

OCTOBER, 1872.

The monthly evening meeting of the Society was held on Tuesday, the 8th October, M. Allport, Esq., in the chair.

The following gentlemen, who had been previously nominated by the Council, were, after a ballot, declared duly elected as members of the Society:—Mr. J. S. Dodds, Hobart Town; Captain H. O'Reilly, Brisbane (corresponding member).

The Secretary (Dr. Agnew) brought under notice the usual returns, &c., for the past month, viz.—

1. Visitors to Museum, 1,460.
2. Ditto to Gardens, 2,276.
3. Seeds, &c., received at Gardens:—From Mr. W. Ball, London, 141 packets of choice flower seeds. From Royal Gardens, Kew, 511 packets seeds of hardy trees, shrubs, and herbaceous plants.
4. Time of leafing, flowering, and fruiting 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 and Summary for September.
2. Swansea, from Dr. Story. Table for August.
3. Tamar Heads, from R. Henry, Esq. Table for September.
4. Sydney, from the Government Observer. Printed tables for July.
5. New Zealand, from Dr. Hector. Monthly tables (printed) from September, 1871, to June, 1872.

The presentations to the Museum were as follow:

1. From Captain O'Reilly, Brisbane, Queensland. Two perfect skeletons of the Dugong (*Halicore dugong*).
2. From Mr. J. Bidenscope. Six samples of tin ore, from New England, New South Wales (assay from 71 to 76 per cent. of tin). Two specimens of stanniferous quartz from same locality. Two ditto of topaz, from New South Wales. Specimen of Hartley bituminous shale from New South Wales. Rock specimen from the Blue Mountains. Specimen of iron ore (magnetic oxide) from the Leven District, Tasmania.
3. From Mr. John Page, Lemon Springs. Specimen of "Native Bread" (*Myliitta Australis*) and the skin of an usually large domestic cat.
4. From Mr. Davis. A brass weight 5dwt. 6grs., being the correct weight of the guinea of 1772.
5. From the Government of Netherlands, India, Vol. 1, of Magnetical and Meteorological observations made at Batavia.
6. From Mr. H. Sale—A Brazilian copper coin.

The SECRETARY requested the special attention of the meeting to presentation No. 1. It was a great acquisition for the Museum and of considerable intrinsic value. The Council felt much indebted to the liberal donor, and had thought it their duty not only to forward a special vote of thanks to Captain O'Reilly, but also to recommend him for election as a corresponding member of the Society.

The SECRETARY read a letter from the principal librarian of the British Museum, intimating that the trustees of that institution had presented to the library of the Royal Society of Tasmania, a valuable series of Natural History publications, comprising about sixty-five volumes and 1 arts.

A letter from Mr. H. V. Barclay, of Spring Hill, was read, relative to

the origin of the so-called tidal wave which caused so much destruction on the west coast of South America on the 13th August, 1868, and the effects of which were felt on these coasts on the 15th of the same month.

The following letter from Mr. A. Johnson, Gould's country was read :—

“September 12th, 1872.

“Sir,—I do not know if you will think the following particulars worthy of being brought under the notice of the Society. Four years ago I brought from Scotland a white kind of potato called “Patterson's Victoria” a seedling then, as now, in great repute as prolific and of first-rate quality. I have grown these potatoes here for the last three years, but last year I noticed that the blossom had changed from white to a pale blue, but there was no difference discernible in the potatoes. This year, however, upon lifting them, they had pink eyes, not unlike a very white Californian potato, and their general shape appeared to have altered from round to a flattish kind of oval.

“My own opinion is that they are probably a hybrid, and that they are returning to the kind from which the blossoms had been inoculated.

“I may add that I have grown these potatoes each year on new ground.

“I am, &c., &c.,

“A. JOHNSTON.

“The hon. secretary Royal Society.”

The CHAIRMAN stated that the flowers of the *Hydrangea*, grown in the part of the colony referred to, invariably turned blue, probably from the presence of iron in the soil, and it might be that the blossom of the potato was changed to blue by the same cause.

Dr. AGNEW remarked this would not account for the change in the shape of the potato. This rather favoured the idea that the plant might be reverting to an original type. He would be glad to know if the common white *Epacris*, or other white flowers, existed in the district. If so, the circumstance would be unfavourable to the theory as to the effect of iron on the blossom.

Mr. GIBLIN observed it was well known that the colour of the blossoms of the *Hydrangea* could be changed to blue by adding a small quantity of an iron solution to the water supplied to the plant. This experiment had frequently been tried, with success.

A second letter from Mr. Johnston was read, being a very favourable report of the sugar beet from seed supplied from the Society's Gardens.

On the same subject, Mr. BARNARD read the following extract from a letter from a settler on the Leven :—“The sugar beet is a complete success, notwithstanding the unfavourable season for other crops, and most useful in fattening pigs and all kinds of stock. Some sixteen pigs that we have killed were entirely fed with the beet, and, although running about, were quite fat. The poultry, too, were very fond of it. My son purposes growing a large quantity next year.” Mr. Barnard proceeded to remark that seed, he believed, had been distributed by the Royal Society to about one hundred persons, upon the simple condition that they would report to the Society the degree of success which had attended the experiment. But as only one or two reports had been received, he thought a circular should be addressed to those who had been supplied with the seed, asking for a statement of results ; as he felt convinced that, were the great advantages of this crop more fully known, its cultivation would become the rule, instead of as now the exception. It was useless to expect the manufacture of sugar from beet until the root became generally grown ; it was putting the cart before the horse. As soon, however, as the exception became the

rule, and an adequate supply of the roots could be depended on, there is no doubt there would be some one in advance to initiate the manufacture; and capitalists would be found with sufficient enterprise to engage in an undertaking fraught with such benefits to the country. He was glad to see that four pounds was the average weight of the roots in Mr. Johnston's crop, as this was just the standard weight likely to contain the proper quantity of sugar. Mr. Barnard added that he had procured the most recent work on making sugar from the beet, and would be happy to give full information on the subject to any intending manufacturer.

