

cows falls off ten to twenty-five per cent. It is impossible to secure anything like as large a flow of milk from cows in winter if they do not have plenty of water.

"It is very foolish to try and bore a well on top of a hill near the house, when it is possible to dig or bore a little further away and get a better supply. The cost of 100 feet of piping does not amount to much. Unless the water is free from contamination, it may cause typhoid fever in the house. A case or two of typhoid fever is generally sufficient to prove a severe lesson as to the value of good water."

AN EXCELLENT WATER SYSTEM

The well that supplies Mr. Caldwell's house is located in a field about 300 feet from the house, and about 500 feet from the water tank in the barn. The water is forced by means of a wind mill into the house and into the barn. There are water basins in front of every cow. The house is piped and the water is used in the kitchen by means of taps. A big water trough is kept in the horse stable. An out-house, that was formerly used as a wash-house, has been converted into a bathroom. There is a brick furnace in it that is used for heating water for the washing of cans in summer. It thus is possible to get hot water for bath purposes. The cost of installing this water system was about \$500. When the wind mill does not work, a gasoline engine is used to pump the water. It is a two-horse power engine and cost \$160. A grindstone has been attached to the gasoline engine, which is used to grind the knives, sharpen the corn cutter, and for other similar purposes.

A WELL-MANAGED FARM

Mr. Caldwell's farm shows evidence of good management. For 30 years he has been putting in the drains at intervals and he finds them the best investment possible. Some 3,000 tiles were used last year and Mr. Caldwell claims that they will pay for themselves this year in the corn crop. The total cost of laying this tile was about 40 cents a rod. The crops grown this year, included 34 acres of corn, 70 acres of hay, 30 acres of barley, 18 acres of rye, 25 acres of oats and 10 acres of turnips.

Mr. Caldwell does not believe in ploughing large quantities of land unless the plow can be followed immediately with the cultivator. It is better to plough a little and to cultivate close after the plough. He believes that land should be well worked up in the spring.

"I am a thorough believer in hiring corn-cutting and threshing," said Mr. Caldwell. "It does not pay the average farmer to invest considerable money in an engine that he can use for only a few days in the year. If, however, I had large quantities of milk to separate, I would keep a gasoline engine."

When asked how he maintained the fertility of his soil, in view of the fact that he was selling such large quantities of milk, Mr. Caldwell replied: "I buy enough gluten meal and bran to make up for the loss of soil fertility. The land on my farm is richer to-day than it used to be."

The system of rotation followed consists of two or three crops of hay, followed by corn, then barley, after which the land is seeded down. Mr. Caldwell used to grow wheat, but when the market for it fell off, he commenced growing barley and has found it to be more profitable, although he does not consider that it seeds down as well as wheat.

AVOID BOGHOLES

"On dairy farms," said Mr. Caldwell, "care should be taken to avoid bog holes. If cows have to walk through bogholes, their udders become covered with dirt and it is hard to keep the milk clean. For that reason, I do not envy farmers whose pastures are located by rivers."

"I do not take much stock in what some farmers call 'cow-hay.' Cows need good hay as well

as horses. Last winter I fed ensilage, turnips, barley and gluten meal. Not much bran was fed as it was too expensive. When bran is \$20 a ton and gluten meal \$25, I considered that the gluten meal is the cheaper feed. This year gluten meal is starting off at \$30 to \$32 a ton and I do not, therefore, think that I will feed much at this price. I have been thinking of trying cottonseed meal if I can secure it at satisfactory prices."

Mr. Caldwell is a great believer in the value of ensilage. "There is about the same difference in the value of a crop of corn and the ordinary little crop of grass," said Mr. Caldwell, "as there is between sky-scrapers and original houses. Corn is a good crop to grow on dear land."

"Some farmers," he continued, "complain about the difficulty they have in keeping their hired help. In most cases, the farmers are as much to blame as are the hired men. If a farmer would show the right spirit towards his men, he is likely to get more work out of them than he will if he tries to drive them too hard, and thus cause them to resent their treatment."

