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AND HOME MAGAZINE

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LONDON, ONTARIO, JULY 1, 1920.

No. 1449

LV.



Good Things To Eat

for the little ones
must be nutritious as
well as appetizing.

Bread, Cake and Pastry baked from

PURITY FLOUR

will supply in appetizing form, the nutriment so necessary to the growing child, will tempt the most fastidious appetite. A hungry child well fed is a healthy child.

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Toronto Winnipeg

Use this coupon to secure a copy of the **PURITY FLOUR Cook Book**, 180 pages of tried and tested information on the preparation of all manner of food for all meals.

COUPON

Enclosed please find 20 cents for one **PURITY FLOUR Cook Book**.

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BUY "IDEAL" FENCE NOW!

If you want sure delivery of fence we suggest that you get your order in now. We were fortunate in receiving an allotment of steel wire which, until exhausted, will enable us to fill all orders immediately. In asking you to place your order now we do so to safeguard you against probable disappointment. It's not a question of late delivery but no delivery that you must guard against. This is true of any wire fence. Orders will be shipped promptly on receipt. Get yours in early.

Heavy "IDEAL" Fence

Made throughout of Full Gauge No. 9 evenly Galvanized Hard Steel Wire. Carried in stock in 20, 30 and 40-rod rolls.

	Old Ontario South of North Bay	New Ontario and Quebec	Nova Scotia, New Brunswick, Pr. Edward Island
No. 4330 4 line wires, 33 inches high, uprights 22 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 11, 11, 11. Per Rod	41c	43c	44c
No. 5400 5 line wires, 40 inches high, uprights 22 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 10, 10, 10. Per Rod	52c	55c	57c
No. 6300 6 line wires, 30 inches high, uprights 22 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 4, 5, 6, 7, 8. Per Rod	55c	58c	60c
No. 6400 6 line wires, 40 inches high, uprights 22 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 7, 7, 8, 9, 9. Per Rod	60c	63c	65c
No. 7400 7 line wires, 40 inches high, uprights 22 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 5, 6, 6, 7, 7, 8, 8, 9. Per Rod	67c	70c	72c
No. 7480 7 line wires, 48 inches high, uprights 22 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 5, 6, 6, 7, 7, 8, 8, 9. Per Rod	70c	73c	75c
No. 8420 8 line wires, 42 inches high, uprights 22 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 6, 6, 6, 6, 6, 6, 6, 6. Per Rod	75c	78c	81c
No. 842 8 line wires, 42 inches high, uprights 16 1/2 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 6, 6, 6, 6, 6, 6. Per Rod	80c	83c	86c
No. 8470 8 line wires, 47 inches high, uprights 22 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 4, 5, 6, 7, 8, 8, 9. Per Rod	76c	79c	82c
No. 847 8 line wires, 47 inches high, uprights 16 1/2 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 4, 5, 6, 7, 8, 8, 9. Per Rod	83c	86c	89c
No. 935 9 line wires, 35 inches high, uprights 16 1/2 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 3, 3, 3, 4, 5, 5, 5, 6. Per Rod	88c	92c	95c
No. 948 9 line wires, 48 inches high, uprights 16 1/2 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 6, 6, 6, 6, 6, 6, 6, 6. Per Rod	92c	96c	\$1.00
No. 9481 9 line wires, 48 inches high, uprights 13 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 3, 4, 5, 6, 7, 7, 8, 8. Per Rod	\$1.04	\$1.08	\$1.12
No. 9500 9 line wires, 50 inches high, uprights 22 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 4, 4, 5, 6, 7, 8, 8, 8. Per Rod	85c	89c	92c
No. 950 9 line wires, 50 inches high, uprights 16 1/2 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 4, 4, 5, 6, 7, 8, 8, 8. Per Rod	92c	96c	\$1.00
No. 1050 10 line wires, 50 inches high, uprights 16 1/2 inches apart. All No. 9 Hard Steel Wire, evenly galvanized. Spacing 3, 3, 3, 4, 4, 5, 5, 6, 6, 6, 6, 8, 8, 8. Per Rod	\$1.00	\$1.04	\$1.09

MEDIUM HEAVY "IDEAL" Fence

Made throughout of Hard Steel Wire, evenly Galvanized. Carried in stock in 20, 30 and 40-rod rolls.

