

NOVEMBER, 1870.

The monthly meeting of the Society was held on Tuesday, the 8th November, J. Barnard, Esq., in the chair.

Among the Fellows present were Colonel Crawford, Dr. Agnew, Messrs. J. Allport, H. J. Buckland, M. Allport, H. Bilton, F. Abbott, jun., J. Roberts, J. W. Graves, L. Susman, L. R. Castray, C. M. Maxwell, A. G. Webster, Justin McC. Browne. Messrs. Curayne and McFarlane (2) were also present as visitors.

The Secretary laid before the meeting the following returns for the past month, viz. :—

1. Visitors to Museum, 737.
2. Ditto to Gardens, 2232.
3. Time of leafing, flowering, &c., of a few standard plants in Botanic Gardens.
4. Books and periodicals received.
5. Presentations to Museum and Library.

Meteorological Returns :—

1. Hobart Town, from F. Abbott, Esq., table and summary for October.
2. Swansea, from Dr. Story, ditto for September.
3. Port Arthur, from J. Boyd, Esq., ditto for October.
4. Sydney, from Government Observatory, ditto for August.
5. Melbourne, from ditto, ditto for September.

The following presentations to the Museum and Library were brought under the notice of the meeting :—

1. From Mr. M. Allport.—A Black Snake (*Hoplocephalus curtus*) from near the waterworks reservoir. Length, 4 feet 6 inches. A Fox Shark, or “Thresher” (*Alopias vulpes*) caught in Adventure Bay.
2. From Captain Warren, R.E.—Pair of feet of “Cariboo Deer” of Nova Scotia, a pair of Indian mocassins made from skin of hocks of “Moose Deer” of Nova Scotia. (A note from Captain Warren, which accompanied these specimens, descriptive of the mode of preparing the mocassins, was read.)
3. From Mr. J. Young, Howrah.—A human Skull from Fiji, Jaws of a species of Shark caught in the Derwent. [The fish from which this specimen was obtained is probably identical with the Port Jackson shark (*Cestracion* Cuv.), figured in “Phillips’ Voyage to New South Wales,” p. 383, and is interesting as being the only known living representative of an extinct species found in the European tertiaryes.]
4. From Mr. F. Allison, Sorell.—A pair of Mexican Spurs.
5. From Salmon Commissioners.—A Salmon Trout Smolt, (*Salmo trutta*) from breeding ponds, River Plenty.
6. From Rev. H. D. Atkinson.—Eleven specimens, embracing eight varieties of Echini from Three Hut Point.
7. From Mr. Richard Robertson.—A large bony mass from a horse’s jaw which had been previously fractured.
8. From Mr. L. Henn.—Curious growth of Honeysuckle (*Banksia* sp.) sapling.
9. From Mr. W. H. Price, Macquarie Plains.—A Ram’s head with four horns.
10. From Mr. T. Herpich, Glenora, Fenton Forest.—An Austrian note, value 1 Gulden (9d. English); two quarters of ditto; five Turkish coins, one $\frac{1}{2}$ Piastre, two $\frac{1}{4}$ do., two Paras; Austrian three Kreuzers; two Skillings, Hamburg.

11. From Mr. H. M. Hull.—Butterflies from Benalla, Victoria.
12. From Mr. G. Davies.—A chick with four legs.
13. From the Government of Victoria.—Results of Magnetic Survey of Victoria, by Dr. Neumayer, 1 vol., 4to.
14. From Government of United States, per the Smithsonian Institution, Washington, United States Coast Survey for 1863-4 and 5, three vols. 4to, bound.

[The Secretary called attention to the very great value of the presentations so frequently received through the Smithsonian Institution. The books before the meeting were profusely illustrated by valuable maps, and could only have been prepared and published at a very large outlay by the American Government.]

15. From J. Barnard, Esq.—Catalogue of Sydney Intercolonial Exhibition, 1870.
16. From J. Abbott, Esq.—A specimen of Coal with its overlying shale, from Rookwood, Three Hut Point.

[Accompanying this presentations were several printed and other documents, extending over a period of nine or ten years, in reference to the value of the coal, &c.]

