JUNE, 1888.

The usual monthly meeting of this Society was held on June 11th, at the Museum, but owing to the unpropitious weather the attendance was much smaller than usual. In the absence of the president (His Excellency the Governor) Mr. JAMES BARNARD took the chair, and in opening the meeting, stated that His Excellency Sir R. G. C. Hamilton was absent in the country, but had expressed his desire that the business of the evening should not be postponed. Although the attendance was small, he (the chairman) should proceed with the reading of the papers, and not break the regularity of their meetings. (Hear, hear.) Mr. Barnard directed the attention of the ladies and gentlemen present to the bound book of proceedings for the past year as printed and published at *The Mercury* office, and which were laid on the table for the use of members. He said the book had been well printed, and was got up in a most creditable manner, it having received the attention which it deserved.

Additions to the library during the months of April and May:—

American Agriculturists, Current Nos.

Annals and Magazines, Natural History, current Nos.

Athenæum, current Nos.

Boletim da Sociedade de Georaphia de Lisboa, 7th Serie, Fos. 3, 4.—From theSociety.

Bollettino della Societa Africana, D'Italiana, Anno V., Fac. III.—From theSociety.

Bulletin of the Museum of Comparative Zoology at Harvard College, Cambridge, Mass. Vol. XIII., No. 6. On the Eyes of Scorpions, by G. H. Parker. No. 8. On certain vacuities or deficiencies in the crania of Mammals, by D. D. Slade. From M. Agassiz. Vol. XVI., No. 1. On the petrographical characters of a dike of diabase in the Boston Basin, by W. H. Hobbs. Vol. XIX., No. 7. Studies from the Newport Marine Laboratory. On certain Medusæ from New England, by J. W. Fewkes. From A. Agassiz.

Bulletin of the New York State Museum for 1883-4.—From the Department.

Bulletin of the New York State Museum of Natural History, Vol. I., No. 2, 1887.—From the Department.

Bulletin du Comite Geologique, St. Petersburg. Vol. VI., Nos. 1 to 10.—From the Society.

Catalogue of Canadian Plants. Part III., "Apetalæ," by J. Macoun, B.A.—From the Society.

Characeæ of America. The Introduction, Morphology, and Classification, by Dr. T. F. Allen.—From the Author.

Bulletin du Musée Royal D'Histoire, Naturelle de Belgique. Tome V., No. 1.—From the Society.

Colonial Museum and Geological Survey of New Zealand.

Geological Report, No. 18. Index Museum Report, No. 22. Studies in Biology, No 2—From the Department.

Die Internationale Polarforschung, 1882-3. Band I., II.—From the Government.

Ergebnisse der Meteorologischin Beobachtungen in Jahre, Berlin, 1886.—From the Society.

Flora of British India. Pt. XIX. By Sir J. D. Hooker, C.B.—From the Record Office, India.

Geological Magazine. Current Nos.

Great Trigonometrical Survey of India, Vol. IV.—From the Department.

Guide to the Shell and Starfish Galleries in the British Museum, 1887. —From the Trustees.

History and description of the skeleton of a new sperm whale, lately set up in the Australian Museum, Sydney, by W. S. Wall. (A reprint.) —From the Trustees.

History and description of Mr. Tebutt's Observatory at Windsor, N.S.W., by Mr. J. Tebutt.—From the Author.

Ibis. Current Nos.

Journals and Proceedings of the Royal Society of New South Wales. Parts II., III. Vol. XXI.—From the Society.

Journals and Papers of the Parliament of Tasmania. Vols. X., XI., XII.—From the Government.

Journal of the Royal Microscopical Society, London (current numbers). —From the Society.

Journal of the Royal Historical and Archæology Association of Ireland.—From the Society.

Manual of the Geology of India. Part IV. Mineralogy (mainly non-economic). By F. R. Mallet (bound).—From the Department.

Memoirs of the Geological Survey of India. Vol. XXIV., Part I. The Southern Coalfields of Sarjuna Gondwana basin.—From the Department.

Memoirs of the Geological Survey of India. Palæontologica Indica. Ser X. Indian Tertiary and Post Tertiary Vertebrata. Vol. IV., Part III. Eocene Chelonia from the Salt Range. By R. Lydekker, B.A.—From the Department.

Memoires de la Societé Royal des Sciences de Liege. Tome XIV.— From the Society.

Memoires du Comite Geologique, St. Petersburg. Vol. I. II., No. 1-5.—From the Society.

Monthly Weather Review, January, 1888.—From the Meteor. Office, Canada.

Morse collection of Japanese pottery, reprinted from the *American Architect* of May 28, 1887. Salem. Essex Institute.—From the Society.

Proceedings and Transactions of the Queensland Branch of the Royal Geographical Society of Australasia, 1886-7. Pt. III.—From the Society.

Proceedings and Transactions of the Victorian Branch of the Royal Geographical Society of Australasia. Pt. I. Vol. I.—From the Society.

"Psyche": A Journal of Entomology Pts.—From the Society, Mass.

Resultados del Observatorio Nacional Argentino en Cordoba. Buenos Aires. Vol. IX. 1876.—From the Department.

Seventh Annual Report of the State Mineralogist for the year ending October 1, 1887.—From the Californian State Mining Bureau.

Scottish Geographical Magazine, Vol. IV., current Nos.—From the Society.

Sidereal Messenger The Minnesota, by Mr. W. V. Payne, 1887. —From the Society. Statistical Papers of New Zealand.—From the Government.

Teaching of History in Schools, an address delivered October, 1887, by Oscar Browning, F.R. Hist, S.—From the Royal Historical Society.

