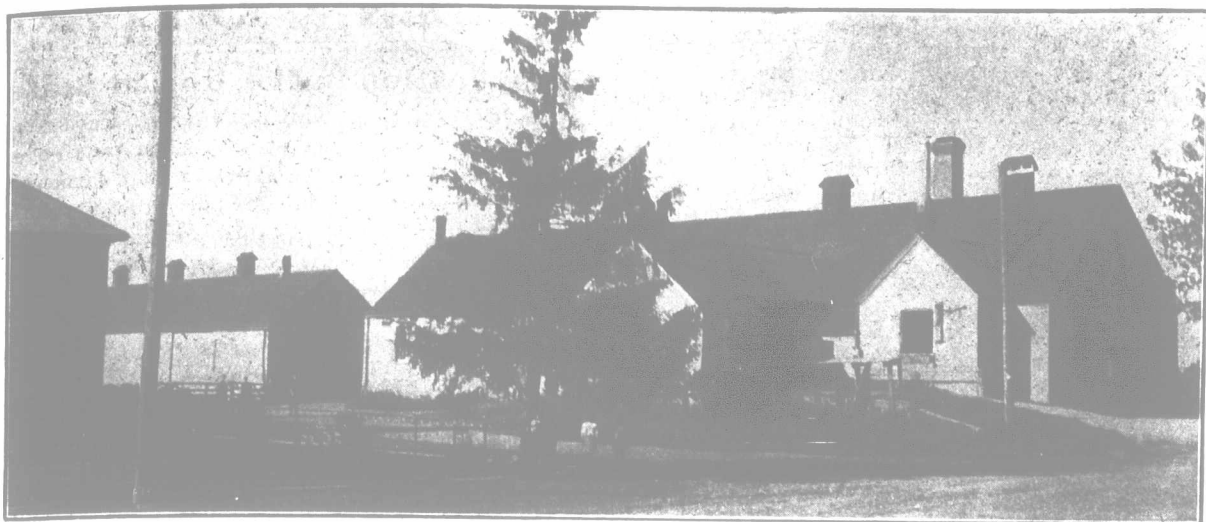




Strathallan Cheese and Butter Factory, at Hickson, Ont.

One of the largest in Canada. Make last year, 232 tons. Curing-room at back, fitted with fan system to force air in circuit through factory and underground.

one week before my field crop, and the enclosed photos will give some idea of its quality. Number one shows the corn just beginning to tassel, at 60 days from planting, and about seven feet high. Twelve days later it had grown from three to five feet higher, and is shown in number two. Number three shows the appearance of the corn two weeks later, no higher than at 72 days, but rapidly maturing large ears. This year there was a distinct though small variation in the different rows, and a good many of the plants showed a considerable tendency to throw out suckers. However, I detasselled all inferior plants and barren stalks, and in a few years I hope to eliminate most of the undesirable characteristics.

Meanwhile, I have ten acres of very fine corn for either husking or silage, and the promise of still better seed for both next year's seed plot and field crop.

W. C. GOOD.

Brant Co., Ont.

[Note.—The photos were not distinct enough to reproduce successfully, but show the development as stated.—Editor.]

Silo-filling with a Small Gang.

Editor "The Farmer's Advocate":

There are two important crops that the Ontario farmer should make himself familiar with, if he is at all ambitious to realize the most from a given quantity of land. These two crops are alfalfa and corn, in both of which lie possibilities which too few of us recognize. Many of us who have silos, and the corn growing with which to fill them, will get quite nervous on the approach of cool nights and threatening frost, and will rush into action and "kill the goose that lays the golden egg," for at no time during the growth of the corn crop is it making real value faster than at the time it is developing the ears and maturing the seeds. And unless actually frosted so as to check further development, or the season is so far advanced that a really hard freeze may be expected, I would not cut my corn until the seeds are for the most part well past the dough state, or beginning to glaze.

We have on different occasions put into the silo frosted corn, when the leaves were dry, but failed to discover any harm therefrom; in fact, the first time we ensiled frosted corn our silage was so superior that we have never feared an ordinary frost since. We do not add water to frosted corn. However, if corn is grown on an impoverished soil, and too thickly planted, it may consist almost entirely of leaf and soft stems, which, if frosted, would be very loose, light stuff, at best not much good, but would need water liberally to save it at all.

