

Howe Island ; also a freckled duck (*Anas. nævosa*), shot at Ross, on April 12. This species of duck is found in Victoria, South Australia, and Western Australia, but has never been reported as found in Tasmania before.

Colonel LEGGE strongly advocated the formation of a complete collection of Tasmanian bird skins carefully labelled, locality, etc. He stated he was of an opinion that there were yet one or two new species of birds in the back country, which had hitherto been over-looked by collectors and others. He trusted the Council of the Royal Society would endeavour to have air-tight cabinets made for such a collection, similar ones being used in the British Museum, and other leading museums.

The CURATOR OF THE MUSEUM said he was glad that Colonel Legge had brought the matter before the fellows, and referred to the excellent skin collection the Australian Museum, Sydney, had in their possession. He said a great deal might be done by our country friends in forwarding to the Museum specimens of animals or birds, which, if not actually wanted for the Museum collection, would be valuable for exchanges with other museums.

The CHAIRMAN (His Honor Judge Dobson) stated that he wished to bring under the notice of the meeting a subject which he was sure would be of interest to them all. He alluded to the wanton and mischievous destruction of the tree ferns at Mount Wellington. Many glens and other localities on the mountain had been utterly robbed of all their beauty and attraction by the stupid destruction of these trees, some of which he had no doubt represented a growth of fifty to a hundred years. He was sorry to say, too, that this desecration was permitted by many of whom better things might have been expected, and, in very many cases for the mere decoration of a ballroom, trees were cut down which we could never hope to see replaced in a lifetime. He thought something might be done to stop this senseless waste of beauty, as far at least as the Mount Wellington Reserve was concerned, by constituting it a people's park, and making it penal to remove ferns or other trees. If Government took the initiative in the preservation of the ferns it was probable that many private individuals, who may act rather in a spirit of thoughtlessness than otherwise, might be induced to follow the good example.

After discussion, in which almost all present joined, it was resolved that a committee be appointed in order to bring the views of the meeting under the notice of the Government.

Mr. Justice Dobson, the Mayor (Mr. Belbin), Colonel Legge, Mr. C. H. Grant, and the hon. secretary (Dr. Agnew) were appointed as the committee.

A vote of thanks to the authors of papers and donors of presentations closed the proceedings.

JULY, 1844.

The monthly evening meeting of the Royal Society was held on Monday, July 7, Mr. James Barnard, V.P., in the chair.

Mr. Wentworth Hardy, who had previously been nominated by the council, was balloted for, and declared duly elected as a Fellow of the society.

The CHAIRMAN apologised for unavoidable absence of the hon. secretary (Dr. Agnew), being away on official duties.

The following usual returns were brought forward, viz. :—

1. Number of visitors to the Museum.—June—Sundays, 930 ; week-days, 1,258. Total, 2,188.

2. Number of visitors to Gardens.—June, 5,010.

3. Plants and seeds received at the Royal Society's Gardens during the month of June, 1884 :—

From the Brisbane Botanic Gardens, 18 papers of seeds. .

From Mr. J. Smith, Riddle's Creek, Victoria, case containing 46 plants.

From Messrs. Shepherd and Co., Sydney, case containing 60 plants.

From Mr. J. Harris, South Yarra, Victoria, case containing 36 plants.

From the Botanic Gardens, Saperanpur, N.W.P. India, seeds—*Picea pindrow*.

From Major Jacob, Jeypore, India, seeds—*Picea pindrow*.

From the Botanic Gardens, Calcutta, collection seeds.

From Baron Ferd. Von Mueller, 12 papers seeds.

4. Plants and seeds sent from the Royal Society's Gardens during the month of June, 1884 :—

To Mr. J. Smith, Victoria, plants and seeds.

To Mr. J. Harris, Victoria, seeds.

To Mr. J. Brunning, Victoria, plants and seeds.

To Mr. L. Purchase, Sydney, seeds.

To Messrs. Shepherd and Co., Sydney, seeds.

To Chamber Agriculture, Washington, seeds.

