OCTOBER, 1870.

The monthly evening meeting of the Fellows was held on Tuesday, the 11th October, His Excellency, C. Du Cane, Esq., President, in the chair. The Hon Mrs. Du Cane and Mr. C. M. S. Chichester, Private Secretary, were also present, together with the following members of the Society: —Dr. Agnew, Messrs. M. Allport, J. W. Graves, L. R.Castray, S.Wright. F. Abbott. J. McC. Browne, F. Abbott, junr., H. Bilton, and Colonel Crawford.

The following gentlemen, who had previously been put in nomination, were after a ballot declared duly elected as members of the Society,viz.:— Mr. P. T. Smith, of Syndal, Ross, and Mr. J. Young, of Howrah, Bellerive.

The Hon. Secretary, Dr. Agnew, laid on the table the following returns for the past month :—

1. Visitors to Museum, 685.
2. Ditto to Gardens, 1906.
3. Seeds received at Society's Gardens.

a. From Dr. Milligan—Collection of seeds of ornamental shrubs and trees, flowers and vegetables ; from the gardens of the Royal Horticultural Society, London. A packet of seed of the China grass fibre plant (*Bœhmeria nivea*), from the Royal Botanic Society's Gardens, London.

b. From Mrs. Woodin—Seeds of Umbrella Pine of Japan (*Sciodopitys verticillata.*)

4. Time of leafing, &c., of a few standard plants in Society's Gardens.
5. Books and periodicals received.
6. Presentations to Museum.

Meteorological Returns.

1. Hobart Town—From F. Abbott, Esq., table &c., for September.
2. Port Arthur—From J. Boyd, Esq., ditto, ditto.
3. Swansea—From Dr. Story, ditto July and August.
4. Westbury—From C. Belstead, Esq., ditto September.
5. Sydney—From the Government Astronomer, ditto for July.
6. New Zealand—From the Government Observer, tables from various stations for June and July ; and from Wellington for August.
7. From Government Astronomer, Melbourne, table for August.

The presentations to the Museum and Library were as follow :—

1. From Mr. Baynton, Brown's River—A small collection of Land Shells, Crustacea, &c.
2. From Mr. W. Johnston, Trinity Hill—A specimen of the Bronze-winged Cuckoo (*Chrysococcyx lucidus*), from Kangaroo Bottom.
3. From Mr. J. W. Graves—A Sparrow Hawk (*Accipter torquatus*).
4. From Mr. F. Butler—Four specimens of ore from Penguin Creek silver mine.
5. From Rev. J. Hutchison, New Town—A Hermit Crab (*Pagurus sp*).
6. From Captain Williams—A Cuttle fish from the East Coast.
7. From Mr. T. Giblin—Specimen of the paper-like bark of a species of Tea-tree (*Melaleuca sp. ?*), from New South Wales.

[The tree from which this bark was obtained is probably identical with, or closely allied to the swamp Tea-tree (*Melaleuca ericæfolia*), of this colony, in reference to which the following note appears in Hooker's "Flora Tasmaniæ," vol. 1, page 129:—"Mr. Gunn describes this as one of the commonest inhabitants of the marshes, often forming an impenetrable scrub, most expensive to clear. Trees of it attain 70 feet, and

4-5 feet in girth; one which that naturalist has measured was unbranched for 27 feet, and was 5½ feet in girth at 3 feet above the ground. In poor sandy soil it forms a dwarf bush. Of the bark, he adds, the natives used to make the catamarans, or canoes, so admirably figured in Labillardiérés voyage, which were stitched with the bark of *Sida pulchella* and *Plagianthus sidoides*."] (Currajong.)

8. From Mr. F. Wise, a Smolt caught with rod and line in the Derwent at New Norfolk.
9. From Dr. J. Milligan, F. L. S., a copy of "The Last of the Tasmanians," and one of " The Daily Life of the Tasmanians," by J. Bonwick, F.R.G.S.

