

ROYAL SOCIETY.

OCTOBER, 1864.

The monthly evening meeting of the Society was held at the Museum on Tuesday, the 11th October, A. Kennerley, Esq., in the chair.

Among the Fellows present, were Dr. Agnew (Hon. Secretary), Dr. Hall, Rev. J. Storie, Messrs. F. Abbott, sen., F. Abbott, jun., G. P. Adams, W. Johnston, H. Hinsby, G. Salier, L. Susman, E. Marwedel, &c.

W. B. Gellibrand, Esq., having been previously nominated by the Council, was, after a ballot, declared to be duly elected a Fellow of the Society.

The usual monthly returns were laid on the table, viz. :—

1. Visitors to Museum during September, 563.
2. Ditto to Gardens ditto, 1,978.
3. Tench supplied to C. M. Maxwell, Esq., 12 (to be forwarded to New Zealand).
4. Plants received from Mr. H. Low, London: total 78 (of which 48 were dead on arrival).

Meteorological Returns, —

1. Hobart Town, from F. Abbott, Esq.
 - (a) Table for September.
 - (b) Summary and Analysis of Observations for ditto.
2. Port Arthur, from J. Boyd, Esq.
 - (a) Table for August.
 - (b) Readings of Government Schooner's Barometer for ditto.
 - (c) Table for September.
 - (d) Readings of Schooner's Barometer for ditto.
3. Swansea, from Dr. Story.
 - (a) Table for August.

The usual abstract of the meteorological observations by E. S. Hall, Esq., was read. Amongst other points of interest, it was noticed that the number of deaths during the last month (September) were fewer than had ever taken place in the same month for the last seven years, except 1861, and that the mean of the ozone register was 8.74, being higher than it had ever been since the beginning of these observations in April, 1857.

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

1. Sennotype Portraits of Aborigines of Tasmania. From the Hon. the Colonial Secretary, on the part of the Government.
2. A Pheasant. From J. Maclanachan, Esq., Ballochmyle.
3. A Human Skull, from Matahaha, New Zealand. From Mr. Hissey.
4. Two War Clubs, the Beak of a Saw-fish (*Pristis*), a Cocoanut-shell Flask or Bottle, three mineral specimens, a Fungus from a Sheoak Tree. From Mrs. Darley.
5. Album Portraits of Professor Owen, and Sir Chas. Lyell. From Mr. F. Abbott.
6. Dried Pouch of a Wallaby.
7. Packet of dried Plants from Western Australia. From Mr. M. Seal.
8. Fish found at Sandy Bay. From Mr. Owen Meredith.

With reference to this presentation, Mr. Morton Allport remarks :—

"Owing to the absence of any standard modern work on fish, it was impossible to give the scientific name of the curious specimen presented by Mr. Meredith, but it is probably allied to the anglers, or frog-fish (*Lophius*, sp. ?)

"I have taken several specimens of two distinct species in the shallow tide-pools on Bruny Island, and had, therefore, good opportunities of observing the curious use made of the paw-like ventral fins. The fish inhabits shallow sandy bays, and is constantly exposed to the risk of being left dry by the ebbing tide, and then resorts at once to the use of its ventral fins to overtake the receding water. On wet sand the fish travels at such a good pace, that it is difficult for a minute or two to lay hold of it—the motion reminding one forcibly of that of a seal in miniature. As even with this aid the fish might be left exposed till the return tide, the operculum, or gill-cover, exhibits an arrangement common to several of the fresh water perch of warm climates, by which the gills are kept moist during their temporary absence from the water. The apparatus by which this is effected consists of a labyrinth of small cells, which are supplied with water, and closed by the action of the gill-cover as by a valve, and from this supply a small quantity is from time to time allowed to trickle through the gills."

A mass of dried and pressed tobacco leaves from the Society's Gardens was

exhibited, and inspected by most of the Fellows present. The following memorandum in reference to it from the Superintendent [of the Gardens (Mr. F. Abbott) was read.

Tobacco Grown in the Royal Society's Garden during 1863-4.

"I have forwarded to the Museum a portion of the tobacco grown in these Gardens last season.

"It may be remembered that Mr. Marwedel brought under the notice of the Society the desirability of trying the cultivation of tobacco in this colony, and at the same time presented the Society with six varieties of seeds. From the fact, however, of the season being too far advanced before the ground could be prepared, the plants raised from those seeds never properly matured their leaves, and consequently I have not been able to gather from them.

"The tobacco sent, was gathered from plants of the variety known as the Virginian, which was previously growing in these Gardens. I have always found this variety to grow luxuriantly, attaining the height of from five to seven feet, the lower leaves measuring 2ft. in length, and about 1ft. in breadth. The leaves were gathered separately as they became ripe, and laid out to dry, during which process they were thrown together two or three times to sweat. When sufficiently dry they were put into a box and pressed.

"As far as my own observation goes, I believe that tobacco will be found to grow freely enough in this colony, but whether the quality will be equal to that grown in the neighbouring colonies, remains to be decided."

Mr. MARWEDEL after examination of the tobacco, pronounced it to be extremely fine in flavor; and such was the general opinion of those present. Mr. Marwedel proposed that it should be forwarded to a friend of his in Melbourne, who was largely interested in the tobacco trade, and who would at once assign to the sample its commercial value. The proposal was agreed to.

Mr. KENNERLEY hoped tobacco would be found profitable for growth in this colony, as its culture would afford large employment for labor.

[Whatever information may be received on the question shall be laid before the public as soon as possible, but there can be no doubt that large tracts of country, especially on the northern shores of the island, are admirably adapted for the cultivation of this valuable plant, and that the climate would also be most suitable for its growth.]

A communication from J. B. Cotton, Esq., of Swanport, was read, giving a detailed description of the manner in which two trees (gum) and a flag staff (pine) had been shattered by lightning in the vicinity of his residence (Kelvedon). A peculiar atmospheric phenomenon was also described; and an account given of a singular displacement of a large stone, weighing about a ton and a half, from its bed at Sandspit. A sketch, which accompanied the letter, shewing the present position of the stone, and its original position, was exhibited.

The SECRETARY read some remarks from M. Allport, Esq., (who was unable to be present) "On the mortality amongst the Trout at the Breeding Ponds of the Plenty."

The SECRETARY also read a paper entitled "Observations upon the Plants which are characteristic of Agricultural, Pasturable, and bad lands respectively," by W. Archer, Esq., F.L.S. (Cheshunt).

In the discussion which ensued, several of the Fellows expressed their sense of the great practical value of Mr. Archer's observations, as it was evident a minute knowledge of the soils affected by particular plants, &c., could not fail in many instances to be of the greatest importance. Mr. Kennerley remarked, in New South Wales he had been struck by the circumstance that land which in the first instance exhibited the usual indications of poverty, and was in every way disheartening to the new settler, was frequently found, after having been cleared, and the subsoil brought to the surface by deep ploughing, to produce crops which not only gratified but astonished the owner. This, of course, was due to the great fact of the soil being virgin, and he mentioned it only to show that when this is the case, even though the land may appear indifferent, the farmer need not always despair before giving it a trial.

Mr. SALIER enquired if the Royal Society intended to take any action in reference to the Intercolonial Exhibition at Dunedin.

The SECRETARY replied that no communication on the subject had yet been received by the Society.

The usual vote of thanks, moved by Mr. JOHNSTON, and seconded by Mr. SALIER, was accorded to the authors of the papers read, and to the donors of the various presentations, when the proceedings terminated.