Dr. Anderson's observations in those little known countries, but the very valuable and beautiful series of costumes, weapons, implements, musical instruments, &c., portions of which are still hanging in this room, and which have been all open to the inspection of the public for days past, shewed what a rich harvest he had gathered, bearing on the history, habits and relations of the curious tribes among which he had been. The collection is also singularly suggestive of connection between these tribes and others. At the meeting in June last, some Panthay visitors were present, and a sketch of the history of this strange people,—an island of Mussulmans in the centre of a raging ocean of Chinese, which had withstood all the attacks made upon them, and had not only held out against their threatened destruction, but were yearly gaining in numbers, importance, and strength,—was

given by Maulví Abdullatíf; drawn up from a MS. in Arabic by one of the Panthays themselves. We anticipate a large addition to our knowledge of these people, and of their border tribes, from the account of Dr. Anderson's sojourn among them, and hope it may be soon accessible to the members of the Society and the public.

The second part of the *Journal* for 1868, contains the usual meteorological returns for Calcutta up to close of August. The 1st number for 1869, now on the table, brings these up to the close of October. These had been allowed to get so much into arrear that, at the close of the preceding year, they had been issued only up to August, 1866. It is hoped that we shall in future be able to give these returns more quickly than hitherto; and that very soon the necessity for publishing them at all may be removed, by the issue in a more complete and general form, of tables exhibiting the chief meteorological elements, not only for Calcutta, but for Bengal generally, from the office of the meteorological reporter. We have seen, with pleasure, that the Government of Bengal has acted on the advice of their able officer, and enabled him, by visiting the out-stations, and personally conferring with the several observers, testing and comparing their instruments, and the modes of registration, to introduce a greater uniformity in the system, and thus obtain a greater regularity in the returns. This is the essential first step towards improvement, and we doubt not will bear good fruit; for, however interesting to local observers local observations may be, they fail entirely in leading up to any general results, unless they can be correlated with other observations in adjoining or more distant localities; and this correlation and comparison is worse than useless, unless the observations have been in each case conducted with nearly equal care, and on a uniform system. This element of success will now be secured for Bengal, by Mr. H. Blanford's visits to the Bengal stations. Similar efforts have been made in the N. W. Provinces, and we look forward to the adoption of a uniform system, throughout India generally, when it may be practicable to deduce from all the returns one general review of the meteorology of India. I would suggest that useful progress towards the accomplishment of this desirable end might be made, if monthly summaries



prepared by the officers charged with the record of these observations under each of the local Governments, were to be published together each month. The observations are now published in detail from week to week, but I think the information they afford, might, with great advantage, be summarized each successive month.

The great value, commercially, of these returns have been acknowledged during the year, by the application from Commercial bodies, for the publication of information regarding rain-fall, &c., in the Upper Provinces. And I cannot help thinking that more practical benefit would be derived from the issue of a brief summary of results each month, and indeed, I would hope, each week, than from the publication of a long list of detailed numerical results, which few persons ever look at; I would also gladly see a combination of the several returns now given. In Calcutta we have weekly publications of the results obtained at the Surveyor-General's Office, as well as those compiled in the office of the meteorological reporters to Government. Now, neither of these are complete in themselves. The establishment maintained at either office is insufficient to secure full and satisfactory results. And we would hope that arrangements may be made to combine both, and to form one really satisfactory, and thoroughly efficient, meteorological observatory. Hitherto no observations whatever have been made of the electrical elements, and their disturbances; none of the seismic phenomena, the importance of which in a general physical study of the country, we have been so recently reminded of,—no satisfactory photometric observations have been made, and—of still higher interest and importance practically—no trustworthy observations of the amount and distribution of evaporation.

I have no doubt all these important questions will receive due attention in time. And I am confident that the Asiatic Society, which has now for nearly quarter of a century steadily, and at great cost to itself, given to the public continuous returns of the meteorological results obtained in Calcutta, will rejoice to see such observations extended, systematized, and compared, with an amount of detail and care, commensurate with the importance of a knowledge of the atmospheric forces and their changes in direction or amount.

And here I would express our grateful sense of the manifold assis-



tance we receive from the Surveyor General's office. To Colonel Thuillier and Colonel Gastrell we are indebted for a continuance of the hearty and friendly aid they have invariably afforded to the Society, not only by their personal support, but also by the liberality with which they have aided the Society in bringing out the many illustrations which accompany the volumes of your Journal, and which, without this aid, it would have been impossible for your Council to publish.

