

would probably be difficult to select a more ideal spot for the purpose.

"All the birds have kept remarkably healthy, with the exception of one of the Buff Leghorns in Pen No. 2, which was noticed to be ailing on January 17th, and at once placed in the hospital, where the usual remedies were administered, but I regret to say that it 'passed over to the majority' four days later.

"A number of the fowls have been in the moult, especially both lots of white Leghorns, which have been handicapped the most seriously in that respect. Also a number have been troubled with broodiness, more especially the Plymouth Rocks and buff Orpingtons, whilst not one of the light breed has shown the least indication.

"The morning food has mainly consisted of one-third sharps (or middlings), one-third barley meal, and one-third pea-meal, which has been cooked over night in one of my own patent cookers. The afternoon meal has been about half wheat and half maize, given alternately, or according to the state of the weather. Oyster shell and flint grit have been supplied *ad lib.*, and the floors of both the houses and shelters have been kept thickly covered with Miller's dust, in which the fowls have spent a great deal of time scratching. The cost in food, leaving out shell, grit, and dust, has been 1.61d. per head per week.

"During the last fortnight of the competition I weighed eight eggs from each pen, taken successively as they came in, and rejecting none excepting one that was double-yolked, with the following results:

|                                        |      |      |
|----------------------------------------|------|------|
| Pen No. 1.—Black Orpington.....        | 18   | ozs. |
| " 2.—Buff Leghorn.....                 | 17½  | "    |
| " 3.—Buff Orpington.....               | 15   | "    |
| " 4.—Min rcas.....                     | 16   | "    |
| " 5.—Langshans.....                    | 15½  | "    |
| " 6.—White Leghorn.....                | 17   | "    |
| " 7.—Plymouth Rock.....                | 17½  | "    |
| " 8.—White Leghorn.....                | 18   | "    |
| " 9.—Faverolles.....                   | 15   | "    |
| " 10.—Buff Leghorn.....                | 17   | "    |
| " 11.—Silver Wyandotte.....            | 16   | "    |
| " 12.—Black Leghorn.....               | 16½  | "    |
| " 13.—Golden Wyandotte.....            | 17   | "    |
| " 14.—Brown Leghorn.....               | 16½  | "    |
| " 15.—Golden Wyandotte.....            | 15½  | "    |
| " 16.—Anconas.....                     | 15   | "    |
| Total weight of the 64 brown eggs..... | 129½ | "    |
| " " " 64 white eggs.....               | 133½ | "    |

"The average number of eggs laid per bird has been 27.76, heavy or sitting breeds averaging 31.09, whilst the light or non-sitting breeds have averaged 24.43.

"Speaking generally of the competition, I trust the results will be found highly satisfactory, especially considering that the winning pen this year has scored sixty-two eggs more than the most successful winner in either of the two previous competitions, but it is a matter of regret that some of the lots have shown to disadvantage by being late hatched or in a backward state when they arrived, because it is evident that whilst some are not high on the list they are of a good laying strain. This has been especially noticeable with regard to No. 15 pen, which did not lay an egg till the ninth week, but during the last month scored 66, which is the greatest number laid by any pen during any of the four months. I would respectfully suggest that in future competitions each owner be compelled to state the date when the pullets were hatched, and that the same be placed side by side with each month's result, and it might even be desirable—seeing the club has more entries than it can accommodate—to accept no birds that have been hatched later than, say, April 20th. Publishing the date would also afford valuable information as to which is the most profitable time to hatch, as it is patent to me that pullets that are hatched too early to escape moulting, or are hatched too late to be laying, or on the point of laying, when they arrive really stand no chance of winning the prizes or of indicating the quality of the laying strain.

"I may add that the cost of the food, which I believe has not been given in the previous competitions, has come as a surprise to me, as our own large stock, which are kept in large lots, cost considerably less, but I ought to state

that they are on unlimited range, and consist chiefly of the light breed; evidently, feeding laying fowls in winter that are partially confined, and half of which consist of heavy breeds, together with using the best of food, costs more than is generally supposed."

## Early Spraying

By F. C. Sears, School of Horticulture, Wolfville, N.S.

It may be doubted whether the old adage, "A stitch in time saves nine," will apply with as much force to any other farm operation as it does to spraying, for with many of the fungous diseases of plants, unless the spraying is done before the plants are attacked, it is a waste of time and materials. And with *all* of the pests for which we spray, either insect or fungus, prompt applications at the proper time are necessary if they are to be effective. Let every grower in the Maritime Provinces, therefore, resolve that this coming season he will practice the most approved methods of spraying and *then* let him carry out that resolve.

The first two pests which claim our attention are the oyster-shell bark-louse and the bud moth. If your trees are infested with bark lice or if they are covered with moss or old bark, and look as though they needed a general clearing up, nothing will do them so much good as spraying with potash, either the rock potash, which can be bought for about eight cents per pound, or with the leachings from wood ashes. One who has never tried it will be surprised at the wonderful improvement this will make in the appearance and thriftiness of the trees. It cleans off all old bark or roughness of any kind, thereby removing countless bark-lice, insect eggs and fungous spores, and it makes the trees look almost as though they had been varnished. Try it, and you will have all your neighbors stepping in to ask how you did it. And the beauty of it all is that whatever material is applied in this way will eventually find its way into the soil, where it will make the best of fertilizers for the orchard. If you use the rock potash take one pound to three to five gallons of water, and if the leachings from ashes, that leached from a barrel should make a cask or more of excellent spraying material. But there are two precautions to be observed in applying this potash. (1) It must be done when the trees are dormant, which means that if you are going to use it this year (and that is what you should do) it must be applied during the present month; and (2) great care must be taken not to get any of it on the hands or any part of the person, as it is extremely caustic, and is likely to produce serious results.

The bud-moth, which seems to be very troublesome in parts of the province, is one of the most difficult of insects with which to deal. The eggs of this insect hatch in the late summer and the little worm produced feeds on the leaves of the apple until about half grown, when it stops feeding and passes the winter in a half-developed state, in little cocoons or nests which may be found by careful investigation attached to the twigs of the trees. In the spring, on the first signs of growth in the orchard, the little worm gnaws its way into the centre of the expanding bud and there lays havoc with the prospective crop of fruit by eating the young buds. Our object should be, therefore, to prevent the worm from getting into the bud, and to do this requires very careful spraying with Paris green. I should advise spraying just as the buds are opened sufficiently to afford a lodgement for the Paris green among the points of the little leaves, and if the insect is very troublesome I should spray a second time a few days later, when the buds are fairly well opened, using for both sprayings Bordeaux mixture with ¼ lb. of paris green to the cask. The Bordeaux mixture will adhere to the buds better than pure water, and this increases the chance of keeping the poison where it will do the most good. This treatment may not effect the entire destruction of this pest, but I am con-