Codlin-Moth.

To the Editor of the *Hobart Mercury*.

Sir,—In reply to the letter of the Ven. Archdeacon Hales in to-day's issue, I would like to point out that where infected orchards have been dealt with by acts of nature rather than Acts of Parliament, and by bird and insect inspectors rather than human inspectors, they have been well-nigh utterly ruined, as witness the bulk of the orchards in the north of Tasmania. Prejudices of theories must give way before facts. The following fact, set forth in a letter from the Department of Agriculture, Washington, to Mr. F. Abbott, of our Botanical Gardens, should have the effect of weakening, if not removing, prejudices against legislation and compulsory measures for the eradication of this pest. The letter was read at one of the meetings of the Royal Society by Mr. Abbott. I here quote from the letter: "As an instance of what concerted action can do, I will cite the experinece of the Peninsular Farmers' Club of Grand Travers, Michigan. 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 75 per cent. of their fruit was destroyed by the codlin-moth, after three years' trial only 5 per cent. was lost in that way." I think, Sir, with such a fact before us, we need not hesitate to pass an Act which, *inter alia*, will make bandaging of all infected trees compulsory in such districts as may be, by the expressed wish of the majority of the orchard-owners, proclaimed infected. Yours, &c.,

Westella, 4th September. B. Stafford Bird.

[Extracts from the *Pacific Rural Press*, 4th October, 1882.]

Remedies for Scale Insects.

In 1881, Mr. J. H. Townsend, of Santa Clara Horticultural Society, placed at our disposal a large number of trees infected with scale for the purpose of being experimented upon. These experiments showed the inefficiency of some measures, and on the other hand showed a certain means of destruction of the scale insect. The following are some of the results obtained:—

1. Concentrated lye, 1lb.; water, 2 gallons.—10th March, 1881: applied by spray on two peach-trees infected by scale; washed in the afternoon when the trees were dry. Effect: scale killed; buds and twigs not injured; the tenderest wood killed also. 5th July, 1881: New wood grown over the trees 4ft and 5ft. long.

2. Concentrated lye, 1lb.; water, 2 gallons.—10th March, 1881: Applied by spray on two peach-trees infected by scale; washed in the morning when the trees were damp with dew. 5th July, 1881: Scale killed; buds and twigs not injured; fruit abundant and trees healthy.

3. Concentrated lye, 1½lb.; water, 1 gallon.—Poured in on two pear-trees infected; lye so strong as to burn bark and foliage; scale entirely destroyed; bark being restored and new foliage appearing.

4. Concentrated lye, 1lb.; water, 1 gallon.—5th July, 1881: Applied on apples badly infected; bark and leaves burned. 2nd August, 1881: Scale killed; bark and leaves being rapidly restored. These trees have since been killed through applying low grade of coal-oil.

5. Concentrated lye, 1lb.; water, 1 gallon.—Tried on almond-, pear-, and apple-trees. Washed with brush in order to destroy the "red spider," which had been tried before with weaker solutions. No scale on these trees. The result was successful at the time, but some months after it reappeared. Whilst it will kill a large number, it cannot reach all the eggs. The effect on the trees generally was wonderfully good.

6. Concentrated lye, 1lb.; water, 1 gallon.—Experiments on 357 Ichworth plum-trees. There were 126 washed with this, February, 1881. Eight trees badly infested with scale; some were tried with a weaker solution; did not completely destroy, though so injured they did not breed. Then washed with the stronger solution, which effectually killed the scale. Two were found some time afterwards that had not been washed with the strong solution, and they were covered with scale.

7. Concentrated lye, 1lb.; water, 1½ gallons.—Out of five trees tried with this, the scale was killed on three. The others, washed again four months afterwards, had not appeared. On a Bartlett pear-tree entirely dormant, being washed with lye, 1lb. to the gallon of water, destroyed the scale. With plum-trees same result. Whale-oil soap and sulphur mixture, with lye added, has been successful. Should, after two years' experience, the scale again appear, my treatment shall be 1lb. lye to 1 gallon of water.

The following experiments were on trees badly infested with scale:—

8. Concentrated lye, 1½lb.; water, 1 gallon.—24th June, 1881: Applied to two Clairgeau pear-trees; brush used; many limbs dead from effect of scale. 27th June: Trees burned considerably; scale killed where reached. 24th July: Bark showing healthy appearance. Trees still better. 2nd August: No sign of scale; bark being restored rapidly; fruit quite clean. 25th April, 1882: Found trees with very healthy top and new bark where burned with lye; where not washed scale still existed. 14th October, 1882: Growth of new wood and bark healthy.

9. Concentrated lye, 1½lb.; water, 1 gallon.—Applied on portion of a tree to ascertain effect on bark. 23rd July: Where washed shows much less stain, lighter in colour and green layer restored. 2nd August: Stain disappearing.

10. Concentrated lye, 1lb.; water, 1 gallon.—Tried on pear-tree. Scale where reached entirely destroyed; bark burned by the lye, but healthy where previously sound.

11. Concentrated lye, 1lb.; water, 1½ gallons.—Tree washed same as above, with about same results. 14th October, 1882: Tree nearly destroyed by scale last year, but little new wood.