Transactions and Proceedings of the Royal Society of Victoria, Vol. XXIV., Part 1, 1887.—From the Society.

THE SILVER EXTRACTING PROCESS.

Mr. J. W. Toplis read a paper on the various methods employed in extracting silver from argentiferous galena and other ores. The paper was one of much interest and importance. Mr. Toplis prefaced his remarks by stating that now silver bids fair to become the source of a large revenue to the colony, owing to the enormous deposits recently

discovered at Mount Zeehan and Heazlewood, he hoped that the various methods of extracting the precious metal from both galena and its ores put before them in a consolidated and condensed form, would prove both interesting and instructive. He went on to explain that galena was almost invariably associated with silver to a greater or less extent, and that when the precious metal was present in sufficient quantities to render it payable, it was extracted by various methods, which he proceeded to explain. The process which Mr. Toplis detailed was much less expensive than that formerly adopted. Under the old process the whole of the lead had first to be reduced to the oxide on a large hearth covered with bone ash, the silver escaping oxidation then being separated from it. This process was on account of the very great expense only applicable to very rich ores. To Mr. Pattinson he said must be awarded the palm, for by his valuable discovery he had cheapened the process to such an extent that any lead containing over 5oz. of silver to the ton would pay for treatment. Mr. Toplis went on to explain the process of cupellation on the larger scale, and the construction of the cupel, etc. He succeeded in giving those present a very good rough idea of the treatment through which galena must pass before the precious metal could be obtained, asking them to always bear in mind that the process, although a long and tedious one, was comparatively inexpensive. The first part of the process—smelting—cost about 10s. per ton, and the desilverising from 12s. 6d. to 15s. per ton. He referred briefly to the enormous deposit of silver lead at Mount Zeehan. He believed that before the next year had passed Tasmania would be known as one of the largest silver-lead producing countries in the world, and this opinion of his, he said, was shared by some of the leading mining experts who had visited Tasmania from the other colonies. The galena from Mount Zeehan was most remarkable for its extreme purity. They had lodes there 6ft. and 8ft. wide of pure metal, which in some cases assayed about 75 per cent. of lead. The lead itself not only paid all expenses of working, but also yielded a large profit. He spoke at some length on the enormous value of the fields, and concluded by expressing a hope that ere long they would see smelting-works and foundries in their midst. (Applause.)

In the course of the discussion which followed on the paper, Mr. W. F. Ward (Government Analyst) said he thought Mr. Toplis was too sanguine in giving them one year only in which to develop the Mount Zeehan mines. He (Mr. Ward) thought it would take rather more than that.

Mr. A. J. Taylor said he fully believed that before many months were over Tasmania would be one of the best silver-producing countries in the world. One great thing in favour of their silver-mines on the West Coast was that the metal was very pure; in fact, it was so clean that it was only necessary to bag it and send it right away. He thought they were much indebted to Mr. Toplis for the interesting information he had given them.

AN ADDITION TO TASMANIAN AVIFAUNA.

A paper in the absence of the author, Mr. W. F. Petterd, F.Z.S., of Launceston, was read by Mr. Morton, entitled "An addition to the Avifauna of Tasmania *Anseranas Melanoleuca*, "the Semipalmated Goose." This bird, a species of goose common in the North of Australia, was lately shot in the Lake district, near Cressy. It was noticed with a small flock that had lately been seen in the neighbourhood of Launceston.

ANOTHER NEW VISITOR.

A paper, by Colonel W. V. Legge, also dealt with a new bird not previously found in Tasmania, belonging to the Order of Fly-catchers *(Chibia bracteata)*. This bird was shot on the East Coast, and the

colonel, in his paper, stated that it was quite possible that the islands in the Straits proved to be a resting place for birds on their way from Australia to Tasmania.

PROTECTION FOR THE SEAL AND MUTTON BIRD.

Mr. C. ALLPORT called attention to the desirability of getting protection in Tasmania for the seal and the mutton bird. The former he said were becoming in very large numbers the victims of poachers from New Zealand. At one time as many as a 1,000 seals were to be counted on Clarke's Island in one day, but they were rapidly being killed, and would soon become extinct unless protected. As to the mutton bird, their eggs were being destroyed, as well as being sent away wholesale, and the birds themselves were being destroyed in immense numbers. The bird was a most valuable one, its oil being an excellent thing for consumptive persons; its feathers were marketable, and the flesh on the bird was excellent eating.

In the course of a very lengthy discussion which took place on the matter, Bishop SANDFORD said he lived at one time for 10 days on an island on the mutton bird, not having been able to get anything else. A young delicate friend of his was with him at the time, and he greatly improved in his health, through, he (the Bishop) believed, eating the bird named continuously.

Mr. E. SWAN did not agree with the Bishop that the bird was a good article of food, and Dr. Barnard said the oil from it could be made much more palatable than cod liver oil, which was so much used for consumptives.

The Hon. B. S. BIRD said the Government before they took steps for protecting the mutton bird would require sound information as to the necessity for such protection.

Mr. F. BELSTEAD, Mr. F. H. WISE, and other gentlemen having spoken, the matter dropped.

THE ANTARTIC REGIONS.

Bishop SANDFORD introduced the subject of appointing an exploring party to proceed to the Antartic regions. If, his lordship, said, Tasmania did not do something, Melbourne would take the matter out of their hands, and he reminded them that Germany had its eye on the regions named. He had no doubt whatever that the starting-point should be from Hobart.

The CHAIRMAN said the question had now become a national one. He thought representations for assistance in the matter of an expedition should be made to the Imperial Government.

Votes of thanks were accorded to the gentlemen whose papers had been read to the meeting, and a similar compliment having been passed to the Chairman, the proceedings terminated.