I am happy to be able to announce to the Society that the various papers on the Ethnology of Bengal, which the Government have requested Col. Dalton to edit, together with his own report on the tribes among which he has so long laboured, and with whom he is so well acquainted, have now attained such progress towards completion, as justifies their being at once sent to press; and we may hope for greater progress being made during the coming year, towards their completion. Dr. Simpson has also completed the series of photographs of those tribes, which he had not before had an opportunity of picturing. The history of the native races in other parts of this vast empire has also attracted much attention, and the Society has received from various districts, valuable reports on the inhabitants, their history, languages, customs, &c. I would also here acknowledge the impetus which has been given to such studies by the publication during the year of Mr. Hunter's valued contributions to the study of the Non-Aryan races of India. These commend themselves alike to those who would desire to study the history of these people, with a view to trace out the curious and intricate relationship established by a study of their languages, and the evolution of these in successive ages—and to those who may be placed in positions of authority, and have to deal with these 'lapsed peoples' in their political and social relations. I am confident that no one is more thoroughly convinced of the fact, that these researches have not yet, and indeed could not as yet, have attained to any completeness or perfection than the accomplished author himself. But if in nothing else, then the greater facility which such a work as his Dictionary affords for seeing the errors, and, by eliminating these, making a still further advance towards truth—if in nothing else than this, every student of these Non-Aryan people—(and who that has taken the slightest interest in the ethnological history of

India, has not been to some extent a student of these tribes,)—must feel largely indebted to Mr. Hunter. We look forward with great interest to the promised comparative grammar of these tongues, and trust the author may be enabled to carry out his intentions satisfactorily and quickly.

From the study of the races still existing in the less frequented districts of this country, or of which the last dying embers are still smouldering on the hill sides, the transition is easy to those Palæo-ethnologic enquiries which bear on that question of surpassing interest, the antiquity of man. I have recently published in the Records of the Geological Survey of India careful drawings of the agate flake or knife, found in the deposits of the upper Godavery, of the discovery of which I made the first announcement to this Society in 1865 (Dec.) and then briefly alluded to this great importance of the discovery. During the year, various additions have been made to our knowledge of the limits of area, over which these records of the stone age have been found. I would ask those who are interested in this investigation to compare the series which Dr. J. Anderson has brought back from China. And we have had the gratification of making known also the first instance of the occurrence in India of evidence of the use by early races of copper in the manufacture of implements of the same general character, as mark the use of this metal in other countries also. Some of these implements procured by Mr. Bassett Colvin near Mynpoorie have been proved to be of pure copper. But, as is generally the case in such enquiries, the announcement of this discovery (supposed to be unique) has led to the knowledge that others have been found elsewhere also. And possibly we shall before long have abundant evidence that, in India, as elsewhere, a certain law of successive development in the use and manufacture of metals has obtained. The very remarkable and very interesting discoveries in Coorg, of which your proceedings contain the record, and of which further details have since been received, cannot fail to prove of high interest, and to excite to similar research elsewhere. These, however, come down to a time, when we tread on the verge of historic records. I would more eagerly seek for the co-operation of many through the country in the search for proof of the existence of man in earlier times. And I would venture to give here, a very brief and

hasty sketch of the reasons which lead geologists to anticipate such discoveries.

I need scarcely detain you by recounting the several steps in the discoveries, which though commenced nearly forty years since, have only within the last ten or so, led to the general acceptance, as a fact, of the existence of man along with numerous animals which have since become extinct ; nor of the various ages which different authors have assigned to these instances. Four divisions have been tolerably well ascertained in Europe. 1. The ante-glacial epoch, or, as Lartet calls it, the epoch of the cave-bear ; 2nd the glacial epoch, or that of the Mammuth and Rhinoceros ; 3rd the post-glacial, or that of the reindeer ; and 4th, the actual, or that of the Aurochs. Now, you will perceive that this very simple enumeration of the principal animal remains, found contemporary with the evidence of man in these successive epochs, combines with the physical evidence, as indicated by the other names of glacial, post-glacial, &c., to shew, that enormous physical changes, bringing with them equally marked organic changes, had occurred over the surface of Europe, even in these very recent (geologically) periods. Still greater alterations both of surface and climate, and of the animals existing at the time had occurred in the periods immediately preceding those to which I have just referred. And the Miocene (Mammalian) fauna of Europe differs in almost every species from those which succeeded it. These tremendous physical changes brought about such changes in climate, &c., that the Miocene animals were succeeded by others fitted to live in a temperate climate, and these again by others who had to endure the intense severity of an Arctic winter, during the so-called glacial period. But if we now look to the history of later geological periods in India, we find no evidence of these great climatal changes, (so far as the greater portion of this immense empire is concerned). True, there is abundant evidence in the great ranges of the Himalayas to shew the former extension of the glaciers of those hills. But I am not aware of the existence of any such evidence beyond the hills ; certainly, I think, none which would prove any great lowering of temperature over a wide area. And coincident with this absence of change in physical conditions, we find an equally marked absence of change in the fauna. We have in India none of those very strongly marked divisions which exist in the successive faunæ of Europe.