The Secretary read some "Notes on an experiment with the fumes of sulphur, and on other methods for the destruction of rabbits in their burrows," by W. Archer, Esq., F.L.S. The fumes were forced into a burrow by means of bellows, attached to a receptacle in which the sulphur was burned; and that this was effectually done was proved by the escape of sulphurous vapour from the bolt-holes. When the burrow was afterwards opened, however, no trace of the fumes was left, nor were the animals destroyed. The experiment was recorded as a "guide or warning to others who may be induced to try further experiments with the fumes of sulphur, or with any other vapour." (Carbonic acid gas would not become condensed, and it would be fatal to animal life, but its use would probably be much too expensive).

Mr. Abbott read a paper "On the Sun and its Office in the Universe."

Some discussion of a conversational character having taken place,

Mr. M. Allport begged to call the attention of the meeting to the fish presented by Mr. Wise (presentation No. 8), on account of its high scientific importance, as furnishing a complete answer to the theory raised by Dr. Günther in reference to the salmon first sent to England. The Doctor then assumed that the fish sent was hatched from one of the eggs imported from England in 1866. This assumption was met by the statement that the fry unnaturally detained in fresh water had reached a higher state of development than the smolt sent to England, and as the fish now presented was but just assuming the smolt stage, all the arguments used in reference to the smolts first caught apply with tenfold force to this specimen. It was, moreover, fortunate that the Museum possessed one of the fry hatched from the English eggs received per Lincolnshire in 1866, and which died in the spring of 1867. Upon comparing this with the fish now caught, it would be found that they accorded with one another so closely, as to leave little doubt of their identity in species. No report had yet been received from England as to the smolt last sent, though they had heard of its safe arrival. Mr. Allport further observed that Mr. Youl, in writing to Sir Robert Officer, had expressed a wish that the Salmon Commissioners should make it publicly known that after careful examination he entirely concurred with Dr. Günther in the opinion that the specimen first sent to England was a Salmon trout (*Salmo trutta.*)

His Excellency read the following extract from a letter which he had received from F. S. Corrance, Esq., M.P., an experienced salmon fisher in Scotch, Irish, and Norwegian rivers, and who had considerable opportunities of studying the habits of the fish:—" Concerning your salmon experiment doubts will soon cease. For although a few fish would be undiscoverable in deep water, so soon as the spawning season begins they will be evident enough upon the upper fords and shallow waters. The success of the experiment will depend upon the mollusca upon the sea banks, and the absence of formidable enemies outside, more than the capabilities of the rivers themselves. And I take it that the destruction

is so great that a constant and copious artificial supply will be requisite for some time to establish the genus unless under most favorable circumstances. Whether they will rise to fly or not, is once more most uncertain. I believe it to depend entirely upon the habits in that respect acquired by the smolts before they leave fresh water. It is at all events a most interesting experiment." His Excellency stated he would, when replying to Mr. Corrance's letter, request him to examine the specimens of our smolts at the Zoological Society's Museum, London.

Mr. M. Allport remarked that Mr. Corrance's statement, that the fish would be readily detected in the spawning season at the upper fords and shallow waters of the Derwent, was undoubtedly correct, but the fact was, it would be quite impossible, with our pecuniary means, effectually to watch the hundreds of miles frontage in the upper waters of the Derwent and its tributaries. These streams run through great tracts of country uninhabited, and in places almost impassable. It was to be recollected, too, that all expense of this kind would be virtually thrown away, as the result of the experiment must necessarily soon be known in the due course of events.

In order to show how unreasonable it was to argue that the salmon experiment had not succeeded, because no large fish had hitherto been caught, Colonel Crawford read the following extract from the "Reports of the Commissioners of Fisheries of the State of Maine, 1867-8," p. 22: —"In the fall of 1850, I put into the Sandy River Ponds ten or twelve trout. For seven or eight years no indications of them were to be seen, notwithstanding thousands of people crossed those ponds every year. Since 1857, it is judged that not less than 2,000 pounds have been taken out annually."

The usual votes of thanks having been accorded to the authors of papers and to the donors of presentations, His Excellency left the chair.