

both sides. Cautious housewives will not run the risk of odorous complications by ordering them to the table in the shell. The papers have teemed with tales of "stales," and "spots," "desiccated" eggs and "rots" by the tank load, finding their way into delectable confections to humor the palate and nourish the jaded people of the strenuous life. Small wonder they are disturbed, and demand something better, which a determined effort will be made to supply.

The tendency is toward egg-producing plants, and the White Leghorn in many quarters has the call, just as the Holstein cow in the dairy sections. In New York City a large white egg sells for more money per dozen than a colored egg. Boston, Mass., pays a premium for a nice brown egg, but not as much by several cents as New York for the white-shelled product. Incubators are in very general use. At an Ontario County plant, a "Farmer's Advocate" editor saw over a dozen ready for operation in the concrete basement, one of them a seven-compartment machine, requiring 600 eggs each, or 4,200 for the hatch.

POULTRY COURSES AT CORNELL.

At the State College of Agriculture, 104 persons are taking the regular and 56 the winter poultry course. Scores have been turned away for lack of room, but the authorities are fully seized of the seriousness of the situation, and have planned a \$90,000 building and plant. Poultry survey work, after the plan of orchard surveys, and a State poultry-breeding station, are contemplated. There were ten women in the twelve-weeks' course. Each student has a pen of several dozen birds to feed and manage entirely. Accurate account has to be kept of the food used daily through the whole period, eggs collected, and other details recorded. Another small pen of birds must be fattened for a short period, and all details and results shown. Incubators of different makes have to be taken apart, put together, and tested, until the students understand them thoroughly enough to actually run a regular hatch for the 21 days. The brooding is similarly covered, and the running of gasoline engines, bone cutters, self-feeders, and other apparatus. Every phase of the subject is embraced in lectures that fill in the time from daylight till dark. And if the students do not acquire a good working knowledge of the poultry business, it is their own lookout. The pens were observed to be kept clean, and deeply littered with straw to keep the laying hens busy hustling for the mixed-grain feed of corn, wheat, oats and buckwheat. The laying mash is fed dry, and includes, among other meals and meat scrap, a proportion of ground alfalfa hay. Fattening birds receive wet mash and more meat scraps. "Cornell eggs" have been selling from the plant at over 50 cents a dozen. It was stated that most of the eggs were laid before 10 o'clock a. m. Large eggs from yearling hens, mated with mature males, are selected for hatching purposes.

In the experience of the College poultry plant, it was found that from flocks of hens confined on bare yards, only 40 chickens from 100 eggs were hatched. Soon after the fowls were taken from these yards and placed under free-range conditions, the hatching quality so improved that 70 chicks from 100 eggs were obtained, and the increased vigor of the chickens so produced was even more marked. The conclusion was reached that, without a few pens kept on free range, the flocks could not be kept up without buying fresh breeding stock each year. After mating, some eggs were found to be fertile in four or five days, and in nine days 80 per cent. would hatch. The last fertile egg was found in 19 days after the male was removed from the flock. Supt. Krum does not advise trying to grade up an ordinary farm flock. Life is too short. The better plan is to start with a few pure birds or settings of pure-bred eggs, and keep the new foundation flock separate at mating time. The lectures by Prof.

Jas. E. Rice, who holds the chief chair in Poultry Husbandry, are very fine, disclosing a large fund of lore in theory and practice, presented with a lucidity and range of vocabulary, and a discriminating nicety of expression, that makes the talk an intellectual treat, and an education in the use of platform English.

GARDEN & ORCHARD.

Montreal Melon Growing.

Without stopping to make any remarks about the famous Montreal melon, I will at once give in brief what we consider the best method in the growing of this crop.

Three or four seeds are planted into 3½-inch pots about the 25th of March. These pots are well watered, and placed into a good hotbed or greenhouse, with a temperature of about 65 degrees. After germination is completed, the temperature should run around 60 degrees, so as not to force the plants too much. If in the hotbed, close attention should be paid to ventilation, and the plants should have full benefit of the sun. The plants are thinned to two plants to a pot after well established, leaving the strongest plants.

