

ROYAL SOCIETY.

 JUNE, 1869.

The monthly evening meeting of the Fellows was held on Tuesday, 8th June ; T. Giblin, Esq., in the chair.

Mrs. R. Walker, who had been previously nominated by the Council, was, after a ballot, declared duly elected as a member of the Society.

The Secretary, Dr. Agnew, laid on the table the usual returns for the past month, viz.,—

1. Visitors to Museum, 596.
2. Ditto to Gardens, 1009.
3. Plants. &c., sent from Gardens.
4. Time of leafing, flowering, &c., 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 and summary for May.
2. Port Arthur, from J. Boyd, Esq., table for April.
3. Swansea, from Dr. Story, tables for March and April.
4. Melbourne, from R. L. Ellery, Esq., table for April.
5. New Zealand, from the Government, tables for March.
6. Brisbane, from Queensland Government, tables for March and April.
7. Sydney, from G. R. Smalley, Esq., tables for February and March.
8. Westbury, from C. Belstead, Esq., table for May.

Also the following reports from the Government of Victoria :—

1. Report of Mining Surveyors and Registrars, Victoria, for quarter ending 31st March, 1869.
 2. Report of Registrar-General, Melbourne (Vital Statistics), for quarters ending 31st December, 1868, and 31st March, 1869.
- Registration of imported live stock for same period.

The presentations were as follows :—

1. From J. Hull, Esq. A Falcon (*Falco melanogenys*).
2. From J. Maclaine, Esq., Clarke's Island, per Mr. M. Allport. An Avocet (*Recurvirostris rubricollis*).
3. From Mr. R. Ransome, Southport, per T. Stephens, Esq. A specimen of Felspar Porphyry, and the Ear-bone of a Whale.
4. From the Seymour Coal Company. Slab of Shale with numerous plant impressions, from Seymour Mines. A specimen of Coal from West Wanganui Inlet, New Zealand.
5. From Mrs. Stagg. Eight Limestone Fossils (Tasmanian).
6. From P. Ferguson, Esq., of the *Ceylon Observer*, per Mr. Langley, A Letter of the Chetty Merchants (Tamils) of Southern India and Ceylon, with an explanatory note.
7. From Mrs. Ransly. A Lizard with double tail.
8. From Mr. S. H. Wintle. Seventeen named specimens of Tasmanian Coleoptera, with note.
9. From J. Maclanachan, Esq. A Pheasant (a cross between English and Chinese breeds).
10. From R. L. Holmes, Esq. Transactions and Proceedings of New Zealand Institute, vol. I.
11. From W. A. B. Gellibrand, Esq. Seventy-nine Photographs of Machinery in the Leeds Exhibition.

[These Photographs were presented to the donor by H. Denny, Esq., Secretary of the Leeds Literary and Philosophical Institution.]

Mr. M. Allport wished to take the present opportunity of remarking that he had recently seen in the *Student*, for December, 1868, a paper on the Salpæ, which confirmed him in the opinion he had hazarded at the last meeting in reference to the occurrence of a small Crustacean in the empty case of one of these animals.

Mr. Barnard laid upon the table a small specimen of fine crystal Sugar, manufactured from Beet-root, which had been taken from a sample of 28 lbs. exhibited at the late Agricultural Show held in Sydney, and read a paper upon the subject.

The Chairman remarked that he thought the thanks of the society were justly due to Mr. Barnard for bringing the matter before the meeting. He was certain it would be of great importance to the colony if the manufacture of beet sugar could be introduced, although at first perhaps only on a small scale, and by private individuals with simple apparatus, as described in the paper just read. In former years he had considerable experience in the growth of beet root, and was satisfied that this climate was peculiarly favorable for it. He could not indeed imagine why it was not more extensively cultivated, as it was a hardy plant, easily managed, and superior in almost every respect as a nutritive root crop to the mangold wurtzel. The produce of the two he thought would be about equal in weight, as the beet could be planted much closer than the mangold.

Mr. Morton Allport moved a vote of thanks to Mr. Barnard for his interesting paper, expressing his opinion that it was a pity gentlemen who had left the colony, and who had an opportunity of observing what was doing in other colonies, did not take some interest in the matter, as Mr. Barnard was doing, and forward reliable information upon the subject. There could be no doubt it would be to the advantage of the colony.

In reference to the subject, Mr. Napier recollected that some time ago a quantity of sugar from Sydney was placed in this market, but as it was somewhat peculiar in appearance, it did not command a ready sale; when tried, however, it was found to be so excellent for jams and general household use that it was all quickly bought up. Subsequently it was found that the sugar originally came from France, and was made from the beet root. He had great pleasure in seconding Mr. Allport's motion.

Mr. Davies was sorry more attention was not paid to the manufacture of sugar. It only required a little energy. If it could not be undertaken in the large and profitable manner recommended in the pamphlet issued by Government, it ought at least to be tried by means of the simple and inexpensive process seen by Mr. Barnard in action near Sydney. If this was seen to succeed in a single instance, no doubt many would engage in the process, and in time it might become a matter of considerable national importance.

Mr. Troup (D.A.C.G.), had seen the beet sugar largely produced in Germany, but doubted if in this island it could be manufactured to compete with sea-borne sugar, which was brought so cheaply to our doors. In America the Maple sugar could only be made profitably in the inland region, far from sea carriage. In the event of its being tried, however, he would recommend that the greatest possible care should be taken to procure the best seed, as it was found that the quantity of sugar in the beet varied very greatly according to the sample of seed.

The Secretary remarked that the important point to be determined was the price per pound at which the sugar could be produced by the simple process just described, and suggested that Mr. Barnard would be kind enough to procure from his friend precise information on this point. In reference to the value of beet sugar, in comparison with that of the imported, it was to be recollected that the refuse from the manufacture formed excellent food for cattle, &c., and being always saleable would be a set off in favor of the farmer.

Mr. Barnard expressed his great willingness to obtain the required information, if possible in time to lay before the next meeting.

Further discussion ensuing, the general feeling of the Fellows present appeared to be if the manufacture of the sugar could once be instituted, that the example would generally be followed. In order to promote this object, it was resolved that the Society should suggest to Government the propriety of offering a bonus for the first sample of a certain quantity, say 56lbs., of sugar produced in Tasmania from the beet.

As it was understood that some plants could be obtained from Mr. R. Walker, it was suggested that the experiment might be tried on a small scale at the Society's Gardens, if the very inadequate amount of labour available there would admit of it.

The Secretary having promised to see the Superintendent of the Gardens on the subject, the vote of thanks to Mr. Barnard, and to the donors of presentations, was accorded, and the meeting terminated.