MARCH, 1864.

The monthly evening meeting of the Society (being the first of the session of 1864) was held at the Museum, Macquarie-street, on Tuesday the 8th March, G. P. Adams, Esq., in the chair.

The following gentlemen having been nominated by the Council, were, after a ballot, declared to be duly elected Fellows of the Society:—H. Bilton, Esq., Glenorchy; J. G. Crouch, Esq., Hobart Town; A. T. Seal, Esq., New Town.

The following returns were laid on the table:—

1. Visitors to Gardens during February, 1,896.
2. Plants forwarded to Government Gardens, Auckland, New Zealand, in return for plants received, 43.

Seeds supplied (papers), 48.

3. Tench supplied to Mr. Baynton, 12; do to Mr. Butler, for Lake Echo, 65.
4. Periodicals received, (the usual.)
5. Specimens forwarded to Dr. Witte, Royal Museum, Hanover, 46.

Meteorological Returns.

1. Hobart Town, from F. Abbott, Esq.
   (*a.*) Table for February.
   (*b.*) Summary and analysis of observations for ditto.
2. Port Arthur, from J. Boyd, Esq.
   (*a.*) Tables for November and December, 1863, and January, 1864.
   (*b.*) Reading of Government schooner's barometer for ditto.
3. Swansea, from Dr. Story.
   (*a.*) Tables for November and December, 1863, and January, 1864.

The SECRETARY read the usual Analysis of the Meteorological observations, together with a health report for the month by E. S. Hall, Esq.

The following presentations were brought under the notice of the meeting:—1. Twenty prepared skins of Queensland birds; from Mr. Waller, Brisbane. 2. Two samples of Sea Island cotton grown in Queensland; from Mr. Wright, Brisbane. 3. Jaw of Sperm Whale; from Mrs. Seal. 4. Ditto, from W. L. Crowther, Esq. 5. Specimen of Gorgonia from D'Entrecasteaux Channel; from Mr. Baynton, Brown's River. 6. Bronze Medal of Royal Horticultural Society, "Awarded to the colony of Tasmania for an exhibition of wheat, October 1862"; from the Commissioners for Tasmania. 7. Skull of "Schnapper"; from Mr. Wintle. "8. Eleven specimens of Minerals and Fossils; from Miss E. Boultbee, Avoca. 9. Fossil (Spirifer Sp.); from Mrs. Geiss, Bridgewater. 10. Specimen of granite from Castlemaine, Victoria; from G. Whitcombe, Esq. 11. A piece of wood with clusters of oysters and mussels attached, found in the Derwent, near Mount Direction; from R. Cleburne, Esq.

The SECRETARY reported that in exchange for a liberal presentation received from Dr. Witte of the Royal Museum of Hanover, the Council had recently forwarded to that gentleman a collection of Tasmanian bird and other skins, which it was hoped would be found acceptable. [The present opportunity may be taken to intimate to the Fellows of the Society and others, that the Council are very anxious to receive either recent specimens, skins, or well prepared skeletons of the native devil (*Sarcophilus ursinus*), and of the native tiger (*Thylacinus cynocephalus*), also specimens of our reptiles, &c., which will be valuable not only as a means of enriching our own collection, but for the purpose of effecting exchanges with other museums, which would in every way be advantageous to us.]

The SECRETARY called attention to the copies of the report for 1863, on the table, which were now ready for distribution, and announced that from Monday, the 12th instant, the lower rooms of the Museum would be open to the public from 12 till 5 o'clock daily, Tuesdays excepted.

Mr. W. JOHNSTON asked if it had not been determined that a public opening, followed by a conversazione, should take place, and that the Governor was to be invited to officiate on the occasion as President of the Society.

The SECRETARY explained that nothing definite had been agreed upon, but if a public opening were thought of, it would evidently be better it should take place when the arrangements of the Museum were complete throughout. Progress, however, was being made with the Geological collection on the upper floor. The Curator (Mr. Roblin) had already arranged a complete and valuable series of specimens, collected during the geological survey of Great Britain and Ireland, which had been forwarded to the Society from the Government School of Mines, London, and with the assistance of Mr. M. Allport, and Mr. Stephens, the remaining specimens would be classified with as little delay as possible. In the meantime as many enquiries were being made as to the period of opening the Museum, it was thought better that the public should at once be admitted to the portion already completed, than that further delay should take place.

Mr. ABBOTT remarked although a public opening just now would be impossible on account of the incomplete condition of the geological museum, the present partial one would not preclude a more formal ceremony on a future occasion.

Mr. ABBOTT then read a paper on the "Means which have been adopted for ascertaining the velocity of light, and the Sun's distance; with especial reference to the forthcoming transit of Venus over the Sun's disc, in 1874, and 1882." After indicating the extreme importance attached to this event by astronomers, Mr. Abbott alluded to the action already taken in reference to it by scientific bodies in various parts of the world. An extract from an address by the Astronomer Royal of England was read, specifying several stations at which observations on the transit would be of peculiar value. Of these stations Tasmania is one, but doubts are expressed as to whether the longitude of this place has yet been determined with the great accuracy which the circumstances of the case would require. Mr. Abbott hoped, however, that Professor Airey would be satisfied on this point on receiving from him a copy of the number of the Papers and Proceedings of this Society, containing Captain Kay's account of the very elaborate series of observations, on which the longitude of Hobart Town was calculated.

The SECRETARY after expressing his sense of the interest attached to the paper just read observed it was evidently of great importance that all those Governments who contemplated sending out observers to this hemisphere should be well informed of the means taken to establish with precision our exact longitude, and was certain the council of the Society would take special care that the subject should be attended to.

Mr. J. G. CROUCH then, by means of the Gyroscope, exhibited some interesting experiments, shewing how the principle of gravity was modified by rapid motion. In one of these a solid metal wheel or disk, very thick at its periphery, 3½ inches in diameter, and fixed on an iron spindle, was made to revolve with extreme velocity. The spindle, which was about 4 inches in length, being in a horizontal position, a suspensory cord was then attached to one of its extremities in such a manner that its rotation was not interfered with, and all other support was removed. One end alone of the spindle was now held up by the cord, and the other projected at right angles to it, free and unsupported in the air. In this singular position, in spite of its own weight, and that of the wheel (1½ lb.) it continued to revolve as long as its extreme velocity was maintained. The same was the case when it was tilted up so as to form an angle of 40° with the cord, and it was only as the rotatory action of the wheel subsided that the distal extremity of the spindle gradually sank until the whole, suspended by the cord, assumed the vertical condition.

Mr. FACY, after alluding to the importance of Mr. Abbott's

communication, and to the interesting character of the experiments just exhibited by Mr. Crouch, moved a vote of thanks to those gentlemen, and also to the donors of the various objects presented that evening to the Museum. The vote being carried unanimously, and accorded by the Chairman, the proceedings terminated.