To Messrs. Vilmorin et Cie, Paris, seeds.

To the Royal Gardens, Kew, London, seeds.

To Baron Ferd. Von Mueller, Victoria, seeds.

To C. F. Cresswell, Victoria, seeds.

To Messrs. Heyne and Co., Adelaide, seeds.

To Messrs. Law, Somner, and Co., Victoria, seeds.

To W. R. Guilfoyle, Botanic Gardens, Melbourne, seeds.

To Mr. Wm. Bull, London, seeds.

5. Time of leafing, flowering, and fruiting of a few standard plants in the Royal Society's Gardens during June, 1884 : — 12th, *Maclaura aurantiaca* leaves shedding ; 20th common privet leaves shedding ; 24th, *Calceyanthus præcox* in full flower ; 26th, *Crocus vernus* in flower ; 28th, black mulberry leaves all shed.

6. The usual monthly and other periodicals for June.

7. List of additions to the Library for the month of June :—

Meteorological reports, India, November and December, 1883, from the Meteorological Office, India.

Meteorological observations made at the Adelaide Observatory and other places in South Australia and the Northern Territory, Mr. C. Todd, Government Astronomer.

Monthly weather report of the Meteorological Office, London, for January, 1884, from Meteorological Office, London.

Meteorological report of the Meteorological Council to the Royal Society for the year ending 31st March, 1883, from the Society.

Monthly record of results of observations, etc., by R. L. J. Ellery, F.R.S., Victoria, from the author.

Journal of the Royal Microscopical Society, London (April number), from the Society.

Journal of the Society of Arts (May), (April), from the Society.

Journal of Science (May), from the Society.

Report on the Progress and Condition of the Botanic Gardens and Government Plantations (Adelaide), by R. Schomburgh, F.R.S., and Director, from the author.

Records of the Geological Survey of India, vol. xvii., part 2, 1884, from the Registrar's Geological Survey Office, India.

Report of the Canadian Observations of the Transit of Venus, December 6, 1882, from the Observatory, Toronto.

Report of the Australian Museum, Sydney, for the year 1883, from the Trustees.

Report of the Chief Inspector of Mines, Victoria, 1883, from the Mines Department.

Reports of the Mining Surveyors and Registrars, quarter ending 31st March, 1884 (Victoria), from the Mines Department.

Report of the Department of Mines, N.S.W., for the year 1883, from the Department.

Gardener's Chronicle, April 26, May 3 and 10, from the Society.

Geological Magazine (May), from the Society.

Agricultural Gazette, April 28, May 12, 5, from the Society.

Annals and Magazines of Natural History, May, from the Society.

The Athenæum, April, from the Society.

Annual report of the American Museum of Natural History, March, 1884, from the Trustees.

Agricultural Statistics, Victoria, 1883-84, Victoria, from the Government Statist, Melbourne.

American Agriculturist, May, 1884, from Messrs. Walch and Co.

Catalogues of the Exhibits in the New South Wales Court Fisheries Exhibition, London, from E. P. Ramsay, F.L.S., etc.

Census of Victoria, 1881, part 7, occupation of the people; part 8, sickness and infirmity, from the Government Statist, Melbourne.

Crime in New South Wales, by H. H. Hayter, C.M.G., from the Author.

A Barometer Manual for the Use of Seamen, from the Meteorological Office, London.

Bulletin of the American Museum of Natural History, vol. 1, No. 5, February 13, 1884, from the Trustees.

The Victorian Naturalist, May, 1884, from the Society.

Statistical Register of the Colony of Victoria for the year 1883.

Blue Book of Victoria, from the Government Statist.

Monthly Notices of the Royal Astronomical Society, vol 44, No 6, April, 1884, from the Society.

Mineral Statistics of Victoria, from the Mines Department.

Proceedings of the Royal Society, Queensland, vol. 1, part 1, 1884, from the Trustees.

Florist and Pomologist, from the Society.

Nature, from the Society.

8. List of Presentations to the Museum for the month of June, 1884 :—

BIRDS.