Thus it happens, as first shadowed out by Falconer, that we find living at the present day the actual and unchanged descendants of several of those animals, the remains of which Falconer and Cautley found buried under some thousands of feet of the Sivalik deposits. And the evidence of the continuity of this descent is afforded by the deposits newer than the Sivaliks. The common Gharial left its bones on the mudbanks of the Sivalik period, just as it now basks on the muddy banks of our existing rivers. The little *Emys (Pangshura) tectum* lived then as now. Elephants then, as now, roamed though the Sivalik forests. True horses (*Equus*) existed; the Camel and Giraffe, cotemporaries of man at the present time, may have been his cotemporaries then also, while true oxen and buffaloes abounded also. The monkeys of that time can scarcely be distinguished from the Honumans which still chatter in our forests. We have therefore abundant evidence that, in India, the existing order of things has dated from a very remote period, and that all the conditions of those early times were suited to the requirements of man. Many of the animals have since then lived down to the period of man, and some exist now. Why then is not the reverse, or reciprocal, way of putting the statement equally admissible, that man had lived back to this early period?

In this peculiar relationship of continuity between the newer deposits of the Godavery and Nerbudda, and the older beds of the Sivaliks, consists one of the marked points of interest attaching to the discovery of evidence of man in any one part of the series. There is no sudden or marked break traceable in the Mammalian fauna which inhabited those countries at the successive periods, why should there be any break in the period through which man was a cotemporary of these animals?

In some very interesting and very important remarks made by my valued colleague, Mr. Wm. Blanford, last year, when the history of the stone implements found in various parts of India was before the Society, he pointed out very briefly how, even up to the present day, the fauna of India presents a remarkable mixture of African and Malay forms; and how the fauna of the Nerbudda gravels, so far as known, appeared "to have been either purely Western, (African and European) in its affinities or to have been much more nearly allied



to the Western fauna than is that now existing." Mr. Blanford also argued very justly, that the case which he instanced in the Nerbudda faunæ of the complete substitution of one animal for another of distinct affinities, indicated that a larger lapse of time had intervened since the deposition of the Nerbudda beds than had taken place in Europe since the formation of those pleistocene beds in which the oldest remains of man yet discovered have been found; "and since which no such case of substitution was known." The reasoning appears to be perfectly correct, inasmuch as we have no evidence of a great change of climate since that early period. But I venture to think that Mr. Blanford has not stated the whole truth. And I believe he would agree with me in thinking that this intimate connection with the fauna of Europe and Africa to which he alludes, as regards the comparatively recent beds of the Nerbudda, can be traced with perfect certainty back to the very base of the Sivaliks, and that the mammalian fauna of India (West and North-West) was one and the same with the fauna of Europe and Africa during the miocene period. We have as yet no evidence to decide the question whether the same animals wandered over the same area at the same time; which, however, is a totally different question. And there were also, and of course, geographical differences in the animals then, precisely as there are now. But the discoveries of Gaudry in Greece some six years since shewed at once that the miocene fauna of Pikermi differed not more from the Sivalik fauna of India on the one hand, than it did from the true miocene of Germany and North Europe on the other. Mastodon, Hipparion, Hyænodon, Musk-deer (*Dremotherium*), Giraffe, and Satyroid apes, all form units in the evidence which indissolubly connects the upper miocene of Europe with those of the Sivalik Hills. And when examined with a little more detail in comparison, we find that the living species which come nearest to the fossil species found in these rich deposits of Pikermi and elsewhere in Greece, the spotted Hyæna, the two-horned Rhinoceros, the Zebra, the Giraffe, and several antelopes are peculiarly African. Further, Unger found among the vegetable remains which occur in numbers close by in Eubœa (and on the same geological horizon) more than 40 per cent. most nearly allied to forms now living in Southern Africa.