Mr. T. GIBLIN observed that many years ago he grew the beet largely for feeding all sorts of stock, for which it was admirably adapted. Although the roots singly were smaller than those of the mangold the weight of the crop per acre was really greater. He had had as much as twenty-six tons from the acre.

At the request of several members present, Mr. Barnard promised to prepare a paper on the subject, from the latest authorities, for the next meeting.

The CHAIRMAN read the following letter:—

“Black Brush,
“September 6th, 1872.

“Morton Allport, Esq.

“Sir,—I have to acknowledge receipt of a letter from Mr. Charles Gould, soliciting information from me of a strange animal seen in the pools of the Jordan. My reason for not complying with the request before, was, that I was not able to see the parties in consequence of the dreadful state of the weather and the flooded state of the river Jordan. I have since obtained the information required, and will now state what I know of the affair.

“It was first seen about 2 years ago in the large pool at Mr. Munday's farm at the Black Brush by Mr. Munday himself. He states that it was like a seal with round head and two flippers, and plunged into the river. It was afterwards seen by the Messrs. Tonks further up the river; it was then seen by the Cox family near their house; and by several others afterwards in the large lagoon under the rocks opposite my house, and by Mrs. Chaplin on the bank of the river close to the cows in the meadow. When approached it bounded into the river. She describes it as having a round head and flippers; that it was about four feet long, of a dark grey colour, and made a noise like “hu” “hu” I have myself seen the water thrown up, but could not account for it. Others have seen the same—Mr. Gunn and the Messrs. McLaren. It was afterwards seen farther up the Jordan by Mr. Collis's shepherd, who states that it was lying by a log, and when disturbed it went into the river. It has not been seen lately, my impression is that it has made its way up the Jordan, perhaps as far as Lake Tiberias. At night was the time it was heard to make a noise. It very much alarmed one of Mr. Cox's sons when watering his horses at the Jordan. He thought it was one of the cattle which had fallen in the river; he has seen nothing of it since. Should I hear anything further I will communicate with you.

“Your obedient servant,
“EDWARD CHAPLIN.”

“P.S.—Tuesday morning, 10th September.

“Mr. Fane Cox was at my house this morning, and informs me that going home a few nights since, when passing by the rocks opposite the lagoon by my land, some large animal went down the rocks into the river, making a loud noise and throwing up the water. He waited

some time thinking it would make its appearance again ; it did not and he could not tell anything about its description. He thought it was a beast of some kind, it made he says a loud gurgling noise like that a horse would make.

“E. C.”

Dr. AGNEW thought this description pointed pretty clearly to the assumption that the animal seen was a Seal.

Mr. M. ALLPORT read an interesting paper on the “Irregularity in the growth of the young salmon,” and subsequently called attention to the young trout occupying a slate trough in the large room of the museum, and said he did so with great satisfaction, because they were placed there as ova, not merely to gratify a little idle scientific curiosity, but to enable those of the public who had small streams or rivers in their neighbourhood to judge for themselves with what ease such streams and rivers could be effectually stocked, at far less cost to the salmon commission than when fish are sent. Any person expending a few shillings in the construction of a wooden trough on the principle of that in the next room, will be enabled next season to obtain a few hundreds of ova ready to hatch within a fortnight of their being placed in the trough. The number of people (many hundreds) who had inspected the process of artificial hatching carried on in the museum, proved that the Society had done a wise and useful thing in taking this extra trouble to induce the public to assist in spreading the fish throughout the colony. Another object which the council of the Society and the Salmon Commissioners had in view, was to demonstrate the advantages to be derived from feeding the young fish in their early stages on living animalculæ, larvæ and small crustaceans, rather than on dead food ; the young trout, like the young of all predaceous fish, much preferred living food, and though it is quite true that they can be taught to take the grated liver upon which they are usually fed, whilst the particles are moving through the water, when once those pieces which are not eaten get amongst the gravel they are left undisturbed and become fertile sources of mischief in destroying the quality of the water ultimately causing disease and death to the fish. Unquestionably much of the mortality in piscicultural establishments was due to this cause, and, therefore, young gentles were always used at the Plenty for feeding the fry as they crawled about till devoured ; even with the gentles, however, some would escape and die among the gravel, causing more or less mischief, but with the larvæ of mosquitos and gnats and small crustaceans no such mischief could occur, as being in their proper element, they roamed about devouring minute particles of vegetation and doing positive good to the water, till their inevitable turn came and they fulfilled one object of their being by furnishing food for others.

To obtain an ample supply of such food it was only necessary to use a fine muslin net in any stagnant weedy pool or ditch and enough minute creatures could thus be obtained in a few minutes to last many hundreds of young fish a week.

The usual vote of thanks having been accorded to the donors of presentations, and to Mr. Allport, a special vote was given to Captain O'Reilly for his valuable donation to the Museum.

The meeting then terminated.