

## JULY, 1872.

The monthly evening meeting of the Society was held on Tuesday, the 9th July. The Right Rev. the Lord Bishop of Tasmania in the chair.

R. Gatenby, Esq., of Macquarie River, was after a ballot, declared duly elected a Fellow of the Society.

The Secretary brought forward the usual returns for the past month, viz. :—

1. Visitors to Museum, 1,059.
2. Ditto to Gardens, 1,345.
3. Plants &c., supplied from Gardens; to Royal Gardens, Kew, 101 packets seeds indigenous to Australian Colonies; to Public Offices, Launceston, 21 plants; to Public School, Bagdad, 60 plants.
4. Time of leafing, flowering, and fruiting of a few standard plants in Botanic Gardens.
5. Books and Periodicals received.
6. Presentations to Museum.

*Meteorological Returns.*

1. Hobart Town, from F. Abbott, Esq., Table for June.
2. Westbury, from F. Belstead, Esq., Table for May.
3. Swansea, from Dr. Story, Tables for April and May.
4. Port Arthur, from A. H. Boyd, Esq., Table for June.
5. Melbourne, from Government Observatory, Tables for May.

The presentations to the Museum were as follows:—

1. From Captain Clinch—A Bow, nineteen large, and twenty-seven small poisoned arrows, a head-dress, neck ornament, &c., formerly belonging to a chief of New Guinea.
2. From Mr. Cearns—Fac simile of the letter addressed Lord Montague, which occasioned the discovery of the gunpowder plot.
3. From J. W. Graves, Esq.—Photographic copy of the portrait of Mr. G. A. Robinson, the protector of the aborigines.
4. From T. R. J. Ross, Esq.—A plumed Bronze Wing Pigeon (*Ocyphaps lophotes*.)
5. From Mr. Luckman, Sorell—A pair of Shoveller Ducks (*Spatula rhynchotis*.)
6. From Mr. Groom—A bronze Portuguese Coin.
7. From Mr. R. W. Stuart—Eleven specimens of Garnets found near Table Cape.
8. From W. A. B. Gellibrand, Esq.—A preparation of the gravid uterus of the Kangaroo Rat, shewing the fetus so far advanced as probably to be within a few days of removal to the pouch.

[Mr. M. ALLPORT observed that this presentation which had been carefully dissected by the curator, was of great interest. It was known to the members that the mode of development of the foetal marsupial was for a long time a disputed point; and even at this late date many who had not had the opportunity of studying the writings of Owen and others, still believed that the fetus was developed on the teat in the maternal pouch. An inspection of the preparation now on the table would, however, satisfy the most sceptical that up to a certain period the fetus was developed in the uterus. How it was removed from the uterus to the pouch and applied to the nipple was still a matter of doubt, some observers thinking it was effected by the mouth, and others by the paws of the mother. Perhaps it was effected in each way by various species according to the fitness of the formation of their mouth or paws for such purpose.]

9. From Mr. F. J. Salier—A War Canoe, from the Solomon's Island Group, South Pacific.
10. From Mrs. Willett—A small Snake, and a young Viper from the Cape of Good Hope.

The SECRETARY called attention to a specimen of iron smelted from Tasmanian ore, which had just been received through *The Mercury* office.

The Rev. H. D. ATKINSON brought under notice two shells which he thought were new, and which he obtained by dredging near Partridge Island, at a depth of thirty-five fathoms. One is a *Modiola*, and the other, Mr. Legrand thought, was a *Diplodonta*, each being a new species. Mr. Atkinson hopes to obtain other specimens of these shells for presentation to the Museum.

Dr. AGNEW exhibited an apple, from the Cascades garden ; a portion of which was covered with a growth that on a cursory view appeared to be a species of blight. Under the microscope this was seen to consist of a series of very fine filamentous stems each supporting a small sac which was the receptacle of an ovum. (*On the table were two microscopes exhibiting the object.*)

Mr. M. ALLPORT stated that the ovum was that of a small green fly, with a very brilliant eye. Mr. Swan had noticed the same deposit of ova on the leaves of the Bay and other shrubs.

