

### The Gate That Lasts

The frame of the Perless Gate is made of steel tubing, electrically welded into one solid piece. It is strong and rigid and will not sag nor get out of order.

### Peerless Farm and Ornamental Gates

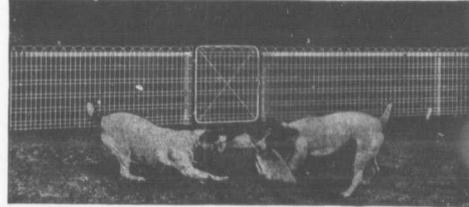
are built to stand. They will save you money because they never need repair. We also make lawn, farm and poultry fence that stands the test of time. Agents wanted. Write for full particulars.

THE BAWWELL HOUSE WIRE FENCE CO., Ltd., Dept. H - Winton, Man. Hamilton, Ont.

## Well DRILLING MACHINES

Over 70 sizes and styles, for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on skids. With engines or horse powers. Strong, simple and durable. Any mechanic can operate them easily. Send for catalog.

WILLIAMS BROS., ITHACA, N.Y.



A fence of this kind only 16 to 23c. per running foot. Shipped in rolls. Anyone can put it on the posts without special tools. We were the originators of this fence. Have sold hundreds of miles for enclosing parks, lawns, gardens, cemeteries, churches, station grounds, etc., etc. Supplied in any length desired, and painted either white or green. Also, Farm Fences and Gates, Chain Link Fences, Tools, etc., etc. Ask for our 1911 catalog, the most complete fence catalog ever published.

### THE PAGE WIRE FENCE CO., LTD., Walkerville, Ont.

Branches—Toronto, Car. King and Atlantic Ave. Montreal, 60-57 Notre Dame St. W. St. John, 27 Dock St. The largest fence and gate manufacturers in Canada. 507

## FARM MANAGEMENT

### How to Bale Straw

Kindly tell me through Farm and Dairy how baled straw is put up or what process is used to prepare it for market so that it will bring the high price quoted in Farm and Dairy—W.F.N. Hutton Co., Ont.

The laded straws as quoted on large city markets and reported in Farm and Dairy is put up into bundles by means of the hay press, such as is used for baling hay. These bales are held in shape by wire. Various types of baling machines are used. Some are driven by horse power, others by steam or gasoline power.

### A Silo of Scantling

Would a square silo built of 2 x 4 scantling laid down in log building style and spiked together be satisfactory?

Could one be built octagonal with better results?—J. A. M. Hastings Co.

An octagon silo built of the material described, that is, of 2x4 scantling, would be very much more satisfactory than a square silo built of such material. An octagon of say six feet side would not require any reinforcement, while a square silo of similar capacity would need to be braced on each side to enable it to stand the pressure. In erecting the silo great care would be necessary to firmly nail all the scantling.—J. H. G.

### Points on Root Culture

John Fixter, Macdonald College, Que.

Roots in a cow's ration are like butter on bread. They make the food more palatable and more easily digested. On the Macdonald College farm an average crop per acre has been 34 tons. The cost per ton was \$1.70.

Roots can be successfully grown on any kind of soil and in any part of Canada. The best root crops we secured on land turned out of sod and plowed down soon after cutting, thus giving an opportunity for the sod to decay and supply the soil with humus. Thorough cultivation of the soil the previous autumn is essential to best results with roots.

Sow plenty of seed. Cultivate early with a hand wheel hoe, getting as near the young plants as possible. Thin the plants out to eight or 10 inches apart with a sharp hoe.

We have found that Mammoth long red mangels give the largest crops, and are equal in food value, pound for pound, with either Tankard or Globe mangels.

### Alfalfa in the Rotation

Alfalfa as a rotation crop is particularly beneficial in that the crops that follow it will make a better

growth than they will on a soil of timothy or other grasses. Recent experiments at an American experimental station show that after an oat—corn—wheat rotation followed by three years of alfalfa, the oat yield was 75.3 bushels an acre or 7.6 bushels above the average yield after winter ryegrass and poor stands of sweet clover and red clover. After corn, the oat yield was 74.2 bushels an acre. These experiments were on good soil. With poor or average soil the oat crop following alfalfa would have been much larger in proportion to the crop following the grasses than here noted.