Chesnut-faced owl—*Strix castanops*, Mr. N. H. Propsting.

FISHES.

A Blenny—*Cristiceps Australis*, Mr. W. Boyes.

MOLLUSCA.

Soft mollusks—*Philine aperta*, Mr. W. Boyes.

A land shell — *Bulimus* sp., from New Zealand, Master A. Clarke.

ECHINODERMATA.

Two sea eggs—*Salmacis* sp. (?), Mr. J. McCance.

A sea urchin—*Maretia* sp., Mr. W. Boyes.

OLOGY.

Two eggs, sooty oyster catcher — *Hematopus fuliginosus*; four eggs, silver gull—*Larus Jamesonii*; two eggs, Pacific gull—*Larus pacificus*. Mr. J. McLymont.

ETHNOLOGY.

Two bags, made by Tasmanian aboriginals; piece of rope, ditto. Miss Buckland.

COINS.

A small collection of coins, Miss Buckland.

Medal of the Duke of Wellington, 1814, Miss Buckland.

A bronze medal, struck in commemoration of the cessation of transportation to Tasmania, 1853, Master A. Clarke.

A fourteen rupee, Mr. J. L. Oakley.

MINERALS.

Specimen of fossil wood, Miss Buckland.

The following papers by Professor R. Tate, F.G.S., F.L.S., etc., Adelaide, were read by Mr. R. M. Johnston, F.L.S.:—

1. Description of new species of mollusca of the upper eocene beds at Table Cape.
2. Notes and description on a new species of *Odax*, by R. M. Johnston, F.L.S., etc.
3. Description of a new fossil shell, from the Eocene Beds, Table Cape, by R. M. Johnston, F.L.S., etc.

NOTES AND EXHIBITS.

Colonel LEGGE presented two specimens of birds to the Society—one an owl (the brown fish owl, *Ketupa Ceylonensis*), and the other a kite (the Indian pariah kite, *Milvus govinda*.) He would not advocate the acquisition of birds from all parts of the world for this necessary adjunct, but thought that a complete collection from the ornithological region, embracing India and the Malayan Archipelago, and terminating in New Guinea, would be valuable here for comparison. There were three species of this large owl—one inhabiting Ceylon; another coming from the Malayan Archipelago; and the third from the Himalays and China. Curiously enough, no large owls were found in Australia, excepting a variety of the barn owl known in England. The present specimen was brought from the jungles of Ceylon. The species lives chiefly on fish, but also on vermin of different kinds and small birds. It is a very ravenous bird, and forms rather a formidable looking object when seen in the gloom of the forest. The specimen under notice was a female. The kite shown was found chiefly in Ceylon and India. It was allied to our Australian kite (*Milvus affinis*) found along the eastern coast and up as far as Timor, the Malayan Archipelago, and extending to the Andaman Isles and to India. There were two allied species of this kite—*Milvus govinda*, to which the present specimen belonged, and *Milvus affinis*. *Milvus govinda* ran up to 19in. in breadth of wings, whilst the Australian kite was never larger than 16½in. The Australian kite, of which there was no specimen at present in the Museum, was darker than the other, and showed an unmistakable difference. It was curious that no species of kite was found in Tasmania; that, though it was found in Victoria, South Australia, and Western Australia, it had not crossed the Straits. The bird was well known in India, where it frequently flew about the streets, and attacked boys carrying provisions: it was also a great attendant in the fishing nets in the morning. He would like to see a specimen of the *Milvus affinis* found in this country. While speaking of birds, he would throw out a suggestion to members fond of ornithology, viz., that a specimen of the osprey was wanted for the Museum. He knew that the bird was found on the eastern coast of Australia. The common fish-hawk or grey back sea eagle (*Haliastur leucogaster*), was also wanted. It was found in the Himalayas, and extended down to this country, where specimens were supposed to be larger than elsewhere. (Applause.)