Mr. GOULD called the attention of the society to some specimens of two rocks, somewhat unusual in the island, porphyries from the neighbourhood of the Black Bluff Mountain, near the Middlesex Plains ; one variety consisted of felspar porphyry, characterized by small crystals of pink orthoclase felspar, and of glassy felspar ; the other is a quartz porphyry, and both differ materially from the felspar porphyry occurring in the neighbourhood of Port Cygnet, and also as elicited by recent observations of the Rev. H. D. Atkinson, at Oyster Cove. He also referred to some large specimens of Iron Pyrites, taken from a vein in the neighbourhood of the Leven, exhibiting crystallisations in the form of the pentagonal dodecahedron, which he remarked had been exploited by him to some extent in the hope of discovery of underlying ores of copper. The pyrites had been tested for gold, which it was not found to contain.

The BISHOP speaking in reference to the specimen of smelted iron upon the table adverted to the immense advantage likely to accrue to the country if the ores stated to be so abundant could be profitably worked, and asked Mr. Gould whether he had any acquaintance with the Ilfracombe district.

Mr. GOULD stated that he had carefully examined the district, and made a very full report upon it some years ago, and that it was in consequence, as he understood, of that report having attracted the attention of Mr. Lennard that this gentleman had come over for the purpose of inspecting the locality and ascertaining the correctness or otherwise of the statements contained in it. He understood that Mr. Lennard was a gentleman of practical experience in the smelting of iron ores ; and that his opinion of the quantity easily available was so favourable that he had induced a Melbourne capitalist to subsequently visit the district, who had been equally satisfied with the abundance of material, and had assured Mr. Gould that on his return to Victoria he should initiate steps for the employment of capital in the reduction of the ores and manufacture of iron in this colony. Mr. Gould considered that although some years since the prices of iron hardly permitted its profitable production in this colony, the present great increase in its value rendered worthy of very serious consideration, the question of the possibility of the production at a profitable rate of malleable iron by a direct process

by means of charcoal. The Melbourne gentleman before referred to, had estimated that charcoal could be produced in the locality at a cost of ten shillings per ton ; and if so, no doubt it would be desirable to entertain the question very fully. The ores were of two kinds, magnetic oxide, yielding by assay, 70 per cent. of iron, and brown hematite having a rather less per-centage, both are in great abundance, and their point of occurrence fully described in the report upon the iron ores of Ilfracombe, by Mr. Gould, in the library of this society.

Mr. STEPHENS said that he had to report an interesting addition to the Flora of Tasmania, a Tree Fern (*Cyathea affinis*) lately discovered on the North Coast. During a journey to Circular Head in February last, his attention was called by Mr. S. B. Emmett to an unusually tall and slender tree fern, which on examination appeared to be quite distinct from the two *genera* already described. The general character of the fern, its great height (40 feet, or thereabouts), and the mode of its occurrence brought to recollection one of a similar description discovered a few years ago in the Cape Otway ranges by a party of the Geological Survey of Victoria, and then named *C. medullaris*. The Circular Head specimen, however, differed in some points from Hooker's description of *C. medullaris*, which is common in New Zealand, but as no frond exhibiting the fructification could be discovered all speculation as to its generic character was futile. Some months later Mr. Emmett succeeded in obtaining a seed-bearing frond, and forwarded it to Mr. R. C. Gunn, who identified it as a species of *Cyathea*. Mr. Gunn forwarded the frond to Baron von Mueller who has removed all doubt by pronouncing it to be *Cyathea affinis*, under which name he also describes the tree-fern from Cape Otway. Baron von Mueller further stated that it is still an open question, which he hopes soon to settle, whether *C. affinis* is really distinct from *C. medullaris*.

In answer to a question from Mr. Gellibrand who thought that the interesting stranger must be identical with a noble tree-fern of New Zealand, which was highly esteemed as a food producer by the Maories, Mr. Stephens stated that *Cyathea medullaris* was famous for a preparation resembling arrowroot, which was obtained in great abundance from the heart of the stem.

Mr. M. ALLPORT proposed a vote of thanks to Mr. Walter Gellibrand for his very valuable and interesting donation. He was glad Mr. Atkinson had commenced deep dredging, and that he had already been rewarded by a discovery. He hoped that other naturalists would follow in the same course, as he was fully persuaded that it was one which must be attended with very brilliant results.

Thanks having been accorded, the meeting separated.