We have already alluded to the absence in India of any of those

great physical changes accompanied by marked organic differences subsequently to this Upper Miocene period. And to this cause is due the fact to which Mr. Blanford so justly drew attention, that the fauna of the Nerbudda valley-beds, has a nearer alliance with the Western or Africo-European fauna, than has that now existing in the Nerbudda district. The two faunæ were in fact one in earlier times, and the divergence since then has been most gradual and is still in progress.

Gentlemen, I allude to these researches not so much for the object of exciting attention to the very startling and very important facts which these truths contain, but rather to point out how essential it is that in such enquiries we should be convinced, that the only true solution to be sought for in such problems, is to be obtained from a careful study of the existing animals in each country, and then of the relations which the extinct forms bore to them. I have purposely endeavoured to avoid as much as possible the use of terms derived from European geology, save when speaking of European results, because I feel convinced that the basis of the classification which has hitherto been adopted for these geologically recent deposits in India, has been erroneous. To appeal to Europe for evidence of the geological age of our Indian deposits, is to appeal to witnesses who cannot know the facts, and must therefore give irrelevant or false evidence. Would an Australian geologist be justified in admitting his cave deposits to be secondary, because in Europe marsupial animals were found in secondary rocks; reversing the question, would an European geologist declare the deposits which hold these marsupial remains to be of recent age, because marsupial animals now existed in Australia? The only key to a knowledge of the true succession of Indian rocks is to be found in India, and too much caution cannot be insisted on, in attempting to adapt to this country laws of distribution of animal life derived from the investigation of other and distant lands.

As Falconer eloquently pointed out long since, it is in India, if anywhere, that we must hope to solve the great problem of the succession of life. Here, if anywhere, shall we find in these ancient alluvia of marvellous extent, some of those intermediate forms, all but totally wanting in Europe.

The year just closed, has witnessed very signal proof of the hearty desire of the Government of this country to disseminate an intelligent knowledge of its history and literature. At a cost, which to some few may appear enormous, but which is in reality scarcely commensurate with the vast interest of the enquiry, sanction has been given to the examination and actual repetition by exact and full-sized models of parts of the more interesting architectural remains of the country. For some time past, the Government of the Upper Provinces have been from year to year, at considerable cost, doing much for the preservation and renewal of the many glorious remains, which give such a magic interest to the great cities of those provinces. What student of the architecture of former dynasties, (and in what way can the genius of any distinct race be more satisfactorily studied than in its architectural remains) has recently visited Delhi or Agra, and has not felt grateful for the enlightened spirit in which the magnificence of their buildings has been preserved and renewed, unsightly obstructions removed, and the grandeur and gigantic nobleness of conception which mark these erections made patent to every visitor. And now the Government of India have gone further, and while carefully preserving these noble monuments of former civilization, have determined that their most striking beauties shall be repeated in Europe, for the admiration of every one who can admire gracefulness of outline, massiveness of design, and wondrous skill in execution. In addition to this, skilled enquirers have been deputed to investigate, measure, and describe, some of the more ancient and less known remains in various districts. Our own active member, Rajendralála Mitra, has but recently returned from Orissa, with a large mass of detailed information on the curious remains in that district, which we trust he will be enabled to make public soon. With great regret, we know that his visit to those malarious jungles has resulted in a very serious illness, which has prevented his being present among us this evening.

Lieut. Cole, R. E., who is also one of our members, has in a similar way been engaged in the examination of the highly interesting architectural remains of Cashmere. And we look with great interest for a more detailed and careful description of these very curious buildings from his pen. So curious and so different are they from any other type, that Cunningham classed them as belonging to a

new order of architecture to which he gave the name of Aryan. This, however, has, by nearly general consent, given place to the term 'Cashmere' order or style, as the former name conveyed an idea that the builders of these temples were of an Aryan race. I would hope that Mr. Cole's researches may be extended to the Punjab, where remains, in many respects similar to the Cashmere temples, are to be found, but with very distinctive peculiarities. During a brief visit to the Salt range in 1864, I had an opportunity of seeing several of these, and of making sketches of them. And I felt satisfied that they had been too hastily referred to the same type as the Cashmere buildings. With many things in common, they differ entirely in the character of the roof, which here assumes the form of a square truncated pyramid, with bulging or curved sides; a form which, I should think, indicates a distinct transition to the true Jaina forms. But we require much more detailed examination, before pronouncing definitely on the facts.

