

ROYAL SOCIETY.

MARCH, 1866.

The monthly evening meeting of the Fellows, the first of the present session, was held on Tuesday, the 13th March, His Excellency Col. T. Goro Browne, president, in the chair.

Mr. Henry James Marsh having 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 usual returns, viz. :—

1. Visitors to Museum during February, 552.
2. Ditto to Gardens, ditto, 1786.
3. Plants, &c., received at Gardens :—From A. Verschaffelt, Ghent, Belgium, one box containing 200 varieties of bulbs.
4. Times of leafing, flowering, and fruiting of standard plants in Gardens.
5. Books and periodicals received.

Meteorological Returns.

1. Hobart Town, from F. Abbott, Esq.
 - a. Table for February.
 - b. Summary of Observations for ditto.
2. Port Arthur, from J. Boyd, Esq.
 - a. Tables for December, 1865, and January, 1866.
 - b. Reading of Government schooner's barometer for ditto ditto:
3. Swansea, from Dr. Story.
 - a. Tables for October and November, 1865.
4. Tamar Heads, from R. Henry, Esq.
 - a. Tables for November and December, 1865; January and February, 1866.
5. Westbury, from F. Belstead, Esq.
 - a. Tables for November and December, 1865; January and February, 1866.
6. Ross, from M. Duncanson, Esq.
 - a. Tables for November and December, 1865; January and February, 1866.

The SECRETARY read the usual Analysis of the Observatory Records, with a Health Report for February, by E. Swarbeck Hall, Esq.

The presentations were as follows :—

1. From the Trustees of Australian Museum, Sydney, 6 specimens of Mammals, 58 ditto of Birds, and 14 of Reptiles, all named.
2. From Mr. Chick, Ironstone Creek, specimen of Musk Duck (*Biziura lobata*). Intestinal Worm and button, passed by a child.
3. From J. Perkins, Esq., a sample of Queensland grown sugar.
4. From J. Cogle, Esq., 6 samples of wool collected in New Zealand.
5. From Col. Chesney, specimen of Echinus.
6. From Mr. Wm. Henry, 4 copper coins, 2 Chinese ditto.
7. From Mr. J. Kelly, 2 half-pennies, George III.
8. From Mr. J. Lumsden, New Norfolk, specimens of White Hawk (*Astur Novae Hollandiae*) and Nankeen Night Heron (*Nyctcorax Caledonicus*).
9. From M. Allport, Esq., specimen of Rail.
10. From Mr. Roblin, a brown Hawk (*Ieracida berigora*).
11. From Mr. J. Smith, River Ouse, a spotted Owl (*Athene maculata*).
12. From Dr. Hall, 12 fossils from new Huon Road.
13. From Mr. F. Abbott, jun., 1 ditto ditto.
14. From Mr. Fletcher, jaws of Ray.

It having been determined by the Council, and announced to the Fellows generally, that a microscopical exhibition should be held this evening, the final arrangements were now made by intending exhibitors, and the doors were thrown open at eight o'clock.

The microscopes, fourteen in number, occupied two rooms, and were liberally supplied with objects of varied interest. The exhibitors were Mr. Abbott, Mr. M. Allport, Dr. Agnew, Mr. Bright, Lieut.-Colonel Chesney, Mr. Giblin,

Mr. W. Johnston, Mr. Legrand, Mr. Napier, Mr. Stone, and Mr. Roblin. Amongst the objects deserving special notice may be mentioned diatoms on dark-ground illumination, magnified to the extent of twelve hundred diameters exhibited by Mr. Abbott. With the Binocular microscope, Mr. Abbott exhibited some very interesting injections, and other opaque objects were also shown with a similar instrument by Mr. W. Stone. Living infusoria were shown by Lieut.-Colonel Chesney; and Mr. Napier exhibited a beautiful series of objects under polarized light. Mr. M. Allport exhibited the living eggs of the English Pond Snail (*Limnæa stagnalis*), as seen on the third, eighth, and fourteenth days. This series attracted general attention, the progressive development of the young animal presenting points of great interest.

In addition to the microscopes, Mr. Abbott also exhibited a Herschel-Browning direct vision Spectroscope—the instrument by which observations in spectrum analysis are made. The Magnesium Light was exhibited by Mr. Nicol, and so arranged by means of clock-work that continuous combustion was kept up in front of a powerful reflector. On directing this towards the shipping, and neighboring buildings, the exceeding brilliancy of the light could be fully appreciated.

As the Fellows were authorised to introduce ladies, the rooms throughout the evening were thronged with interested visitors. Several officers from the ships of war now in the harbor were also present. The exhibition closed a little before ten o'clock, and the satisfaction generally expressed was such that a soiree of a somewhat similar character, with perhaps other attractions, will probably become an annual institution of the Society.

MICROSCOPIC OBJECTS EXHIBITED.

MICROSCOPE No. 1, MR. F. ABBOTT.

Arachnoidiscus Ehrenbergii, *on dark ground illumination.*

Polycystina, *ditto.*

Podura Scale (Test) *Mag.* 400, 800, and 1200 *diameters.*

Arachnoidiscus Japonicus, *Mag.* 400, 800, and 1200 *diam.*

MICROSCOPE No. 2, MR. M. ALLPORT.