We are not anxious to have either rain or sand in our corn when we handle it for the silo, so we do not cut much in advance. We are anxious to have as much of the corn, from the root up, in the silo as we can, so we do not use a binder.

We have not used the short-handled hoe, but believe it is all right. We have used the sickle some in the past, and, if well handled, can cut quite short, from one to one and a half acres a day.

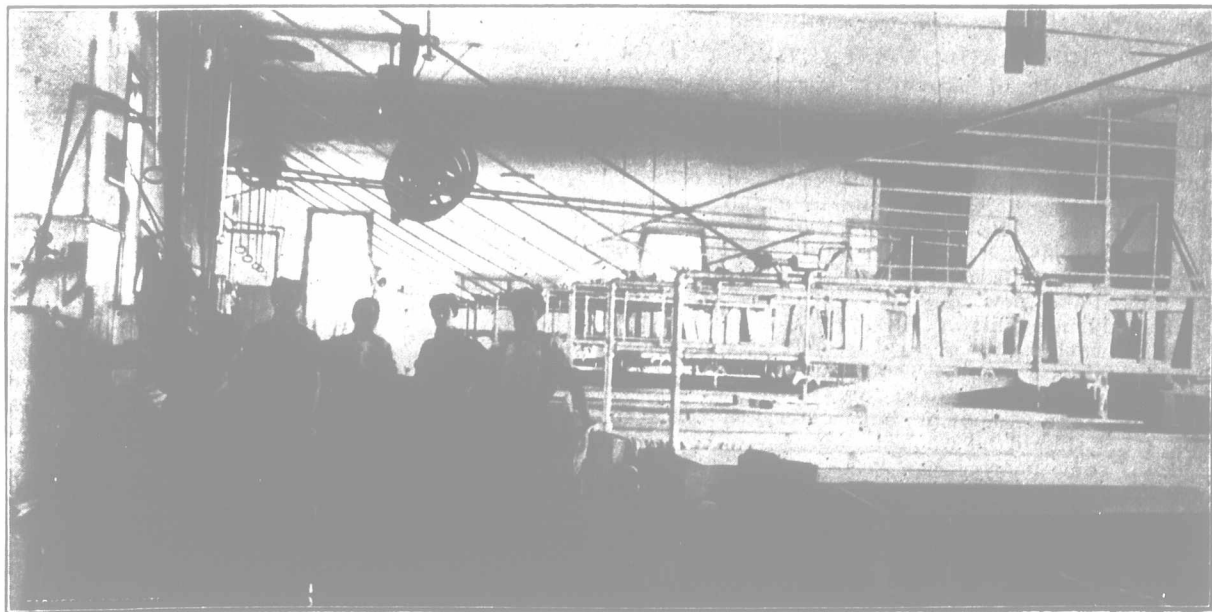
Planted in squares $3\frac{1}{2}$ feet apart, the Dain corn-cutter serves our purpose best. This is built on the sled principle, but adjustable on wheels; cuts two rows at a time, and shaves the corn at the surface of the earth. Two men and one horse will cut over one acre per hour with this machine. Having our own corn-cutter, a thirteen horse-power gasoline engine, a thirteen-inch-mouth blower, a farm force of six men and four team, and two or three neighbors owing return labor, we have no special difficulty in putting away the corn crop when we so decide.

If the frost comes before we are ready, and makes the corn leaves too dry, and checks development, we get ready and put the corn away. If the weather permits the crop to mature well through the dough stage and into the beginning of glazing, we get ready for the work. A few of the men can get the blower and engine in place; others can get three or four wagons ready by putting long reaches in them, putting on 18 or 20-foot plank; while two men and the old horse take the cutter to the corn field, and move up and down the rows, clearing down 14 feet per round, leaving the bundles untied, ready to gather up. When the wagons are ready, those men can go and get them loaded, by putting some bundles lengthwise, butts out, the ends between the standards, so as to raise or fill in between the wheels; then put on the load carefully, crosswise, with all butts on one side, to be towards the machine when driven up to it.

