

APRIL, 1867.

The monthly evening meeting of the Fellows was held on Tuesday, the 9th April, J. Barnard, Esq., in the chair.

E. Atherton, Esq., who had been previously nominated by the Council, was, after a ballot, declared to be duly elected a Fellow of the Society.

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

1. Visitors to Museum, 494.
2. Ditto to Gardens, 2274.
3. Plants received at Gardens :—From Botanic Gardens, Sydney, 29 (of which 9 were new to the Gardens). From T. Young, of Sydney, 3 Plants, and 6 varieties Gladiolus. From Mr. Henderson, Sydney, 15 Plants.
4. Plants, &c., sent from Gardens :—To Mr. Henderson, Sydney, 42 Plants. To Messrs. Grant and McMillan, 95 papers Australian seeds.
- 5 Time of leafing, &c., of a few standard plants in Botanic Gardens.
6. Books and periodicals received.
7. Presentations received.

Also Meteorological Returns from Hobart Town for March; Port Arthur for February, and Westbury for March.

The Secretary read the usual Monthly Analysis of the Meteorological records, and Health Report of E S. Hall, Esq.

The Presentations to the Museum were—

1. Specimen of Saw-Fish (*Pristis*), from W. L. Crowther, Esq.
2. Ditto of *Chimæra Australis*, from Mr. M. Browne.

Mr. M. Allport observed that although information had been given in the newspapers from time to time of the movements of the Salmon, he thought it only due to the Society to make a formal report on the subject. The young fish which went away in October 1865 returned in February 1867. This tends to prove that they are absent 15 months, and not 3 as some writers at home still maintain. In favor of their absence being of 15 months' duration he might also observe that when they left the river they wore, of course, the Smolt dress, and those which have been seen are Grilse. Were it the case, as some suppose, that two trips had been made to the sea they should now have been Salmon, as the change from Grilse to Salmon is known to take place on the second visit to the sea. He himself had no doubt that they had made only one sea trip, and that 15 months was the period of absence. At the same time he would observe that when the smaller rivers begin to be stocked we shall be able to carry out further investigations with greater accuracy. Nets, which in so large a river as the Derwent would be almost useless, and which would be liable to be swept away at any time by floods and floating trees, would be of the greatest benefit in a small and easily managed stream, and the return of probably the very earliest fish could be detected. At home, in order to settle this much vexed question, the second dorsal fin, called the "dead fin," has been cut off, the fish sent to sea, and a reward offered for its capture on its return. In the course of 3 or 4 months a Grilse would be brought without the fin, and the reward claimed. It has been suggested that in such instances the claimant may have obtained a grilse, cut off the fin,

kept it till the wound healed, and then presented it for the reward. After spawning time, between June and July, it is intended if possible to capture one of the fish and preserve it. At present the weight of the grilse is estimated at from 4 to 6 pounds.

The formal business of the evening having now terminated, the Fellows adjourned to the large room upstairs where, agreeably to notice, a Microscopical Exhibition was to be held.

This Exhibition, like its predecessor, was very complete in its display of Microscopes, accessory apparatus and objects. The large upper room of the Museum was fitted up for the purpose, and six first-class instruments, made respectively by Varley, Ross, Beck and Beck, and Pritchard, were exhibited. Also two Microscopes, by Oberhauser, three of Binocular construction, by Beck and Beck, with a number of minor instruments. Many of the former were fitted up with all the modern accessories and improvements.

The doors were thrown open to visitors at 8 o'clock, and as each Fellow had the privilege of introducing three ladies the room was soon filled with spectators.

The series of specimens brought before the meeting was so extensive and interesting that parts of it might properly afford material for several distinct notices. The circulation of blood in the animal and sap in the plant were well displayed. A number of suitable objects were shown under polarised light, with an extra large Prism, which, besides assisting in the accurate determination of structure, produces most beautiful effects. Not the least interesting objects were a series of thirty sections of Colonial Woods, together with Foraminiferae from the Mediterranean and the Coast of Australia, Polycystina, from Barbadoes (seen opaque and transparent), and also a large number of entomological and vegetable preparations. A specimen of the cast skin of *Aphis destructor*, and a Chrysalis were shown by means of Beck's opaque Disc-revolver, by which arrangement as many as five sides of a cube can be examined with ease.

In addition to the various objects shown under the Microscopes were thirty-one enlarged microscopic photographs of Diatomaceæ, printed on albumenized paper. The negatives of this beautiful series were taken by Dr. Maddox. On the same board was exhibited a photograph of microscopic crystals from the Human Breath, showing the chemical constituents of the exhalations thrown off from the lungs. This photograph was taken from a drawing by Mr. Lens Aldous, the celebrated Microscopical artist.

To illustrate the infinitesimal beauty of these photographs, natural specimens of the diatoms were shown under the Microscope, exhibiting striae from 40,000 to 100,000 in the inch.

Some of the above objects were beautifully prepared by Mr. E. D. Harrop, of Launceston, who very kindly sent them for exhibition. The Fellows present who had Microscopes were Mr. Abbott, Mr. Abbott, jun., Dr. Agnew, Mr. M. Allport, Mr. E. Atherton, Col. Chesney, Mr. Johnston, Mr. Napier, and Mr. Stone. Mr. Roblin had two Microscopes under his charge, and also exhibited, with great success, the Magnesium Light.

The Exhibition was continued until about 10 o'clock to the great satisfaction of the numerous visitors.