Mr. Henry Glendinning, of Victoria Co., Ont., has had a somewhat similar experience with the beneficial effects of alfalfa sod on succeeding crops. In adjoining an old alfalfa field was a bog yard, the soil of which naturally was very rich. The fields were plowed up together and seeded to corn. The corn on the alfalfa sod was 2½ feet higher than that in the pig yard and of a deeper green color. Mr. Jas. Stonehouse, who visited the farm about that time, noticed the difference and could hardly believe that after so many valuable crops of alfalfa had been taken off the soil should be in such a fertile condition.

The secret of this residue of plant food is the alfalfa stores up nitrogen in the soil. Nitrogen is the most important of fertilizer ingredients and the most expensive. Were nitrogen purchased in the form of commercial fertilizer it cost \$7 to \$15 to 20 cents a pound according to availability. In the air above every acre in our farms is enough nitrogen to grow good crops for thousands of years. This nitrogen can be obtained free of charge for the growing of leguminous crops. Alfalfa will not only draw on this great store of nitrogen but it stores two or three times as much as other stable crops each year, but will lay in the soil a store of nitrogen for succeeding crops.

### Why Keep Poor Cows?

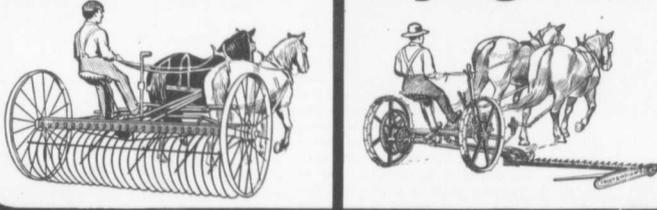
C. F. Whitley, In Charge of Records, Ottawa

It has been stated on good authority that the average yield of 17,000 cows in the famous Belleville, Ont., section for the factory season of 1910 was 3,480 lbs. of milk. There are sections in Quebec where it is doubtful if the average is much over 2,500 lbs. The average income per cow in connection with one Quebec creamery was only \$19.60. As some patrons obtained as much as \$34.00 a cow, it is obvious that many cows were earned scarcely \$15.00. Some primary principles of dairy farming seem to need attention here. Records of each cow's production, and plenty of milk to which cows should be bred because unproductive. During 1910 the average yield of 1,100 cows in Quebec cow testing associations for the full period of lactation was 179 pounds of milk or double the above creamery average.

Two good records near Winchester, Ont., for January, February, and March are 6,725 and 6,570 pounds of milk from 65 cows, that froze out in December. Such cows, sources of keen pleasure and good profit to their owners, are found in increasing numbers where cow testing is practiced. Plenty of individual cows in Canada are giving 10,000 and 12,000 pounds of milk and from 300 to 400 pounds of fat in one season. Why keep poor cows?

Enclosed you will find \$1.00 for our renewal to Farm and Dairy. We think Farm and Dairy is coming to be the front view fast. Each issue will be better than the one before. All access to Farm and Dairy and all concerned in its publication.—J. D. Lawrence, Richmond Co., Que.

## Save time at haying time



Next season outfit yourself with a Frost & Wood hay outfit—fit—A Giant Eight Mower and a Tiger Auto-Dump Rake. You will then have a haying equipment good for a lifetime's hard service—one that will save time at haying time, save you buying repair parts, and save a big slice of its cost yearly in reduced work for horses and men too.

## Built to Outlast the Men who Buy them

This Mower makes a 6-foot cut easier than others cut but a 4-foot swath. Plenty of roller bearings help it to run smooth, insure long life, reduce wear to the minimum. One owner has worked his Frost & Wood Mower hard every season for 20 years—and brought but ONE REPAIR

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PART in all that time. Reinforced Cutter Bar protected against wear by guard-shields behind the knives; Pitman rods of toughened forged steel; large bearings on hanger—not usual pins—allow cutter-bar no play and cannot wear down. Tiger rakes has as many good points as No. Eight mower. 64

# Frost & Wood Giant Eight Mower Tiger Auto-Dump Rake