I would also refer to the most interesting and valuable papers of Mr. Ferguson on the tope of Umrawutti, near Bezwara in the Madras Presidency, as an evidence of the great interest which Indian architectural remains are now exciting. Some few specimens from this very wonderful Buddhist erection are in the Society's collection, and the members can judge for themselves of the marvellous detail and beauty of the sculpture which adorned its walls.

More recently, the Government of India have, with great liberality, taken steps to secure the possession of a complete list, and also of as complete a library of Sanskrit works, existing at the present moment in India, as may be practicable. The Government have referred to your Society for advice and aid in this very important step, and the matter is now under the consideration of the Philological Committee. The Society cannot fail also to feel gratified at the entirely unsolicited acknowledgment of their long continued efforts to promote a knowledge of Oriental literature, which the resolution of the Governor-General in Council to place at the disposal of the Society, in furtherance of the publication of Sanskrit works of importance a sum of Rs. 3,000 per annum, in addition to the Oriental Publication Fund, already in the management of the Society, conveys. There is, I regret to say, a considerable difficulty in obtaining the aid of properly quali-



fied Sanskrit scholars to carry Sanskrit works through the press, and it would seem that the resolution to catalogue, and bring together a complete series of Sanskrit literature, has by no means been taken up too soon.

I would hope that, on completion of the proposed Catalogues of Sanskrit works, a similar step may be adopted with reference to the numerous Persian and Arabic works which exist scattered in the libraries of native Princes and gentlemen throughout the country.

In connection with Oriental studies, it is a source of gratification to hear from Bábu Rajendralála Mitra, who has acted as Secretary to the Fund, that from scholars in India, who appreciated the value of Bopp's contributions to comparative grammar, a very considerable sum has been remitted in aid of the Bopp Commemorative Fund.

I cannot conclude without expressing to you the obligations under which, in common with every member of the Society, I feel myself to your executive officers and Council. When we first came together, and had, with much anxiety, obtained a full knowledge of the heavy amount of liabilities that were hanging over the Society, it was seriously debated whether it would not be necessary to cease for a time the publication of your *Journal*, and thus, in fact, give up the only evidence we do offer to the outside world of our useful existence. Ruinous as we felt that this would be, we thought honesty demanded that our debts should be paid. If this misfortune has not fallen upon the Society,—if instead of ceasing to issue your *Journal*, we have been enabled to make the volume for the past year larger, and to bring it before you more punctually than in former years, you owe your thanks for this gratifying result to the devotion of your Secretaries; and above all, to the care with which the Finance Committee of your Council have guarded your resources. To Col. Gastrell, as your Treasurer, and to Dr. Partridge as a member of that Committee, we all owe a very hearty expression of our thanks for the assiduity and caution with which they watched over your interests. To the Council at large, I must be allowed to express my own thanks for the kindly support they have accorded to myself during the term of my office.

Allow me now to express my lasting obligation for the unmerited honour you conferred on myself by placing me in your chair. I am

painfully conscious of how inadequately I have been able to fulfil the duties of the important office of President. Of one half of the discussions brought before you, those bearing on Oriental literature, I most candidly confess my entire ignorance. And I cannot but think that the selection of some other, more permanently resident in Calcutta, and less harassed by pressing claims upon his time from other work than I am, would have been more beneficial to the Society's welfare. I can, however, assure you that none can be more truly desirous of the well-being of the Society, none more sincerely and thoroughly convinced that your success is interwoven with the progress of Science and truth in this country : and limited as has been the range of my own labours and little as I know, I have endeavoured to show, at least, that I *do* know the value of knowledge, and would desire to foster and aid in the acquisition of it. For the kindness with which my efforts have been received, I feel greatly indebted to the members of the Society. I trust our meetings may ever be distinguished by freedom of discussion and freedom of intercourse, by an unflinching expression of opinion, and an equally unflinching kindliness of feeling towards those with whom we may differ. If in aught I have done well, so far I have done according to my wish. And I thank you for the additional proof you have this evening given, that my willingness and desire to promote your interests are not doubted, however I may have failed in my ability to accomplish that desire.