Eggs (living) of Limnæa stagnalis, on the 3rd, 8th, and 14th days, showing progressive development, *Mag.* 80 *diameters.*

Circulation of Blood in Tadpole, *ditto.*

MICROSCOPE No. 3, (Smith and Beck's Binocular,) MR. F. ABBOTT, JUN.

Injection, Human Skin, *Mag.* from 24 to 40 *diam.*

Ditto ditto Intestine, *ditto.*

Ditto Sheep's ditto, *ditto.*

Ditto Eye of Wallaby, Iris and Ciliary Membrane, *ditto.*

Opaque Objects, Spicules of Gorgonia, *ditto.*

Ditto Polycystina (fossil) *ditto.*

Ditto Young Oysters, *ditto.*

Ditto Australian Gold Dust, *ditto.*

MICROSCOPE No. 4 (Educational), MR. F. ABBOTT.

Liemophora splendida, *Mag.* from 55 to 75 *diam.*

Aristolochia, section of Stem, *ditto.*

Date Palm, ditto, *ditto.*

Spine of Echinus, section of, *ditto.*

Ditto, ditto, *ditto.*

Scale of Fish, *ditto.*

Compound Eye of Beetle, *ditto.*

MICROSCOPE No. 5 (G. Oberhauser's pocket), MR. F. ABBOTT.

Scales of Butterflies (3 slides).

Hair of Dormouse.

Human Hair.

Cornea of Fly.

MICROSCOPE No. 6 (Pritchard), MR. G. R. NAPIER.

Section of Flint (by Polarized Light), *Mag.* 90 *diam.*

Carbonate of Lime, *ditto.*

Oxalate of Ammonia, *ditto.*

Iodide of Quinine, *ditto.*

Salicine, *ditto.*

Asparagine, *ditto.*

Horse Hair (by Polarized Light), *Mag.* 90 *diameters*.
 Section of Hoof of Horse, *ditto*.
 Whalebone *ditto*.

MICROSCOPE No. 7, DR. AGNEW.

Photographs,—Lord's Prayer.
 „ Passage of Bonaparte over the Alps.
 Wing of minute Beetle.
 Foot of Fly.
 Coralline (2).
 Wing of Gnat.

MICROSCOPE No. 8, DR. BRIGHT.

Proboscis of Blow Fly.
 Ditto of common Fly.
 Stings of Wasp.
 Section of Human Tooth.
 Ditto *ditto* Bone.
 Poison Fangs of Snake.
 Section of Sheep's bone.

MICROSCOPE No. 9, COLONEL CHESNEY.

Transverse Section of Equisetum.
 Ditto *ditto* Root of Horse Chesnut.
 Ditto *ditto* Branch of *ditto*, 1st year.
 Petiole of Horse Chesnut.
 Ditto of Palm.
 Ditto of Tropical Plant.
 Living Infusoria.

MICROSCOPE No. 10, MR. W. JOHNSTON.

Spiculæ from Holothuria, *Mag.* 350 *diam*.
 Tarsus of Fly, *ditto*.
 Spine of Echinus, *ditto*.
 Eye of Tabanus, *Mag.* 130 *diam*.
 Diatomaceæ from Bohemia, *ditto*.
 Diamond Beetle, *ditto*.
 Fossil Infusoria, &c., &c., *ditto*.

MICROSCOPE No. 11, MR. T. GIBLIN.

Seaweed with Oscillatoria, Baccillaria, &c.
 Portion of Eye of Fly.
 Sting of Nettle.
 Beard of Periwinkle.
 Poison Fang of Black Snake.
 Volvox globator.
 Sulphate of Copper crystals.

MICROSCOPE No. 12, MR. LEGRAND.

Scale of Eel.

Synapta vittata, from Red Sea.

Foraminifera, from Anvers.

Coscinodiscus, from Algiers.

Diatoms, from Ichaboe Guano.

Foraminifera (Fossil), from Oran, Algiers.

Photographs.

MICROSCOPE No. 13 (Smith and Beck's Binocular), MR. STONE.

Opaque Objects, Shells of Foraminifera, *Mag.* 30 to 40 diam.

Crystals of Metallic Ores, *ditto*.

Fructification of Fern, *ditto* 60 *ditto*.

Leaf of Lily to show Stomata, *ditto* 60 *ditto*.

Leaves of Sage, Thyme, and Mint, shewing oil globules,
ditto 60 *ditto*.

Lung of Cat, injected, *ditto* 60 *ditto*.

Human Skin, *ditto*, *ditto* 60 *ditto*.

Section of Hoof of Rhinoceros (by Polarized Light), *ditto*
60 *ditto*.

Hair of Elephant (*ditto*), *ditto* 90 *ditto*.

Spicules of Gorgonia (*ditto*), *ditto* 90 *ditto*.

Crystals of Bichromate of Potassa (*ditto*), *ditto* 90 *ditto*.

„ Sulphate of Copper (*ditto*), *ditto* 90 *ditto*.

„ Salicine (*ditto*), *ditto* 90 *ditto*.

Spinnerets of Spider, *ditto* 350 *ditto*.

Hair of Mouse, *ditto*.

Scales of Moth, *ditto* 750 *ditto*.

MICROSCOPE No. 14, MR. ROBLIN.

Circulation of Blood in Web of Frog's foot, *ditto* 360 *ditto*.

Sections of Colonial Woods (6), *ditto* 80 *ditto*.