

they be given a limited trial, and then indulged in.

The lime-sulphur wash is made by quicklime or unslaked lime, one pound, ground sulphur, using twenty pounds of water, and boil for one hour. Then add enough water to make a gallon. Strain through a fine cloth or muslin, with at least 24 meshes to the inch.

Some of the other sprays, however, are easily prepared:

1. Two pounds of white oil soap dissolved in one gallon of water.

2. Common kerosene oil or crude petroleum, emulsified, and used not stronger than 50 per cent. for peach and plum trees, and not more than 50 per cent. for apple and pear trees.

3. Commercial insecticides, generally known as soluble oils, offered by different firms, are approved of by many, but special care should be exercised in the strength used. Thorough knowledge of them is desirable before making general use.

In every case, thorough application is the main essential. For small areas, painting with a large brush is recommended. On large orchards, a power spray, giving very fine mist, is best.

Authorities do not hesitate to state that there is danger of injuring the fruit buds by spraying too early in the fall. These buds require some time after the leaves have fallen before they become hardened and ready to withstand caustic solutions. For this reason, fruit-growers are urged not to spray for San Jose scale before at least two weeks after the leaves have dropped.

APPLES AS GROWN IN ANNAPOLIS VALLEY.

This has been a most eventful year in the fruit interests of Nova Scotia, or, rather, that part of it called the Annapolis Valley. In the beginning, the "Brown-tail Moth Scare" was beneficial in causing the orchardists to take more interest than ever in the care of their trees. The old saying, that "We never value a thing till we have fear of losing it," was exemplified in many cases last spring, when many neglected orchards were renovated, sprayed, and generally cleaned up, incidental to a search for the brown-tail. Then, for this, as well as the reason that good literature, institute work, etc., are waking up our farmers, spraying was practiced more widely and more thoroughly than ever before.

Thus, the farmers did more carefully than formerly what they could to get good fruit. Then the other party to the contract stepped in and gave us nearly an ideal season for growing apples—a season with abundant rainfall during the first part, for creating a rapid and healthy growth in the fruit, and sunny, warm weather during September and October to give it color and finish. Probably never before has Nova Scotia had such a large crop of such excellent quality as this season, gathered in perfect condition, practically without a windfall.

The fruit-growers of Nova Scotia were fortunate, also, in choosing such a year for making a special effort to hold a Provincial Horticultural Show. Now, it is difficult to fittingly describe this show of fruit, or, rather, apples, without gaining a reputation for bombast, but the following facts are worthy of note:

First—We had an ideal season for growing fruit.

Second—The men who exhibited that fruit approximated ideal orchardists.

Third—Nova Scotia is an ideal place for growing apples.

Now your readers are ready for the following: WE HAD THE BEST SHOW OF APPLES EVER SEEN AT ONE PLACE AND TIME ON EARTH.

To prove this, men who had been all over Canada at fruit shows, men who had visited such places in the United States, and men who had visited the yearly shows in England, agreed it was the best they had ever seen. Thousands of plates of apples nearly perfect in typical shape, color and quality, over four hundred barrels of packed fruit, fit for a king, and many boxes. The tempting prize list of some \$2,600, of course, was an important factor in bringing out so large an exhibit. One of our Annapolis County men, E. T. Neely, won some \$160 in prizes. Other prizewinners were B. Chesley, T. B. Messenger, D'Almaine, Parker, Moore, etc. The judging was excellently done by two Ontario men, J. C. Smith and A. McNeill. In a report published by one of our eastern papers, the judgment of these men was rather rudely questioned, but the report was evidently written by the "printer's devil," or someone equally unqualified to criticize such men as Messrs. McNeill and Smith. The judging was done by emphasizing the points of uniformity, color and typical shape. Size was rightfully not taken into account when the other attributes were wanting, and this, of course, led to some dissatisfaction among those whose lack of judgment led them to exhibit fruit abnormally large, coarse and unattractive. The educational value alone of the

work done by the judges has merited the appreciation of the best men who attended the exhibition. The weather during the week was ideal. Annapolis Co., N. S. R. J. MESSENGER.

PROGRESS AND EXPERIMENTS AT JORDAN HARBOR.

The possibilities in transforming broken-down farm farms into up-to-date, prosperous-looking areas for the production of fruits and vegetables, has been clearly demonstrated at the Horticultural Experiment Station at Jordan Harbor, Ont. In three seasons, or, rather, since July, 1906, the ninety acres of which the farm is composed, and



Barn on Horticultural Experiment Station.

most of which was in poor condition, or, at least, unprofitable as a fruit farm, have been brought into a comparatively high state of cultivation and given a strictly horticultural and experimental appearance. The removal of some three hundred worthless peach and plum trees, as well as grape vineyards that had run wild, and unsightly old buildings, followed by the application of a liberal supply of barnyard manure, and, by well-directed labor on drives, plots and plantations, give some idea of the factors that entered into this transformation. Graded driveways, labelled plots and



Canning Factory and Cold Storage

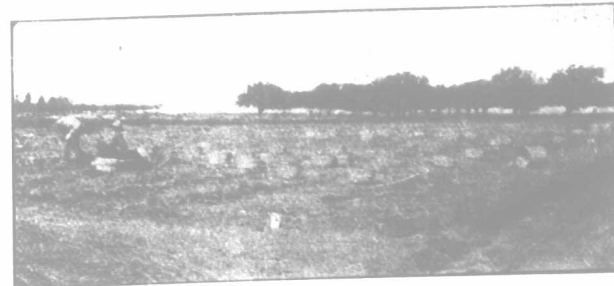
New Administration Building in Background.

carefully-planted orchards bear testimony to the amount and the excellence of the work done.

