

in the early morning or in the evening, when there is no breeze and the foliage is moist with dew. The general practice is to dust the trees from one side, and give the tree-row, on the other side of the dusting outfit, a light blast as the team walks along. In this way the trees are dusted thoroughly from one side, but very indifferently from the other side. Mr. Ruscoe's practice is to dust the trees from one side thoroughly, and when the wind veers, the same trees are dusted from the other side; this, he considers, one application. Experiments and tests have shown that the best results from dust are obtained where liberal applications are made, and Mr. Ruscoe's method of putting on the "two-in-one" application possibly had a good deal to do with the superiority of his fruit last year. Sulphur dust, containing 15 per cent. of lead, was used in 1919; his plans for 1920 were to use the Sanders dust, which is a modified Bordeaux, for all except the application just after the petals have fallen, when the sulphur dust would be resorted to in order to prevent any russetting.

#### ORCHARD RATINGS.

Growers in the Annapolis Valley are beginning to feed their orchards systematically, and supply them according to their needs. As a live stock producer would figure out the rations for his cattle, so are the growers basing their fertilizer applications on the actual needs of the orchards and the soil. The applications now made appear liberal, compared with those of five or ten years ago, but it may be found that the amount fed annually into the orchards at the present time is inadequate. The treatment given the orchard under discussion is worthy of study, because it typifies to a certain extent orchard feeding practices in the Valley. One hundred trees of this orchard were set in 1889, two hundred trees were set in 1891, and the 8½ acres were completed in 1893; six-and-a-half acres, to complete the fifteen-acre block, were set eighteen years ago, and Wagener fillers in this section were set in 1911. The yield in the fifteen-acre orchard in 1919 amounted to 2,400 barrels, with Baldwins and Spys off, the other 400 barrels making a total of 2,800, marketed last year, came from an older orchard which is additional to the orchard under discussion. The fifteen acres in 1919 received an application of 3,000 lbs. of nitrate of soda, the older part receiving more per acre than the younger trees. The younger trees also received an application of fifteen two-horse loads of manure per acre, and in addition to the nitrate, the first-set trees were given about 600 lbs. to the acre of a fertilizer containing 16 per cent. phosphoric acid and 1 per cent. of nitrogen. In 1918 the whole orchard received one-half ton of slag per acre, the young orchard was given a coat of manure, and the older part about 200 lbs. of nitrate of soda per acre. The plan for 1920 was to use about 300 lbs. of nitrate of soda to the acre, and supply phosphoric acid in the form of ground limestone or basic slag. In Mr. Ruscoe's opinion, nitrate of soda is worth \$200 per ton in an orchard. He also expressed the opinion that the soils in the Annapolis Valley are tremendously deficient in lime. For this reason basic slag or ground limestone was sure to give results.

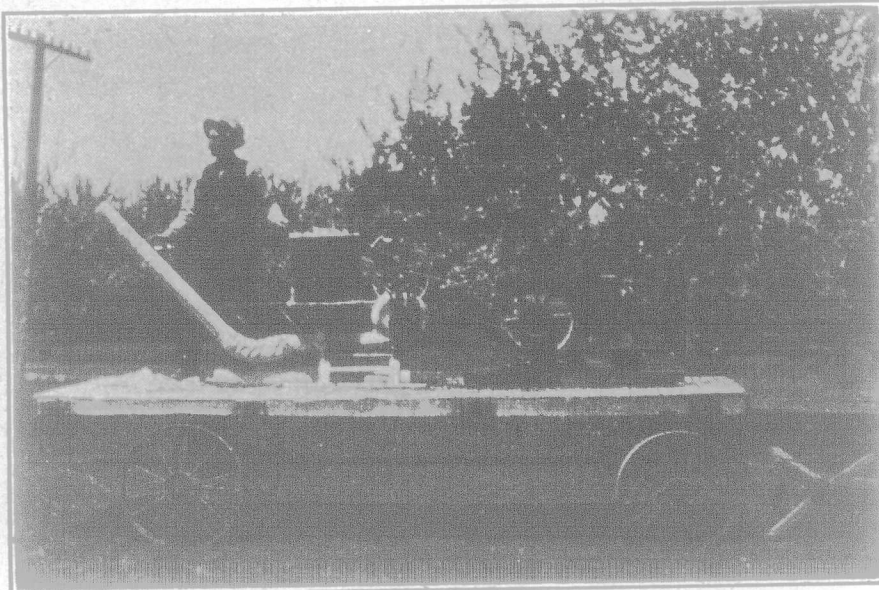
#### ORCHARD CULTIVATION.

