

INSTEAD OF THE HIRED GIRL.

Editor "The Farmer's Advocate":

My gasoline engine is a two-horse, two-cycle, upright engine, quite satisfactory to run No. 5 Daisy churn, as we use a 24-inch diameter pulley on churn, driven direct from a four-inch diameter pulley on engine. Our No. 5 Daisy barrel-churn will churn 60 pounds butter quite handily from separator cream, and the churn works best with the large pulley, having more grip for the belt, and runs the proper speed, and strong. We use it in a well-lighted room, having cement floor 14 by 16 feet, with a 10-foot ceiling, with a line shaft high enough to clear one's head, and a short intermediate shaft to reduce the speed. Having smaller pulleys on these shafts, we slip the belt from off churn, and place on the 12-inch pulley on shaft over engine. This shaft has another pulley, of four-inch diameter, from which a belt runs up on the 12-inch pulley on line shaft; another 12-inch pulley on line shaft runs the belt down to washing machine, which has a 10-inch pulley. This same belt does for grindstone (10-inch pulley), by having one of them a little each way from being direct under line shaft. I find this works handy enough for us, as one at a time is all we have had occasion to use yet. By putting extra pulleys on line shaft, it could be used to all of these purposes at once, if necessary.

I like my engine well. It is very simple, takes up very little room—no more than a cream separator—and uses very little gasoline, and is as safe as a coal-oil lantern.

Domestic help being so hard to obtain, I bought this engine, and it has proved a wonderful help.

W. J. PEGG.

York Co., Ont.

THE DAIRY INSTRUCTORS OF WESTERN ONTARIO.

The Dairy Instructors and Sanitary Inspectors of Western Ontario spent the first week of April at the Guelph Agricultural College. The time was well taken up with dairy lectures, lectures on veterinary science, lectures and practical work in the chemical and bacteriological laboratory. One-half day was very profitably spent scoring cheese and butter, when they were fortunate in having the assistance of Mr. W. W. Gray, of the firm of Thos. Ballantyne & Sons, cheese exporters, Stratford, who gave some valuable information regarding quality of cheese and butter demanded by the export trade, laying particular stress on the fact that a clean-flavored, close-boring, smooth-textured, yet firm-bodied cheese was the ideal cheese for export; the color, also, should be clear and uniform, but not too high in colored cheese.

Time was set apart for general discussion of the coming year's work of instruction, and several evening meetings were held, when the work was all carefully gone over by the instructors, so that entire uniformity of method would be advocated by each, since uniformity is recognized as one of the principles of success. A lively but friendly discussion was brought out during one of the lectures regarding moisture in cheese, and, after a full discussion, it was the unanimous opinion of the instructors that the system of cheesemaking advocated and taught by them during the past five years, and practiced by the very best cheesemakers, was giving excellent results in improving the quality of the cheese in Western Ontario, and that it would be unwise to make any radical changes in the methods of making.

A short course for makers desiring instruction in milk and cream testing was carried on at the same time as the Instructors' course, and was attended by quite a large class of experienced cheese and butter makers. The instructors and makers who took the week's course appreciated very much the efforts of the Professors of the College to make their stay both profitable and enjoyable.

There will be no change in the Instruction staff this year, which consists of the following men: Frank Hens, London, Chief Instructor; Alex. McKay, St. Mary's, Stratford Group; Jas. R. Burgess, Listowel, Listowel Group; E. N. Hart, Ingersoll, Ingersoll and Woodstock Group; Geo. Travis, Tillsonburg, Simcoe Group; R. H. Green, Cayuga, Brantford Group; W. Hamilton, Woodstock, London Group; Fred Dean, Western and Southern Creameries; Mack Robertson, St. Mary's, Northern and Eastern Creameries.

FRANK HENS,

Chief Instructor, Western Ontario.

In the London, Eng., market the ruling average price of cheese during the seven months of production of the season of 1907 was 61s., as against 50s. 6d. for 1906.

While imports of Canadian cheese into Great Britain showed a slight falling off last year, and imports from New Zealand are increasing, Canada is still far in the lead, supplying within 34,911 tons of Britain's needs.

GARDEN & ORCHARD.

THE STRAWBERRY AND ITS CULTURE.—II.

GROWING PLANTS FOR PROPAGATING.

It is just as necessary to have good, strong, vigorous plants to set, as to have the best grain to sow, or trees to plant. They should be grown with special care for that purpose. Only a limited number of plants should be allowed to form, and these should be kept separate from one another, so that each plant can fully develop; then you have plants capable of doing credit to themselves, which strawberries will do every time they are given a fair chance. Is there any wonder that strawberries, as some say, "soon run out," when they, year after year, take up plants that may be in the way—plants that were late in rooting, weak, and from which no sane man should expect great results? Get started right by setting only the best plants, and then keep right by growing your own plants as much as possible. I believe by growing plants as I have advised, we can improve the strawberry from year to year, instead of "running it out."