As soon as the ground is fit, during the latter part of April the field is prepared by thorough deep cultivation, it having been well manured the fall before. Rows are run out with a plow ten feet apart, throwing two heavy furrows each way, and loosening the bottom soil again between these furrows with the third furrow. This loose soil may be thrown out with the shovel, and the trench filled with good hot manure well tramped into the furrow. The bulk of manure is usually 6 inches deep and 1 foot wide. The plow is used to cover the manure, ridging the soil to the center, leaving the dead furrow between the 10-foot rows. The framers are then placed at once in place over these rows, and covered tightly. Towards the last of the first week in May, these frames are ready to receive the plants, which are spaced 18 inches apart, two pots to a light right over the row of manure. After a week or ten days, all of the plants but one in a place are cut off, and but eight plants are allowed to remain to a frame. If handled in this way from pots, the plants will suffer little check from transplanting. There is great advantage in getting the beds made up early, as this warms the soil, which is the most important thing in the early spring.

The frames require careful handling to keep the plants well ventilated, and yet not chill them. The plants should be occasionally watered, although every advantage should be taken of allowing rains to do this, as they do much better from being watered naturally than by artificial means. The ground should be given frequent shallow cultivation with the hoe to keep down all weeds and prevent evaporation.

Late in June the vines will have filled the frames, and should be lifted to allow the vines to grow out under the frame. Later on, about the middle of July, the frames may be removed altogether.

The ground should be rich, so that the plants may make continuous growth, without check. Plants handled in this way should give their first ripe fruit the third week in July, when Montreal melons are worth about \$12 per dozen.

About 300 frames, 12 x 6 feet, with four 3 x 6-foot sashes, are required per acre. These sashes and frames cost about \$13 complete, making the initial cost of the frames about \$3,900 per acre. Each frame should produce ten good marketable melons, which, on an average, should bring about 75 cents apiece, or equal to \$7.50 per frame, or \$2,250 per acre. The cost of handling these frames should not exceed \$500 per acre. Allowing 10 per cent. for wear and general depreciation.

tion in the frames, or \$390 per year, we still have a profit of \$1,250 per acre.

After the melons become the size of a coconut, they are turned every few days to admit of perfect development, care being taken not to injure the vine. Or they may be placed on three small stones to permit of a ready circulation of air around the plant.

The best size for market is from eight to twelve pounds apiece, although sometimes they are grown to weigh sixteen to eighteen pounds each. It is not wise for one without experience to start melon-growing on a large scale, as these and many more details that go to make up successful melon-growing in this country can only be fully mastered by experience in the practical handling of the crop. Thirteen 6 x 12-foot frames grown here last year returned \$119.11, or \$9.16 per frame, which would total \$2,748 per acre.

W. S. BLAIR

Pointers on Vegetable-growing.

At the annual meeting of the Quebec Vegetable growers' Association, a brief notice of which appeared in our last issue, the president, Paul Wattiez, presented a vigorous address, in which he referred to the advisability of securing legislation regulating the weight of vegetables sold in bags, so that, no matter where in Canada a bag of potatoes, for instance, is purchased, the consumer will know what the bag should contain. At present we have a law fixing the weight at 80 pounds for this vegetable, whereas in Ontario 90 pounds constitutes a bag. The 80-pound bag is more desirable, as it is impossible to put 90 pounds into the flour bag, which is the container usually used for handling potatoes. The weights per bushel for all the root vegetable crops is now legally 60 pounds, whereas a measured bushel of turnips will not weigh more than 45 pounds, unless carefully packed into the measure, and carrots and beets about 50 pounds.

The Association conducted fertilizer experiments at sixteen different points during the summer, with different grades of home-mixed fertilizers, and it was hoped that similar work would be continued. This and similar problems could be done, resulting in great good to the growers.