The practice in this orchard is to plow in the spring, as soon as the frost is out of the ground. It is then harrowed a great deal, especially during the month of May, when an effort is made to harrow at least once a week with the old-fashioned spring-tooth harrow. Cultivation is continued up to June 25, and then crimson clover is sown at the rate of ten pounds per acre. This seed is rather expensive, but Mr. Ruscoe considered it very valuable as a cover crop. Crimson clover does well with him; it makes a good growth, standing up about eight inches high, and continues green on into the

winter, thus making an excellent cover crop. Buckwheat is not liked as a cover crop, but it is used occasionally to smother out couch grass. A strip of grass about four or five feet wide is left along each tree row, the cultivation and fertilization being focused on the intervening space between the trees.

#### THE FUTURE OF APPLE GROWING.

Nature undoubtedly designed the Annapolis Valley especially for apple production, and no local prejudices or pseudo-optimists can prevent the development of the industry. In former years the man who had five or ten acres of orchard and produced a thousand barrels of apples annually was a big grower; now the five-thousand-barrel man is not unknown, and the Apple King of the Valley last year filled 22,000 barrels. Many are asking themselves, "What are the prospects for apple growing in the Annapolis Valley?" Some are inclined to think that the limit has been reached, while those who took chances ten or fifteen years ago setting out large orchards, are the most optimistic of all. Unless something unforeseen occurs to dampen enthusiasm, Nova Scotia will be producing very close to 3,000,000 of apples, and then it will be a question of markets. But the market problem loomed large when the crop was only half a million or less. Over 20 years ago



C. M. Roscoe in His Orchard with the Dusting Outfit.

discouraged growers sharpened the axes and swore vengeance on their plantations because they received a polite request from commission houses in England to please remit certain named amounts to cover expenses on consignments of apples which had sold badly. If the commission houses had not been so far away there might have been some real tragedies to record. However, with increased production have come new and bigger markets, and the future will, no doubt, provide for what the Valley has to offer. The future is always a blank. Some guess correctly and come out on top; others guess badly and go under. There is no gamble though where one endeavors, with assistance of science and modern methods, to produce first-class fruit. The demand for superior fruit will never be entirely satisfied.

## POULTRY.

### Rearing the Young Turkeys.

When about six weeks old the young turkeys are old enough to go to roost. Practically all turkey raisers allow the birds to roost in the open trees or on fences or other roosts especially provided for them. In sections where high winds prevail it is customary to build the roosts next to a barn or shed, where there is some protection; when this is done posts are driven into the ground and poles laid across them 4 to 5 feet from the ground. By driving them to the roosting place and feeding them there every evening just before dark, young turkeys can be made to roost wherever desired. For the first few times it is sometimes necessary to keep them under

the roost until dark, but they will finally fly up, and after a week or two will no longer have to be driven, but will come up every night to be fed and to roost.

During the summer and early fall turkeys can find an abundance of feed on the average farm. Grass, hoppers and other insects, weeds and grass seeds, green vegetation, berries and grain picked up in the fields all go to make up the turkey's daily ration. When this natural feed is plentiful, very little need be added until fattening time, except for the purpose of bringing the turkeys every night to roost, and to keep them from straying from home. For this purpose one feed of grain every night just before roosting time is sufficient.

