

APRIL, 1864.

The monthly evening meeting of the Society, was held on Tuesday, the 12th instant, A. Kennerley, Esq., in the chair.

Among the Fellows present were Mr. C. Gould, G. P. Adams, F. Abbott, sen., F. Abbott, jun., L. Susman, A. M. Nicol, J. G. Crouch, H. Hunter, D. Lewis, H. Bilton, G. R. Napier, M. Allport, J. Facy, T. J. Knight, Q.C., H. S. Wintle, E. S. Hall, and Dr. Agnew, Hon. Sec. Professor Neumayer, of Melbourne, was present by invitation as a visitor.

L. Roope, Esq., having been nominated for election as a Fellow of the Society, was, after a ballot, declared to be duly elected.

The following returns were laid on the table:—

- (1.) Visitors to Museum during March, 222.
- (2.) Ditto Gardens ditto, 2,104.
- (3.) Plants sent from Gardens : per Percy, to H. Lows, London, one case containing five large Tree Ferns.  
Per Isabella Brown, to Messrs. J. Backhouse and Sons, York, one case plants.
- (4.) Plants received, from Mr. C. Diehl, New Zealand, 39.
- (5.) Books and periodicals received.

## METEOROLOGICAL RETURNS.

- (1.) Abstract of observations taken in Tasmania, from 1st July to 31st December, 1863.
- (2.) For Hobart Town, from F. Abbott, Esq.
  - (a.) Table for March.
  - (b.) Summary and analysis of observations for ditto.
- (3.) For Port Arthur, from J. Boyd, Esq.
  - (a.) Table for February.
  - (b.) Ditto for March.
  - (c.) Reading of government schooner's barometer.

The SECRETARY read an elaborate analysis of the meteorological table for Hobart Town, with the usual monthly health report, by E. S. Hall, Esq.

The presentations consisted of:—

- (1.) Two Mounted Postage Stamps (5 and 10 cents), used as money in the United States in 1862, from A. Clapham, Esq., of Scarborough, per J. Milligan, Esq.
- (2.) Two Japanese Coins and one "Taeping," from Captain C. C. Abbott, per J. Milligan, Esq.
- (3.) Twelve samples of Cotton, in various stages of preparation for manufacturing purposes, from J. Milligan, Esq.
- (4.) Two Turtles, from China Seas, from Mr. A. Bilton.
- (5.) Canoe Paddle, from a native boy of Savage Island, per Mr. O. H. Hedburg.
- (6.) Ancient Spanish Gunlock, from Mr. Hampton.
- (7.) Musk Flies, from Rev. E. P. Adams.
- (8.) Forty-nine Geological Specimens, from C. Gould, Esq.
- (9.) The Annual Address (for 1863) of the President of the Royal Society of England (General Sabine), from E. S. Hall, Esq., to whom it was presented by the author.

The SECRETARY read a letter from Dr. Mobius, President of the Museum of Hamburg, offering to make exchanges with our Museum. (For the purpose of making exchanges with other countries, prepared skins, skeletons, or fresh specimens of our animals, birds, reptiles, &c., will be gladly received at the Museum.)

Mr. ABBOTT laid on the table the usual half-yearly abstract of the Light-house Registers, and read some observations upon it, containing among other matters a detailed account of the great storm, or cyclone of the 25th and 26th October, 1863. This was traced from Spencer's Gulf, having passed across the south-west portion of the continent of Australia, in various parts of which its effects were severely felt. It reached Portland Bay on the 25th, and King's Island on the following day.

Some extracts from the log of the Offley, and from letters from the Superintendent of King's Island light-house, and the Captain of the Wonga Wonga were also read. From these accounts, and from the registers kept, it appears that Portland Bay or King's Island must have been about the centre of the storm.

Mr. ABBOTT remarked that he regretted the Society did not possess a regular series of the Adelaide Meteorological Registers, as he considered that Mr. Todd's tables—if not the best—were equal to any in the Southern Hemisphere. The prevailing gales and squalls in these colonies, having their origin chiefly in the Southern Indian Ocean, and passing in sequence over Adelaide and its vicinity before reaching us, rendered it desirable to have a register from that place, it being situate in the direct path of the storms.

Dr. HALL observed that it was needless to remark on the importance of the Meteorological Observations, which through the courtesy of the Marine Board, we have been supplied with from the various stations round our coast. To make these complete, however, it would be most desirable that similar observations should be made at some central station in the island, such as Oatlands or Campbell Town.

Dr. AGNEW explained, (as on a former occasion) that the importance of an inland station was fully recognised by the Council, and that instruments had been supplied to gentlemen at George Town and Campbell Town for the purpose of making observations. These after having been carried on for a short period soon became irregular, and then ceased altogether. He was sure, however, the Council would at any time do what they could to assist any competent volunteer who would undertake to continue these observations effectively.

Mr. ABBOTT suggested that possibly some of the masters of the government schools might undertake the duty. If done regularly, very little time—not more than fifteen minutes daily—was required.

