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Proceedings of the Meeting of the Society held on Tuesday, the 30th January 1912.

H. G. TOMKINS, C.I.E., F.R.A.S., *President*, in the
Chair.

P. N. MUKHERJEE, M.A., F.S.S., }
E. P. HARRISON, PH.D. } *Secretaries.*

The ordinary monthly meeting of the Astronomical Society of India was held in the Imperial Secretariat Buildings on Tuesday, the 30th January 1912, at 5 P.M.

The meeting was opened by the President, who asked Dr. Harrison in the temporary absence of Mr. Mukherjee to read the minutes of the previous meeting, which were then confirmed.

The following presents were then announced as having been received since the last meeting, and the thanks of the Society were accorded to the respective donors :—

1. Journal of the Royal Astronomical Society, Vol. LXII, No. 1.
2. Journal of the British Astronomical Association, Vol. XXII, No. 2.

3. Bulletin of the Astronomical Society of Barcelona for November 1911.
4. Revister Di Astronomica for December 1911 Annov No. 12.
5. Results of the Meteorological Observations made at the Radcliffe Observatory from 1900-1905, Vol. XLIX.
6. Index to Vol. I of the Journal of the Astronomical Society of India, by Mr. Lawrie.

The President next read the following list of members who had been elected by the Council since the previous meeting of the Society. The elections were duly confirmed :—

1. Mr. H. M. LANSDALE.
2. ,, T. A. FERRIER.
3. ,, J. C. BELL.
4. ,, P. F. LINTON.
5. Mrs. LINTON.
6. Rai Bahadur Pandit PARMANAND CHATURVEDI.

This was followed by the admission of new members, who signed the roll, and the President then announced with reference to the programme of work decided on for the session that the first of the three public lectures had been fixed for Friday, the 9th February 1912, at 5 P.M. Col. S. G. Burrard, R.E., C.S.I., F.R.S., a Vice-President of the Society, had consented to give the first lecture, his subject being "The Earth as a Planet." The Hon'ble Sir James Meston, K.C.S.I., would occupy the Chair and the Municipal Corporation had kindly allowed the Society the use of the Town Hall for the purpose. The lectures were free and open to any one who cared to attend, whether they were members of the Society or not. The President hoped that all members would take advantage of the opportunity offered to hear a lecture of the kind arranged for and would bring their friends, and also induce as many as possible to come.

The President then asked Dr. Mullick to give his paper on the Motion of the Planets. In doing so he pointed out that the paper was one of a class which members had not hitherto had before them—its nature being mathematical. This word was rather apt to terrify some who were not experts in the subject, but it was necessary to represent all classes of astronomical works in the Society, and he had no doubt that if members gave Dr. Mullick their careful attention, he would be able to make the subject interesting to all of them.

Dr. Mullick then gave a most interesting paper, illustrating his remarks on the blackboard.

The President.—Dr. Mullick has, I think, justified the remarks I made before he began, that he would be able to make the subject in hand interesting to members. I do not think I have ever seen the matter handled more clearly and made more interesting, and I am sure from the attention which it was evident to me was being given during the time that Dr. Mullick was speaking that other members felt the same thing. Two things struck me: One was that it would be a very useful and instructive exercise for members to take their star charts and to map out on them the paths of some of the planets from night to night. It would require very little time or trouble, and also very little technical knowledge. Mars and Saturn were now available for the purpose, and if members will try this, they will get in a practical manner a graphical representation of the curious apparent paths of the planets which Dr. Mullick had been discussing. They will learn more in this way than by any amount of book reading and theorising, and they will then be able to realise the practical meaning of that part of the subject. The other point is the excellent illustration which Dr. Mullick has given them of a single simple cause often accounting for quite a large number of complicated observations. It often happens that we begin at the wrong end of the string, and consequently we pick up a lot of loose ends which when considered together are most puzzling and complicated. Some general and simple key is then to be applied and the puzzle is cleared up. This happens so often in natural research that in undertaking a discussion of data at hand it always seems to me to be advisable in the first place to look for some simple and general explanation, and as a rule to reject complications, or at any rate to doubt them.

The hearty thanks of the meeting were then accorded to Dr. Mullick for his interesting paper.

M. W. Hanley then read a note on a base for a large telescope which was being put up at Barrackpore and explained the details of the structure by means of a plan.

Mr. Sarkar.—Would it not make the base more stable if the pillars were battened?

Mr. Hanley.—I thought of it, but in view of the size of the base on which they stand, it did not seem necessary. The height of the pillars is not great in comparison to their size and distance apart and the whole is amply strong. Moreover as the base is south of the house, it is protected from the Nor'-westers and there will not be much wind pressure.

Mr. Sarkar.—In order to prevent vibration, would it not be advisable to separate the part of the upper concrete on which the siderostat is to rest from the part on which the tube is to be ?

Mr. Hanley.—It would certainly be a safeguard, but I am doubtful whether tremors will occur.

Dr. Harrison.—It seems to me that vibration is more likely to occur from beneath the whole structure. In Calcutta this is certainly the case, and if, as I gather, the vibration increases in effect with the size of the instrument, this may be rather a costly experiment.

The President.—I don't think there is anything like the vibration in Barrackpore that exists in Calcutta. In Calcutta I should say it would be impossible to do much.

Mr. Hanley.—The soil on which the base at Barrackpore is built also seems to me to be pretty good. However, of course, no precaution against vibration should be neglected.

The thanks of the meeting were then accorded to Mr. Hanley for his interesting note.

Mrs. Tomkins then handed in some slides of the old observatory at Delhi which she had developed since the previous meeting. They were interesting as showing the solar shadow on the large sun-dial. One of the other instruments was also well shown.

The President then showed some slides of star clusters and nebulae taken by Dr. Ritchey of America, which were greatly admired.

He then stated that there was a piece of original work on the Moon which could be done by any one with a little spare time and which required nothing but a small amount of perseverance. He referred to the craterlets on the Moon's surface. In studying the origin of the lunar formations the distribution of these craterlets was a very important matter. There were hundreds of them, and though there had been many vague statements regarding them, as far as he was aware no systematic attempt had ever been made to tabulate their distribution. The work could be done from photographs which he could supply and would be eminently suited to one of the lady members. It would take a couple of months or so to do, and he asked for someone to volunteer to do it. Such a volunteer would have a chance of doing a real piece of original research work of value in solving one of the greatest of the Moon's problems.

The meeting was then adjourned until Tuesday, the 27th February 1912.