The cutting-box will stand on a platform a little lower than the planks of the wagons, and will extend back beyond the feed-board just far enough to pass and work around the end of it. Thus, when a load is brought up close to the side of the platform, the engineer and the driver, working from the platform, are never more than a step or two from either the corn or the machine; and, by picking it off the wagon, and feeding direct to the machine, can easily keep a constant stream going, with corn from 9 to 12 feet long.

With our outfit, we need not get excited if some part of it is standing idle for hours, only so our men have work. If the men get ahead with the cutting in a few hours, and stop the corn-cutter, it will stay where left until wanted again; little difference if a team is standing up in the field until wanted—they may as well stand there for an hour as in the stable, where they often stand idle; or, if the gasoline engine stands quiet until the men cut more corn and get all the wagons loaded, nothing is lost. With a big commercial equipment it is different; too many men and teams hired are expensive, and too few makes it costly. With our outfit, eight men can keep from four to six loads going per hour, but two or three men can employ themselves profitably at the job, and we have no real figures of the cost.

In the silo, the chief work is to keep the silage evenly mixed and levelled, with tramping around the edges of our round cement silos. In putting in the last four or six feet, more care is taken to thoroughly tramp; lower down, when we are put-



Make-room in the Strathallan Cheese Factory.

ting in from two to three tons per foot in depth, a man's weight does not count for much.

We would not advocate that every farmer should have a complete outfit; and we also know that it is easier for one man controlling two or three farms to control such an outfit than for two or three persons to do so, but yet we believe much more co-operation could be practiced in this matter than is at present the case, and a more satisfactory control of our corn crop had if farmers stood together for such things that are a common necessity, and yet too costly for individual needs.

Waterloo Co., Ont.

ANSON GROH.

THE DAIRY.

Strathallan Sub-earth-duct Curing-room.

Probably the largest make of cheese turned out from any factory in Western Ontario, if not in Canada, is that of the Strathallan cheese and butter factory, run by a joint-stock company, who employ as maker W. A. Bothwell. At this factory a system of fans was installed about eight years ago for controlling the temperature of the curing-room, and while Mr. Bothwell would not recommend any factory to instal this system to-day, as a better one has been devised, it is of interest as marking one epoch in the development of the cheese-factory curing-room. The air is made to circulate through about 400 feet of tile placed six feet underground, the air being taken from the curing-room through a six-inch pipe, and brought into it through an eight-inch pipe. A fan on the principle of the device used in sawmills for disposing of shavings, forces the air through the tile. The maker estimates that it would take about 24 hours to deliver the whole air of the curing-room once through the pipes; this assuming that there were no diffusion, but that each volume would pass through only once in that time. As demonstrating the comparative efficacy of this system, it is noteworthy that on the day of our visit (July 14th), rather a warm day, the temperature stood at 68 degrees at 4.30 p.m., having risen only two degrees since the fans were started to work in the morning. The maker informs us that the temperature seldom or never exceeds 70 to 72 degrees with the fans in operation. This, however, is ten degrees warmer than is desirable, and the installation of an ice chamber is contemplated. The size of this curing-room is 28x60 feet, the shelves giving capacity for the storing of 1,200 cheese. Insulation consists of common brick walls plastered on lath inside, above a five-foot wainscoting at the bottom. The ceiling is plastered, and the floor is of wood.

The size of the factory proper is 128x31 feet, and is detached from the curing-room. A 40-h.p. boiler and a 20-h.p. engine furnish steam and power. The make of cheese last year was 232 tons in a little over six months, 23 tons of butter being made during the remainder of the year. Sixty-seven cheese were made this year one Monday in June, the highest make from a single day's milk being 40 cheese. About one-third of the patrons make Saturday night's milk into butter. The majority take fairly good care of the milk, which, consequently, arrives, as a rule, in pretty satisfactory condition. The whey is pasteurized for 50c. per ton, live steam being used entirely for the purpose, as the exhaust steam has been for a number of years used to heat the water for the boiler. For pasteurizing the whey, four angle pipes are placed across the bottom of the tank from which jets of steam issue, giving the whey a circulatory motion. There is no doubt in Mr. Bothwell's mind but that a cool-curing room is a good investment for a factory. "We are always ready for an even temperature," he