Reference was made to the summer excursion to Macdonald College. The president thought they were fortunate in having such an institution in the Province, and hoped that the growers would plan on sending their boys to this institution.

An attempt was made to increase interest in growing vegetables at exhibitions, and for this purpose two silver cups were given for the best display of vegetables at the Laval and Hochelaga exhibitions.

MARKET ACCOMMODATION IMPROVABLE.

The market accommodations in Montreal were not all that could be desired. More room should be available. At present the market was too congested, and growers were not able to display their products to good advantage. To get a good stand on the market made it necessary for those at a distance to start very early in the morning, and even then the near-by grower generally got there first. There were no facilities on crowded market days for easy traffic through the streets, which condition the Association should aim to change, if possible.

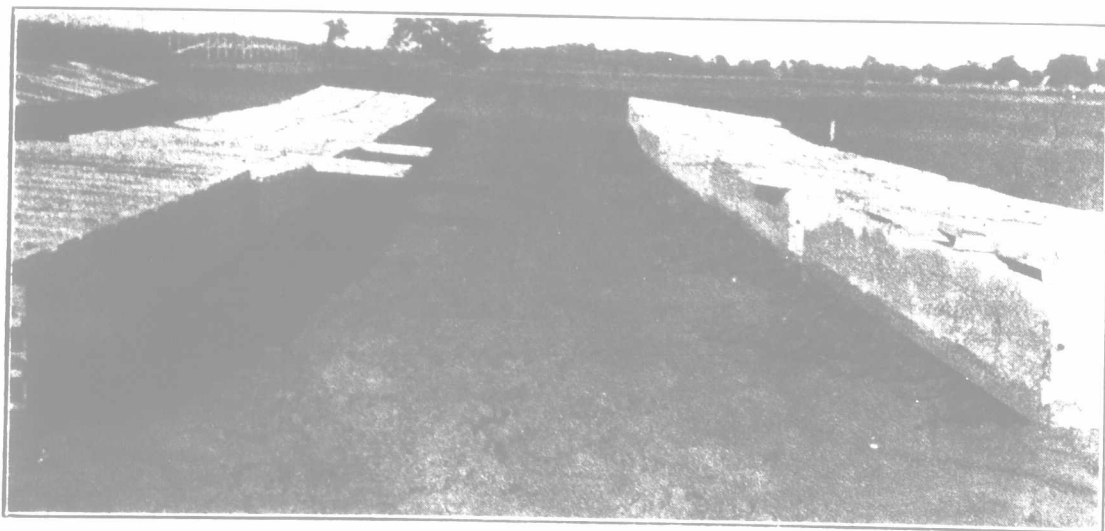
"Melon Wilt" was the subject of an address by Dr. Harrison. He outlined the symptoms of this disease, and methods for its control. Like many other similar diseases, prevention was the only cure. By burning all diseased plants, it would in a large measure be prevented.

TOMATO-GROWING.

L. V. Parent, Grand Ligne, Que., gave an interesting paper on tomato-growing. He pointed out the importance of giving more care to the development of plants for setting out. This may mean more expense at the start, but, for early crop, it much more than pays for the extra expense in the earlier fruit produced. He advised the use of three-inch flower pots or strawberry boxes. He also referred to the advisability of hardening off the plants, getting them used to wind and outside temperature, as in this way they suffer much less check in transplanting. He outlined the method followed in growing plants to a single stem. This may not be advisable on a large scale, but could be practiced to advantage for early fruit, and to secure fruit of first quality. The cost of this method was its great drawback.

DISEASES OF VEGETABLES.

Prof. Wm. Lochhead spoke on "Diseases of Vegetables," referring specially to the club-root, potato scab, early and late blight, and celery rust. Prevention is the best means of control. Diseased refuse should be burnt or buried deeply. To dump diseased material on the farm was a great mistake. Weeds are often responsible for carrying over certain diseases, and all fence corners or around buildings should be kept free from such weed plants.



Melon Frames at Macdonald College.

Lifted and blocked up at the corners, which allow vines to grow out under the sides of the frame.