In reply to a query, the Secretary intimated that he had no information as to the thickness of the seam, but he had heard a very favorable opinion given as to the quality of the coal.

Mr. Maxwell suggested that the most practical and satisfactory method of establishing its value would be by having a ton of it sent to the Gas and Steam Companies for the purpose of being tested.

17. From J. J. Butler, Esq., Bagdad.—An English Perch (*Perca fluviatilis*), aged seven months.

Mr. Allport at the same time exhibited several young perch from a few days to three weeks old, in order to show the enormous rapidity of growth, and consequent value of these fish as an article of food.

The Secretary read a continuation of "Notes on an excursion to Cummings's Head, and the Falls of the Meander," by W. Archer, Esq., F.L.S. Also a paper by the same author, entitled "Notes on the Californian Thistle."

Mr. M. Allport read the following notes on the salmon trout (*Salmo trutta*) at the River Plenty:—"Another, and an important addition has, since our last meeting, been made to the history of the salmon experiment. It will be remembered, that in the winter of 1869, those of the salmon trout (*Salmo trutta*), which were detained in fresh water, first spawned, and when the eggs hatched, it became a question of great interest, whether the fry would, in due season, exhibit the migratory instincts of their species in the same manner as if the parent fish had spawned after a visit to sea; and this question became of still greater interest from the doubts entertained by scientific men in England, as to whether the fish detained at the Plenty were really salmon trout at all, some going so far as to assert that they could not be genuine because they had spawned, and that no migratory salmon ever would breed without the previous journey to sea. The Salmon Commissioners, some time since, sent to England specimens of the young fish, hatched from the first eggs laid by the salmon trout, such young fish being then seven months old, at which time they exhibited, in a marked degree, all the characteristics of the par of migratory salmon, and especially the orange-coloured fins, which are looked upon as peculiar to the par of the salmon trout. Had the experiment stopped at the time when those young fish were sent away, many people might have jumped to the conclusion that some mistake had occurred, and that these young fish were really, as Dr. Günther suggested, hybrids and not salmon trout; but, fortunately,

we have now in the specimen on the table the most convincing proof that these young fish belong to some migratory species of salmon, and we have, therefore, no right to doubt the statement of those who sent the eggs from which the parent fish were produced, and must admit that their progeny are true salmon trout. The specimen before you (presentation No. 5) is a facsimile of some 300 others now in our large pond at the Plenty, all of which have assumed the full smolt dress of brilliant scales, which dress is not only the invariable characteristic of those which migrate seawards, but also the unerring sign that they are ready to depart. Besides the great fact of the final success of the salmon trout, which this specimen abundantly proves, there is another interesting point to which I desire to call attention. Of the two smolts caught in the estuary of the Derwent in the end of October last year (that is at the very same season at which this specimen has been taken from the pond) one was sent to England and pronounced by Dr. Günther to be an abortive salmon trout, the other was kept here, and is now before you. Upon comparing these specimens, you will find that the salmon trout smolt from the pond at the Plenty, though a healthy, well-fed, well-shaped, silvery fish, is not one-fourth of the weight of its abortive brother, and they exhibit other differences which make it difficult to believe that they are identical in species. During the last fortnight the parent salmon trout, unhappily reduced in number to 11, and which first assumed the smolt livery three years ago, have exhibited marked restlessness at their forced detention, swimming round and round their pond, seeking an outlet, and even throwing themselves out of the water at the lower grating in such a determined manner as to render it necessary to increase the height of the guard to prevent their escape."

A list, in course of publication by Mr. Legrand, of 42 new species of Tasmanian land shells, principally discovered by him, was laid on the table for inspection. Accompanying and illustrating the list was a series of lithographs, exquisitely rendered by Mrs. Forde and Miss Scott, of Sydney.

A very beautiful collection of roses, comprising thirty-two named varieties, from the Society's Gardens, was exhibited, and was examined with much interest by the Fellows. Mr. Abbott mentioned that the Gardens now contained about one hundred and fifty varieties of this flower.

After some conversational discussion, the usual vote of thanks having been accorded to the authors of papers and the donors of presentations, the meeting terminated.