Professor NEUMAYER, from Melbourne, having been introduced by the Secretary, was kind enough to favor the meeting with a short address. After passing an eulogium on Mr. Abbott for his labors in the cause of meteorological science, he observed that he thought it would be interesting to many of the Fellows of the Royal Society to have the modern instruments for the observations on Terrestrial Magnetism described to them, in order that they might be able to compare them with those formerly in use at the Magnetic Observatory, kept up for so many years in this locality. The chief difference between them was the size of the magnets, as the needles in the new apparatus were only four inches long, while the bars of the old magnetometers had a weight of between twelve (12) and twenty (20) pounds. All other differences between the two sets of instruments were of a less essential kind, and there was only one instrument to which he should more particularly refer as quite peculiar to the system of instruments employed by him; this was the Differential Inclinatorium of Professor Lamont. He went on to describe the instrument which is constructed of two soft iron bars, which becomes magnetic by the induction of our earth. The instruments were shewn and explained to the meeting in as simple a manner as the nature of the subject would admit of. Professor Neumayer further mentioned it had been often said that further observations on Terrestrial Magnetism were superfluous in our part of the globe as the excellent set of observations taken during a period of thirteen years at Hobart Town by Captain Kay and his staff had furnished everything requisite for the advancement of magnetic science. High as was his opinion of the work just alluded to, he had to protest against such opinions, and any one conversant with the science in question would bear him out in the statement that although many highly valuable discoveries had been made of late in the phenomena connected with Terrestrial Magnetism, the theory of it had not been materially advanced, and how then could it be said that further exertions would be superfluous. And again, the observations made at Melbourne during the last seven years by himself must be considered as joining to the Hobart Town series, furnishing as they do a continuation, and repetition of the investigations of a former period. His present visit was to establish the connection between both series still more closely, and also to determine what changes had taken place in the values of the Magnetic Elements since the Hobart Town observations were concluded. In conclusion, he would only mention that he had succeeded in making a series of observations at Melbourne, extending over a period of seven years—and that during five years hourly registrations of Magnetic and Meteorological observations had been recorded. Simultaneously with this extensive work he had also carried out a Magnetic Survey of the colony of Victoria, and to give an idea of the difficulties he had to overcome in completing this important work, he would only mention that he had to travel 11,000 miles, from the sea-level to an elevation of 7,300 feet, and through country where he had to cut his track, and carry his instruments on horseback. His labors in this hemisphere were to be published at home in several large volumes, which the learned Professor

expressed a hope of being able to lay before the Royal Society in about two years. (Applause.)

Mr. WINTLE read some remarks on the "Evidences of the Shell Deposits seen around Hobart Town, not being produced by the Aborigines, and the period of their origin being Post Tertiary," in support of views brought forward in a former paper, which he understood had, at least in part, met with the approval of Mr. Gould. With reference to Mr. Wintle's statement that the remarks on this subject, previously submitted by him to the Society, had been approved of by Mr. Gould, Mr. Gould stated that the long time which had elapsed since that period prevented his remembering them distinctly, but his impression was that they had not been approved of by him. He proceeded to say that Mr. Wintle's observations simply confirmed an already known fact, viz., the existence of comparatively recent deposits all round the Island. He thought there was no reason for supposing there had been oscillations of level during the deposition of the bed enumerated in Mr. Wintle's section. As to the precise age, it would be desirable to collect more specimens to compare with existing species. After the meeting Mr. Gould's attention was drawn to a statement of Mr. Wintle's that his section rested on an equivalent of the new red sandstone, this is incorrect, as also a statement made by Mr. Wintle at a previous meeting that some of the rocks of Mount Wellington are of the Silurian age, and which he had erroneously stated to be the opinion of Mr. Gould.

Mr. GOULD proposed a vote of thanks to the donors of presentations, and to the authors of the papers just read, and added that he was sure the meeting would feel much gratification in giving their special thanks to Professor Neumayer for the very interesting address they had just had the pleasure of listening to.

Professor NEUMAYER returned thanks, observing that he had every reason to be highly gratified with the attention and courtesy he had received, not only in Tasmania, but also in the neighboring colonies of Victoria where he had resided for several years. During that period having had many opportunities of studying it, he had acquired a great regard for the Anglo-Saxon character. He saw how well suited the race was for the great purpose of colonisation, as it possessed a keen eye, not only for the practical of every day life, but also for all that was sublime and great, and was consequently enabled to apply, and adapt itself to circumstances of the most varied character. He would indeed have been well content to pass the remainder of his life among them, but having been sent out by the King of Bavaria for a special object, it was now his duty to return, in order to lay before the scientific world of Europe the result of his labors. His friend Mr. Marwedel, however, would always know his address, and if at any future period it was thought his services could be of use, he would promise, it would at all times give him the greatest pleasure to do anything that might be in his power to promote the interests of the Royal Society of Tasmania.

