

Report of the Meeting of the Society held on Tuesday the 26th October 1910.

H. G. TOMKINS, F.R.A.S., *President*, in the Chair.
W. G. BURN, B.Sc., *Secretary*.

Mr. Burn read the minutes of the previous meeting, which were confirmed.

The President then announced that Mr. Michie Smith, Director of the Kodai Kanal Observatory, had accepted the appointment of Vice-President of the Society, and that Dr. Gilbert Walker, Director General of Observatories in India, who had joined the Society as an original member, had been elected as Vice-President by the Council to fill one of the two vacancies still on the Council. This election was confirmed with applause.

It was then announced that the Council, in view of the large number of enquiries which were being received regarding the purchase of instruments and requests for advice concerning them, had, under Bye-law 4 of the Society, appointed an Instrumental Director in whose hands this work could be placed. The appointment would be continued as long as the need for it existed, and Mr. S. Woodhouse, Manager of the Mathematical Instrument Department of the Government of India, had very kindly consented to fill the post. The appointment was confirmed.

As Mr. P. C. Bose, elected Treasurer, was unable to take up the duties, Mr. U. L. Banerjee, proposed by the Council, continued as Treasurer. Mr. Banerjee then read the balance sheet of the Society, showing a balance of cash in hand amounting to Rs. 256-10-3.

The President stated that Mr. Woodhouse had, at the cost of considerable labour, prepared for the Society a set of Star Charts, a copy of which would shortly issue free to each member. The thanks of the Meeting were unanimously accorded to Mr. Woodhouse for this valuable piece of work.

Mr. Rakshit, Director of the Meteor Section, read a short paper on the position of the constellation Leo in November, and of the radiant point of the Leonid Meteor showers which, though it had fallen off in recent years, should nevertheless be looked for on the nights of the 13th to 16th November. He explained his note with the aid of a neat diagram, and hoped that he would receive observations in time for use at the November Meeting.

Mr. Colquhoun then read a paper on an instrument which he had constructed to enable one to find the position of the

Sun with relation to the observer at any time of year and at any hour of the day. He exhibited the instrument and explained how it was worked.

Mr. Urquhart—Can the instrument be used in a room ?

Mr. Colquhoun—Certainly. It is only necessary to set it in the room with the aid of a compass.

The President remarked that the instrument, which was very ingenious, was a reversal of the principle of the sundial. The ordinary use of the sundial was from the position of the Sun to tell the time. Mr. Colquhoun had reversed the arrangement and given the time and date ; his pointer indicated the position of the Sun. The thanks of the Meeting were then accorded to Mr. Colquhoun for his paper and the trouble he had taken to bring the instrument to the Meeting and explain it.

Mr. Tomkins showed some magic lantern slides of Halley's Comet, taken at the Kodai Kanal Observatory, which had been very kindly sent by Mr. Michie Smith, together with the bulletin of the Observatory relating to the Comet. The slides taken on the small scale showed an extremely interesting amount of detail in the tail of the Comet. Those taken with the 9½ inch reflector were greatly admired, the detail brought out in the pictures being marvellous.

The Secretary then read a short paper from Mrs. Percy Brown describing the Comet as seen from Java, and an extract was also given of a communication from Mr. Durham of Bombay describing the Comet as seen from Harda on the 4th May 1910. Mr. Durham thought that the tail of the Comet fanned out like the tail of a peacock and estimated it to have been of great length.

Mr. Mears remarked that he could not agree with Mr. Durham that the tail fanned out. According to his observations the tail was singularly straight and of uniform width the whole way down. That was remarkable, because it was not what would be expected, and would seem to indicate that there was very great difference in the distance from the earth to the various portions of the tail.

The President—I can bear out Mr. Mears' observation. To me the tail certainly did not appear to fan out either before or after the transit. Of course there are details on the photographs that were not visible to the eye, but I take it Mr. Mears is referring to the tail as visible to the naked eye.

Mr. Mears—Yes. I refer of course to the appearance to the eye.

Mr. Simmons said that on one morning he had noticed three exceedingly bright meteors which proceeded from the

Constellation Aquarius. He thought the shower was active about that time, and wondered if there were any connection between it and the Comet.

The thanks of the Meeting were then unanimously accorded to Mr. Michie Smith for sending the photographs and to the writers of the papers.

Mr. Tomkins then read a short note on the observations which could be made at the total eclipse of the Moon which is to take place on the morning of the 17th November, explaining the phases of the eclipse by means of a diagram. Attention was directed to the behaviour of any stars that might be occulted, the appearance of the bright rays of Copernicus, Tycho and Proclus as the shadow passed over them, and also in the shadow, the presence of any abnormally bright or dark spots in the shadow, the detailed observation of one or two rays selected by the observer, the colour of the eclipse, and the regularity or otherwise of the shadow.

The Meeting was then adjourned until the 29th November 1910 at 5 p.m.

Meteors.

BY THE DIRECTOR OF THE SECTION.

The phenomena of this branch of Astronomy are most interesting and by no means unimportant. They may be conveniently divided into three classes: *namely*, (1) Aerolites, (2) Fireballs, (3) Shooting Stars. Of these three classes, aërolites, meteorites or meteoric stones, are rare, but not so rare as to prevent sufficient evidence being produced that such occurrences happened from time to time. Indeed there are observations from which we can legitimately conclude that from time to time masses of stone of different sizes and generally of considerable weight passed through space and were precipitated upon the Earth's surface. The circumstances attending the fall of aerolites are not always the same. Generally the fall is attended by a loud detonation; but it must not be concluded that every detonating meteor is an aërolite.

Now we come to the second class, *namely*, Fireballs. They are occasionally of great brilliancy, appear suddenly, and are usually noiseless. Their form is generally pear-shaped. The slow moving Fireballs generally evolve trains of sparks, but the swifter class project streaks of phosphorescence upon the sky, and these features sometimes linger for many minutes after the first appearance. Many Fireballs have formed the subjects of computation as to their distances, sizes and velocities, but the peculiar nature of these phenomena and their unexpected appearance lead