

drought. The working of the soil in seeding at so late a date has been a great check to the growth of weeds, and now that crops have started so vigorously they are likely to keep ahead of the weeds for the remainder of the season.

"Correspondents report continued sale of stockers, principally yearlings and a few two-year-olds for export to the United States or to the ranches in the Northwest Territories. The prices received by farmers for these is reported as very remunerative. The number of beef cattle in the province is estimated at 9,231 and the number of milch cows at 81,149.

"Creameries opened up about the 1st of May, and cheese factories about the 10th of May. The season opened up very late and has been cold and backward. Feed was scarce with the farmers on account of the feeding period being much longer than usual. There was no grass for pasturage until the first week in June. There is now, however, an abundance of grass, and the milk flow is increasing rapidly. The prospects are good for a million pounds of cheese, and very nearly the same for creamery butter to be made this year."

## Sub-Earth Duct

### Its Value in Lowering the Temperature of Curing-Rooms

The following letter addressed by Instructor Morrison to Mr. George Hatley, secretary of the Cheese and Butter Association of Western Ontario, furnishes additional evidence as to the value of the sub-earth duct as an air duct controlling the temperature of the curing-room in a cheese factory:

"In reply to your request for information regarding sub-earth ducts which have been recently added to the curing-rooms in my district, I submit the following report:

Caistorville—The sub earth duct is completed and in operation. The duct is eight feet deep and extends 118 feet under ground. It is made of three rows of five-inch tile, two rows of six inch tile, and one row of eight-inch tile, all laid close together with the eight-inch tile in the middle; over the tile there is a covering of rye straw.

In digging the trench for the tile a spring was found near the factory. The water from the spring runs in the bottom of the trench for its entire length, which possibly somewhat increases the moisture in the curing room. The in-take pipe is built of galvanized iron, fifteen inches in diameter and thirty feet in height, with cowl on top. The outlet from the curing-room is simply a hole in the ceiling on the opposite side to that at which the duct enters.

On the day on which I visited Caistorville the temperature on the outside in the shade was 85 degrees. Inside the curing room a strong breeze was coming in from the duct at a temperature of 60 degrees. The temperature of the curing-room did not exceed during the day 69 degrees. The curing-room at this factory is very poor. I am of the opinion that with a reasonably good curing-room the temperature can easily be held at 65 degrees. The moisture in the curing-room was from 80 to 82. There was no mold on the cheese."

As we pointed out some time ago, a distinctly forward movement has been inaugurated in the Province of Quebec in regard to curing rooms and curing cheese, and the dairymen of this province will have to be on the alert if they wish to maintain the position they now hold as producers of the finest quality of Canadian cheese. The sub-earth duct furnishes a very simple and yet effective means of very largely controlling the temperature of curing-rooms, as Mr. Morrison's letter very clearly shows, and every cheese factory in the country should have one built. Their construction is not difficult, and a suitable duct could be put into every curing-room at comparatively little cost. In fact, if there were no other means of doing so, a few of the patrons, under the direction and with the assistance of the maker, could put one in in a very short time, and its cost

would be more than paid for in one season by the improved quality of the cheese and by preventing any loss in weight due to the excessive heat of July and August.

Of course a sub-earth duct will not make up for a poorly ventilated and a poorly constructed curing-room. But even the temperature of a poorly constructed curing-room can be very much improved and controlled if it has one of these ducts in connection with it. We would advise every factory to no longer delay this matter. We are just entering upon the two most trying months of the year for curing cheese, and if a factory has not already done so there should be no further delay in getting in a sub-earth duct. Curing the cheese properly is of the utmost importance in enabling Canadian cheese to retain the position it now holds in the British markets.

## Preparing Sheep for Exhibition

The following from the London, England, *Farmer and Stock Breeder*, that land where fitting live stock for shows is made a business, will be of interest to those engaged in that line of work in Canada:

"Sheep selected to do battle at the coming agricultural shows have now reached a stage when they require careful and attentive management, particularly the rams. The latter should be given plenty of exercise, both by themselves and in the halter, for it is important to get a ram to walk properly in the halter, so that he may do himself full justice before the judges. This can be accomplished by the expenditure of a little time and patience, while the ram is at the same time exercised. Intending exhibitors would not only save themselves considerable expense, but be doing their particular breeds great good if they would make sure that those selected are true to type. Nothing militates so greatly against the interest of a breed than horns or slugs, when one of the points of the breed is that no signs of horns should appear; or, again, bareness over the poll, or black wool or other fault declared by the society to be detrimental.

"Many breeders have decided that the skin should be a clear pink, free from spots, etc., and yet how often one finds the contrary when examining these classes? These may be what are termed breed points or fancy points, but no matter what appellation may be given them they should never be found in selected show or exhibition sheep. All such should be drafted out and never allowed to appear before the public as selected show sheep.

"In the case of males especially it is essential that they should stand well on their legs and feet, and be able to move with ease and comfort. It ought to be made a rule by every society that under no circumstances should a prize be awarded to a male animal that cannot move freely and be useful in the flock. The showyard should be a place of exhibition of sheep for use, and not, as far too often has been the case in recent years, of useless, over-fed and broken-down animals.

"The lambs have by this time been selected for the summer shows, and these require very careful, though liberal, treatment. They must not be confined, for nature requires that they take a proper amount of exercise; they should be fed upon a generous scale, their dams being also well fed. The most important need, however, is that they should have warm and sheltered quarters, without being too confined, and that their food should be of as many varieties as possible. Tempt the appetite all you can, but remember that the secret of successful feeding is in feeding moderately often, regularly. Do not heap food before them, but just as much as they can eat, so that the food may not get stale. Clean, fresh water, together with a lump of rock salt, will also be beneficial.

"The shearing rule does not apply to the Lamb classes, and hence one can begin to trim and get their fleeces into shape as early as one likes. This is an important matter and the earlier one commences the better face will be ob-