COMPLETE DRAINAGE SYSTEM.

The nature of the soil demanded drainage. This demand has been met by a complete network covering the ninety acres, and giving a total length of about 11 miles. The result has been marvelous. Land that in 1907 could not be touched until May 15th, or later, was in fit condition for cultivation this year by April 10th. Levels were carefully taken, so that in no case is the fall less than 2 1/2 inches in 100 feet. The average depth below the surface is about three feet, but in a few places, for short runs, it was found necessary to leave the tile only 2 feet underground.

Standing out most prominently among the changes on this farm, are the buildings already



Harvesting the Onion Crop.

Tests with Fertilizers.

erected, or now nearing completion. In every case a rich and substantial appearance is presented. The barn comprises horse stable, feed room, carriage room and sprayer room, with a basement for housing the farm implements. A cold-storage building of fair proportions has been provided for storing specimens of various kinds of fruits and vegetables until such time as they can be used, and also to test their keeping quali-

ties in cold storage. Not, by any means, of least importance, is the canning factory, in which are tested the canning or pickling qualities of the numerous varieties of fruits and vegetables. Different methods are adopted in an effort to find out for growers and tanners whether or not there are varieties which might displace some of the standard sorts. Factories are slow to use new varieties until it is proven that the quality is superior, and growers are slow to grow a new variety until the factories assure them of a ready market.

NEW BUILDINGS OF RED BRICK.

The administration building and the directors' residence will be ready for occupation by the end of the year. Both are of high-grade red brick. The former is an imposing structure, comprising office, library and reading-room on the main floor, and laboratories on the upper flat. In the basement are store-room, boiler room and coal cellar. To the rear is a workshop. A greenhouse, also, is being put up adjoining the boiler room. To insure permanent labor at the Station, a double house is being erected for the accommodation of teamsters and others. An indication of the care that will be exercised in planning and constructing the roadways and drives around the buildings when completed, is presented in the main approach and massive stone bridge spanning the creek between the entrance from the highway and the group of buildings.

CULTURAL METHODS.

Special precaution has been exercised in cultural methods adopted. This year some of the land has been in oats, and a few acres were devoted to hay crop. As soon as possible, every acre will be used for fruit and vegetable production. In preparing ground for tree-planting last spring, a start was made after the grain crop was harvested in 1907. Thorough cultivation was practiced all fall. Before winter set in the area was ribbed up. Last spring this was levelled and plowed, and subsoiled to a depth of sixteen or eighteen inches. The land was well cultivated until the middle of June. Part of the area planted to apples was sown with peas, which were plowed under during the summer, or before the pods were nearing maturity. A high percentage of all kinds of young trees have grown, and the land is in creditable condition.

PREPARING FOR VARIETY TESTS.

Much attention is being paid to variety tests in all fruits, two or three trees each of numerous varieties having been set out. In peaches, however, investigation is being made into peach culture with high and with low heads, and also on light and on heavy soil. Standard varieties have

been used for this purpose. As between the two systems, little or no difference can be noticed in the number that have lived through the summer, but the percentage on the light soil exceeds that on the heavy.

Interesting results are being obtained from the eight-acre apple orchard referred to in "The Farmer's Advocate" last season, where part is allowed to stand in sod, cutting the grass and letting it remain on the ground, part plowed in spring, and part plowed in fall. Carrying the experiment a step further, half each of the fall plowing and of the spring plowing is sown with some standard cover crop, while the other half of each is kept under clean cultivation. No appreciable difference can be noted on the areas plowed in spring and in fall, or on the parts on which cover crops are grown and the parts that are bare. But there is a distinct difference both in thriftiness of tree and quality of fruit on the sod, and on the parts cultivated, in favor of the latter. The trees on the sod are lacking in rich-green foliage, while the leaves have fallen earlier. The fruit is smaller, but more highly colored, and contains a slightly higher percentage of wormy apples. This test, along with many others, will be continued for five years or more.

WORK WITH VEGETABLES.

Several acres, also, are devoted to growing tomatoes, melons, onions, and other crops produced by truck gardeners and those who supply the canning factories. Variety tests on soils of varying nature and tests of standard varieties, with fertilizers commonly recommended for garden soils, form the bulk of the work in this department. The extent of operations in this connection can be gathered from the fact that plots included 53 varieties of onions, 109 of peas, 104 of beans, 95 of potatoes, over 70 of tomatoes, some 60 of muskmelons, about 25 of watermelons, as well as corn and other garden crops. On request from the Ontario Vegetable-growers' Association, special work in variety and dates of seeding has been conducted.