SETTING THE PLANTS.

See that the ground is thoroughly worked, and in the best possible condition, then mark it out, both ways, the same as for corn. I would prefer setting the plants three feet by three feet to three feet by four feet, as many do, believing that by having the matted rows narrow they do better. We trim up the plants; that is, take off all runners and dead leaves, and also cut off some of the long, fibrous roots, as it is difficult to get them properly planted otherwise. Care should be exercised that the roots of the plants are not exposed to the sun or wind; they should be kept covered and moist. A plan adopted by some during warm weather is to "puddle them," which covers the roots, and thus prevents the fibrous roots from drying out so readily.

Some about here have tried the plant-setting machine, but I believe the old hand machine is as good as any yet. We use the spade, which is inserted not perpendicularly, but on an angle, and the plant is carefully inserted in the opening at the same time, giving it a few sudden jerks so as to spread the roots, and then the soil is firmly tread about the plant by the foot so as to close the opening. The advantage of the angle opening is that you can much more successfully and thoroughly close it. Many plants are lost simply from the fact that they are not firmly planted. See that the crown of the plants are fully as high as the surface of the soil; if lower, the earth gets into the crowns, to the serious injury of the plants. Remove the blossoms, so as to give the plant every advantage to do its best.

Another way of setting plants I have practiced for several years with good success is as follows:

Having grown the plants as above advised, each plant standing alone, I take these up carefully with a tiling scoop by inserting it about the plant, giving the scoop a few side movements, when the plant, with the earth adhering, can be removed, similar to a potted plant. These plants, with the earth, are conveyed on a dray to the new plantation, where they are set. The advantages of this system are:

1. Every plant will grow.
2. One may plant them about one month later, and yet have an abundance of plants. During this time, one can be giving the ground frequent cultivation, thus destroying many weed seeds, and have less cultivating and hoeing to do.

3. Fewer plants will be required, as one can set them five feet apart in the row and they will run together, as they start growth immediately. Some may claim this system encourages too much plant growth at an expense of fruiting. I am not prepared from the limited experience I have had, to know whether such is the case, if continued for years.

CULTIVATION.

As soon as the plants are set, especially if the soil is dry, begin the cultivation at once. Don't delay one day. The best implement I have found for this purpose is a weeder; unless the plants are very firmly set, it may be necessary to remove a few teeth that come directly over the rows, else some plants may be pulled out. The advantage of the use of this tool is that you create a dry earth mulch, which conserves the moisture in the soil, which is all-important at this stage. It is also doing its work as a weed destroyer. In a week or ten days, the cultivator may be started, and then followed up again with the weeder, and continued at frequent intervals throughout the season. Don't wait till the weeds appear. You can economize much time by taking them in the "nick of time." Use the hoe occasionally, and I have found a garden rake to be of good service about the plants. As soon as the plants commence making growth, I give them a spraying of Bordeaux mixture with a hand sprayer, which can be done as fast as a man can walk, and takes very little material. The following spring, as soon as growth starts, give them a thorough spraying of Bordeaux, and you will not have any trouble with the blight.

MULCHING.

In this locality, very little attention is paid to mulching, as the plants generally come through the winter all right. In more northerly latitudes, I would advise covering them as soon as the ground is frozen; this covering to be removed in the spring, and raked between the rows. I have found a dressing of farmyard manure, applied over the rows, to be valuable; but the serious objection is that you also seed the ground down, and render the plantation beyond redemption for more than one crop. Where berries are grown only for home use, by covering a part and delaying the removing in spring for some time, the season can be lengthened a week or two.

PICKING.

Picking season is a busy time with the strawberry man. The hot weather ripens the fruits very fast, and they should be picked just as soon as ripe. Sometimes it is necessary to pick them every day; usually every alternate day will do. They should not be picked while wet with dew or rain. When intended for shipment, they should be graded while being picked in three classes: No. 1, or the larger; and No. 2, smaller, but sound; and No. 3, such as are too ripe or otherwise faulty, for local consumption. The pickers will need extra pay to do this work. But if we pay them, say, two cents per box, will not the berries thus graded be worth that much more in the market, and give better satisfaction?

Indians from the reservations, until the past few years, had been relied upon to do most of the picking. The Pollocks and others have been tried, with varying success. The local help in the country, towns and villages—boys, girls, men and women—now turn out and have their annual outing at picking strawberries.



Dairy Instruction Staff, Western Ontario.

Back row (left to right): E. N. Hart, Fred Dean, Mack Robertson, Geo. Travis.
Front row: Alex. McKay, Jas. Burgess, Frank Hens, Robt. Green, W. Hamilton.