Mr. STEPHENS directed attention to an interesting rock specimen from the Upper Huon district, discovered and presented to the Museum by Mr. Charles Glover, who was well known as the pioneer in mineral explorations in the South-west, and whose labours in that field for many years past had rivalled those of Mr. James Smith in the North, though they had not resulted in the discovery of another Mount Bischoff. This rock had attracted much notice, and, until carefully examined, had led many persons to suppose that it was allied to the well known Carrara marble. Mr. F. M. Krausé, of Ballarat, had kindly analysed a specimen of the rock, and furnished the following description:—Rock specimen from Weld River, Upper Huon.

Amorphous—Under the microscope cryptocrystal-line; optically negative; $H=5.5$; $G=2.98$.
 Lustre vitreous to pearly. Opaque-white; in thin splinters sub-translucent; tough; fracture even.
 Comp.—Silicate of alumina and soda, with traces of lime and ammonia.

"Before blowpipe fuses at 3 with intumescence to a blebby glass. From the unequal distribution of free silica, and the presence of ammonia, it is probable that the substance is the product of transmutation of a felsitic or kaolinitic rock. If it can be shown from its mode of occurrence that it is not merely an altered rock, then it is undoubtedly a new mineral species to which the appropriate name of Weldite might be given."

Mr. Krausé had also furnished the following note on a specimen of the altered sandstone at Campania, which was sometimes mistaken for a quartz reef. Ferrugineous quartzite (so called "auriferous sandstone"), Campania. No trace of gold.

There was no reason to doubt, he (Mr. Stephens) thought, that the specimen from the Weld River was from an altered rock allied to those described by Strzelecki under the general term of silicious slates, the outcrops of which might be seen at various points on the North coast to the West of the River Leven. If more accessible, it might probably be utilised in the manufacture of the finer kinds of pottery, but he feared that the remoteness of its situation would prevent it from being turned to any profitable account.

Mr. C. H. GRANT believed that the rock under notice was the result of decomposition of granite in some form or other. It was no doubt granite freed from its mica, and probably altered by electrical action, and would not be found in any quantity. It was nodular in its character.

Mr. STEPHENS did not think that the rock was at all nodular in the sense spoken of by Mr. Grant. It might be described as a massive band interstratified with bands of quartzite and other altered rocks, and Mr. Glover had traced it for a mile in the direction of its strike.

The CHAIRMAN intimated that Mr. W. H. Charpentier had kindly consented to become honorary draughtsman to the Society.

Mr. CHARPENTIER presented a cabinet of zoophytes, which, he stated, might form the nucleus of a fine collection if any of the members desired to take up the study, which was a favourite one in Victoria and the other colonies. A great many specimens could be found on the Tasmanian coasts. There were only three varieties missing from the collection to make it perfect, and it included a great number of *Diatomaceæ*. There was one matter he would like to mention, though he did it with diffidence. In Manchester microscopical societies were formed in connection with such institutions as this, and worked with a great amount of success. By the aid of the microscope they were not only able to see a great deal more of fossils, etc., but sections of rocks were made for examination. Any gentleman desiring to take up the study could provide himself with a microscope similar to that on the table (one of Field's), for £4 4s., and if required he would be only too delighted to instruct any one in its use. They would be astonished at the beauty which these zoophytes assumed in various forms under the microscope.

Mr. R. M. JOHNSTON was very glad that Mr. Charpentier had brought the matter forward, and trusted the remarks made would encourage the study of a branch which had been greatly neglected. Mr. Harrop, of Launceston, was well known in England as the contributor of many peculiar forms of *Diatomaceæ*, in which Tasmania was very rich; and Mr. Petterd, of the same place, was also working up a fine and well-classified collection.

Mr. CHARPENTIER added that in Manchester the artisans had been foremost in scientific research, and their studies had done a vast amount of good.

The CHAIRMAN, on behalf of the Society, thanked Mr. Charpentier for his donations to the Museum.

Mr. J. SWAN proposed a vote of thanks to the donors and authors of the various papers read before the meeting.

Several members examined the zoophytes shown by Mr. Charpentier by means of the microscope, and the meeting closed.
