

SEPTEMBER, 1879.

The monthly evening meeting of the Society was held on Monday, 8th September; His Lordship the Bishop of Tasmania in the chair.

The following gentlemen, who had previously been nominated by the Council, were balloted for and duly elected as Fellows of the Society; viz. :—The Rev. R. Rawson, M.A., of Richmond; the Rev. A. C. Newstead, George Town; and the Rev. Horace Graham, Hobart Town.

The following returns were brought forward by the SECRETARY (Dr. Agnew):—

1. Number of visitors to Museum during August, on Sundays 1,336, on week-days 1,162; total, 2,498.
2. Ditto to Gardens, 4,516.
3. Plants and seeds received at Gardens:—From Mr. G. Brunning, Melbourne, 36 plants. From the Victorian Horticultural Society, 100 varieties of scions of new fruits. From Mons. C. Huber, Paris, 36 packets of seeds.
4. Time of leafing, flowering, etc., of a few standard plants in the Botanic Gardens during August.
5. Books and periodicals received.
6. Presentations to Museum.

Meteorology.—

1. Hobart Town, from F. Abbott, Esq., table for August.
2. Mount Nelson and Bruni Island, from the Marine Board, ditto.
3. Melbourne, from the Government Observatory, printed tables for May, 1879, and Results of Observations for 1876.
4. From the Meteorological Department of India, report from 1877-8; report of the Madras Cyclone, of May, 1877; Indian Meteorology, 1877.

The presentations to the Museum were as follows:—

1. From Mr. W. L. Boyes, a curious Crustacean from George's Bay.
2. From C. Allport, Esq., a Bittern (*Botaurus poicilophilus*) from New Norfolk.
3. From Bernard Shaw, Esq., specimen of Cement from the gold diggings, Beaconsfield.
4. From Neil Lewis, Esq., a Half-crown of William and Mary, 1689.
5. From Mr. Lewald, a Chilian dollar, 1872.
6. From John Macfarlane, Esq., a specimen of "Pelé's Hair," volcanic glass, from the Kilauea crater of Mauna Loa, in the Sandwich Islands.

Mr. STEPHENS, after referring to the admirable description of Mauna Loa (in eruption) given by His Excellency in a paper read at a former meeting of the Society, observed that this specimen was of interest as showing the action of strong gusts of wind on the spray of boiling silicates. "Pelé" was the name given by the islanders to the supposed goddess of the volcano.

Attention was called to a valuable work by Baron F. Von Mueller, K.C.M.G., entitled "A Descriptive Atlas of the Eucalypti of Australia and the adjoining Islands," copies of the first and second parts of which had been presented by the author on the part of the Government of Victoria.

The following communication on the Codling Moth from the Department of Agriculture, America, was read by Mr. ABBOTT, who observed in the first instance that although little new information as to the moth was brought forward, the paper was valuable as pointing out the great benefit which was likely to accrue from united action being taken to suppress the pest in any given district.

Department of Agriculture,
Division of Entomology,
Washington, D.C., July 8, 1879.

Mr. F. Abbott, Botanical Gardens, Tasmania.

Dear Sir,—Your letter to Commissioner Le Duc, containing questions concerning the Codling Moth has been referred to me.

The following is an epitome of the life history of this moth, *Carpocapsa pomonella* :—

The adult moth appears in early summer and lays its eggs on apples and pears, laying them singly in the blossom end of the fruit.

The larva, when hatched, eats its way to the core, usually causing the fruit to fall prematurely. When full grown, the larva burrows out through the side of the fruit, and undergoes its transformations within a cocoon, under the rough bark of a tree, or in some other protected place. This species is both single and double brooded.

The larvæ winter in their cocoons, transforming to pupæ during early spring.

The remedies are as follows :—Pick up and destroy the infested fruit as soon as it falls, or allow hogs to feed upon it; but by far the most effectual remedy is to trap the larvæ by providing a place for them to spin their cocoons. This may be done in many ways; the most effectual way is to put a band of hay or other material around the trunk of the tree. The trees should be scraped to remove the rough bark before the bands are applied, so that the larvæ will have no other refuge than the bands. The bands should be put upon the trees as soon as the apples begin to fall, and should be examined every two weeks and all the pupæ killed; this process should be repeated until the last apples are harvested in the fall. We use heavy coarse paper for band material, and either tie or tack them around the tree trunks. To have this remedy prove a *perfect* success concerted action is necessary among the neighbouring pomologists, as the moths fly from one orchard to another, more or less. As an instance of what concerted action can do, I will cite the experience of the Peninsula Farmers' Club of Grand Traverse, Mich. This club passed resolutions that all the orchards on the peninsula should be bandaged. In case the owners would not attend to it, the club bandaged the trees for them. The result was that although before they began seventy-five per cent. (75/100) of their fruit was destroyed by the Codling Moth, after three years' trial only five per cent. (5/100) was lost in that way. I feel quite confident that a similar experiment would succeed with you.

I should add that the orchards should be cleared of rubbish (old boards, etc.), that would afford hiding places for the pupæ.

The first remedy spoken of is only partially successful, because about half the larvæ leave the apples before they fall, and crawl down the tree to find places to make their cocoons.

Yours, etc.,

J. HENRY COMSTOCK,

Entomologist.

In the absence of the author, the SECRETARY read a paper of considerable scientific interest, by Mr. R. M. Johnston, F.L.S., entitled "Notes on the relations of the Yellow Limestone (Travertin) of Geilston Bay, Hobart Town, with other fluviatile and lacustrine deposits in Tasmania and Australia, together with descriptions of two new fossil Helices." Regret was expressed for the writer's absence, as the Chairman noticed several of the points referred to by Mr. Johnston, which he thought were new, and would have afforded subjects for discussion.

A special vote of thanks was accorded to Mr. Johnston, and thanks having been voted to the donors of presentations, the meeting closed.