Mr. Caldwell does not believe that the price of milk advanced in proportion with are raised. This is a mistake. The price of milk advanced in proportion with are raised. This is a mistake. The price of milk advanced in proportion with are raised. This is a mistake.

RURAL DELIVERY

In 1904 Mr. Caldwell was the Liberal candidate on the County of Carleton, which has an unbroken Conservative record since before Confederation. He was defeated but he has since had the usual experience of defeated Government candidates in regard to patronage. He has contended that all rural post offices should receive a daily mail, but he has been afraid that the cost of "free rural mail delivery" would be too great. Speaking on this subject to our representative, he said: "The articles on Free Rural Mail Delivery that were published in The Canadian Dairyman and Farming World have shown me that there are two sides to this question of Free Rural Mail Delivery, and I am now inclined to think that we will be justified in trying Free Rural Delivery in our thickly settled farming centres."

The Brood Mare

One of the greatest drawbacks to profitable horse-breeding throughout the country is the large proportions of inferior mares which are being used for breeding purposes. Many farmers do not seem to believe in the adage that it pays to "breed from the best." They have good mares but they are not breeding them and those that they are breeding are frequently very far indeed from being the "best." They are too often the worst; in many instances, so bad that they are quite useless for any ordinary purpose and if they had been geldings would have been destroyed but, because they are mares, they are used to perpetuate their species.

The brood mare should always be a well bred animal, but, altogether aside from good breeding, she should possess certain qualifications before she should be used for breeding purposes. First, she should be reasonably sound, she should at least be free from any of those diseases and blemishes known to be hereditary, such as spavins, ring-bones, certain forms of blindness, and roaring,

any of which are likely to be transmitted from parent to progeny generation after generation. While it is quite possible for a horse to suffer from any of those weaknesses as the result of an accident or injury yet in the great majority of cases those blemishes are due to hereditary taint and should disqualify an animal for breeding purposes.

Secondly, a mare should be of good conformation. It is easily possible to find mares that are quite sound and yet entirely unfit for breeding because of bad conformation. A horse of poor



Harvesting Corn at the "Stadions Stock Farm."

When Quebec dairymen, with the climatic disadvantages of their region, find that it pays to grow corn for the silo, our Ontario farmers should grow more and more of this great forage plant. The photo was taken on the farm of Mr. Gus Langlois, Cap Rouge, Que.

conformation is always an undesirable animal and nothing can be done to improve him. The blemished horse is often restored to usefulness by treatment but the one with any marked weakness of form must go through life just as he is. There is no help for him. Consequently, a mare of weak conformation should not be allowed to reproduce her kind for the reason that she is almost sure to transmit her own weakness to her progeny.

Vice is also hereditary. Bred from a vicious mare and you stand a good chance of raising horses with the same vice of the dam. And yet, how many mares are being used as brood mares simply because they are too vicious for any kind of work?

If the farmers of Ontario would weed out the inferior breeding mares and use only well-bred, sound animals of good conformation, the value of the horse-breeding product of the country could be increased to a very great extent in a very few years.—"Centaur."

"Breeding cattle, like everything else, can be learned only by slow degrees. It is better," concluded Mr. Stewart, "for a farmer who intends to breed pure bred stock to buy only a few to start with. He is bound to make some mistakes, and it will not cost him as much to make these mistakes with two or three cattle as it will if he buys a whole herd. After he has got a good start with a few animals and feels sure of his ground, he is better prepared to launch out and increase the size of his herd."

It is high time that an alteration was made in the method of assessing farm property. The present method tends to keep farmers from improving their houses and buildings, and it does not give them much encouragement.—F. E. Anderson, Peterboro Co., Ont.

Dairy cows should be liberally fed as 60 per cent. of what a cow can eat goes to sustain her body. He who would willfully withhold the other 40 per cent. would be foolish indeed.—N. J. Kneuman, Man. Agri. College.