One of the greatest difficulties with which turkey growers have to contend is to keep their flock from wandering over too wide an area and invading neighboring farms. To some extent, feeding heavily night and morning reduces the area over which turkeys range, but even then they often go too far. When trouble of this kind occurs, the most effective plan is to drive them into an inclosure, and keep them there until about noon. In warm weather turkeys do most of their ranging early in the morning and by 9 o'clock they are usually as far from home as they will get during the day. As soon as the sun becomes very warm they spend most of their time in the shade until 3 or 4 o'clock in the afternoon, when they begin moving towards home, ranging for feed along the way. If the weather is not too warm they do not spend so much time lying in the shade, and consequently range over a larger area and may keep moving away from home until noon. By feeding in the pen every morning they soon learn to go there on coming down from roost and no time is lost in penning them. If they fly out of the pen, the flight feathers from one wing should be clipped.—By A. S. Weiant.

### Some Good Pens in Nova Scotia Contest.

Up to July 9, a pen of Rose-Combed Rhode Island Reds were leading in the first Nova Scotia egg-laying competition after 35 weeks work. They had laid 828 eggs and the poorest hen had laid 124 eggs in this time. The other four hens in the pen had laid 149,166,182 and 197 eggs respectively. The two best hens in this pen laid 37 more eggs than any other two hens among the 150 in the competition. Only 9 out of the 30 pens laid 150 eggs or over and only 3 pens averaged 140 eggs or more per hen. The 150 birds had up to this time averaged 113 eggs in 250 days.

## FARM BULLETIN.

### The Murray Government Returned in Nova Scotia.

The provincial elections in Nova Scotia, on Tuesday, July 27, resulted in a signal victory for the Murray Government. Twenty-nine Liberal, seven Farmer, six Labor, and one Conservative candidates were elected, giving the Government a straight majority of fifteen. The majority in the last House was twenty-one. Two new parties, namely Farmer and Labor, are to be found in the present Legislature, while Conservatives are quite conspicuous by their absence. Two Cabinet Ministers were defeated, namely, Hon. H. M. McGregor and Hon. E. H. Armstrong. The return of the Murray Government was not a surprise, but in a time when Governments are tottering and falling, it is considered a signal tribute to Hon. G. H. Murray, after twenty-four years in office, and on his sixth appeal to the people, that his administration should be so overwhelmingly endorsed.

### Referendum Vote Postponed in Ontario.

The Dominion Government has postponed until Sept. 18, 1921, the date of the prohibition referendum in Ontario, which was originally set for October 25 of this year, in response to a request from the Ontario Legislature. The reason given for the postponement of the referendum is that the Ontario voters' list needs revision and bringing up to date, and several organizations such as the Dominion Alliance, the Great War Veterans' Association and the Citizen's Liberty League had requested a later date. No other province but Ontario is given a postponement of its referendum on the prohibition question.

### Purchasing Commission of Canada.

Ottawa has dissolved the War Purchasing Commission, which will be replaced by the Purchasing Commission of Canada, to consist of a chairman and two members who will supervise and check all purchases made by the various departments of the Government with a view to obtaining economy. Col. L. R. Lafleche, Montreal, and A. E. Howard, Vancouver, are the two members of the Commission so far appointed. The chairman is yet to be named.

### Two By-Elections on September 20.

By-elections will be held in St. John City and County and in Colchester County, N. S., on Monday, September 20, to decide the fate of two ministers recently added to the Meighen Cabinet. Hon. Rupert W. Wigmor, Minister of Customs and Inland Revenue, will seek re-election in his own constituency, St. John, and Hon. F. B. McCurdy, Minister of Public Works, who represents Colchester, will again contest that seat.



There are Still Plenty of These Late-hatched Chicks Throughout the Country.  
For winter laying, chicks should be hatched in March and April.