	Old Ontario South of North Bay	New Ontario and Quebec	Nova Scotia, New Brunswick, Pr. Edward Island
No. 630 6 line wires, 30 inches high, uprights 16 1/2 inches apart. All Hard Steel Wire, evenly galvanized. Spacing 4, 5, 6, 7, 8. Per Rod	41c	42c	43c
No. 641 6 line wires, 41 inches high, uprights 16 1/2 inches apart. All Hard Steel Wire, evenly galvanized. Spacing 7, 7, 8, 9, 10. Per Rod	42c	43c	44c
No. 6410 Same as Style No. 641 with uprights 22 inches apart. Per Rod	40c	42c	43c
No. 726 7 line wires, 26 inches high, uprights 13 inches apart. All Hard Steel Wire, evenly galvanized. Spacing 3, 3 1/2, 4, 4 1/2, 5, 6. Per Rod	45c	46c	48c
No. 7261 Same as Style No. 726, but with uprights 8 inches apart. Per Rod	53c	55c	57c
No. 7266 Same as Style No. 726, but with uprights 6 inches apart. Per Rod	59c	61c	63c
No. 742 7 line wires, 42 inches high, stays 13 inches apart. All Hard Steel Wire. Spacing 6, 6, 7, 7, 8, 8, 8. Per Rod	51c	54c	56c
No. 834 8 line wires, 34 inches high, uprights 13 inches apart. All Hard Steel Wire, evenly galvanized. Spacing 3, 3 1/2, 4, 4, 5, 6, 8. Per Rod	54c	56c	57c
No. 936 9 line wires, 36 inches high, uprights 13 inches apart. All Hard Steel Wire, evenly galvanized. Spacing 3, 3 1/2, 4, 4 1/2, 5, 5 1/2, 6. Per Rod	56c	58c	61c
No. 949 9 line wires, 49 inches high, uprights 13 inches apart. All Hard Steel Wire, evenly galvanized. Spacing 4, 4, 5, 6, 7, 7, 8, 8. Per Rod	62c	64c	66c
No. 1150 11 line wires, 50 inches high, uprights 13 inches apart. All Hard Steel Wire, evenly galvanized. Spacing 3, 3, 3, 4, 4, 5, 6, 7, 7, 8. Per Rod	71c	73c	75c
No. 1448 14 line wires, 48 inches high, uprights 13 inches apart. All Hard Steel Wire, evenly galvanized. Spacing 2 1/2, 2 1/2, 2 1/2, 2 1/2, 3, 3 1/2, 4, 5, 5 1/2, 5 1/2, 6. Per Rod	83c	85c	88c

"IDEAL" Poultry Fence

Top and bottom wires No. 9, all others No. 13. Carried in stock in 10 and 20-rod rolls.

No. 1848 18 bar, 48 inches high, cross-bars 8 inches apart. All Hard Steel Wire, evenly galvanized. Spacing, from bottom up, 1 1/2, 1 1/2, 1 1/2, 1 1/2, 2 1/2, 2 1/2, 2 1/2, 2 1/2, 3, 3, 3 1/2, 3 1/2, 4, 4 1/2, 5. Per Rod	\$1.05	\$1.10	\$1.15
No. 2060 20 bar, 60 inches high, cross-bars 8 inches apart. All Hard Steel Wire, evenly galvanized. Spacing, from bottom up, 1 1/2, 1 1/2, 1 1/2, 1 1/2, 2 1/2, 2 1/2, 2 1/2, 2 1/2, 3, 3, 3 1/2, 3 1/2, 4, 4 1/2, 5, 6, 6. Per Rod	\$1.15	\$1.20	\$1.25

"IDEAL" Lawn Fence and Lawn Gates

Write for Price List and Catalogue.

Improved "IDEAL" Farm Gates

Horizontal wires all No. 9, only 5 inches apart. Uprights No. 12 wire, 6 inches apart. Diagonals No. 13, furnish a strong close mesh, chicken-proof and pig-proof. New patented brace tightener and latch—the biggest gate improvements in years.

Length, feet	Height, inches	Old Ontario South of North Bay	New Ontario and Quebec	Nova Scotia, New Brunswick, Pr. Edward Island
10	36	\$4.00	\$4.20	\$4.40
10	42	4.25	4.45	4.70
10	48	4.50	4.75	4.95
10	54	4.75	4.95	5.20
10	60	5.00	5.25	5.50
10	66	5.25	5.50	5.75
10	72	5.50	5.75	6.00
12	36	8.00	8.75	9.25
12	42	8.50	9.20	9.65
12	48	9.00	9.45	9.90
12	54	9.50	10.00	10.45
12	60	10.00	10.75	11.20
12	66	10.25	10.75	11.30
12	72	10.75	11.30	11.80
14	48	11.00	11.50	12.00

Improved "IDEAL" Stock Gates

Wire filling No. 9 throughout, same as Heavy "IDEAL" Fence. No fence filling used. Each wire put in by hand.

Carried in stock in following sizes only	\$9.00	\$9.45	\$9.90
12 feet long, 51 inches high, each	9.25	9.70	10.20
14 feet long, 51 inches high, each	9.50	10.00	10.45

Fence Supplies, Brace Wire and Barb Wire

Ideal Steel Posts, 1 1/2 x 1 1/2" long	\$0.60	\$0.65	\$0.68
Ideal Fence Stretchers, each	12.50	13.75	14.20
Hand Stretcher, each	1.50	1.65	1.75
Universal Post Hole Digger, each	3.50	3.50	3.60
Galv. Staples in 25-lb. boxes	2.20	2.30	2.40
Galv. Staples in 100-lb. boxes	8.00	8.30	8.60
No. 9 Brace Wire, per 25 lbs	2.10	2.40	2.50
No. 9 Coiled Spring Wire, per 100 lbs	7.40	7.70	8.00

Barb Wire

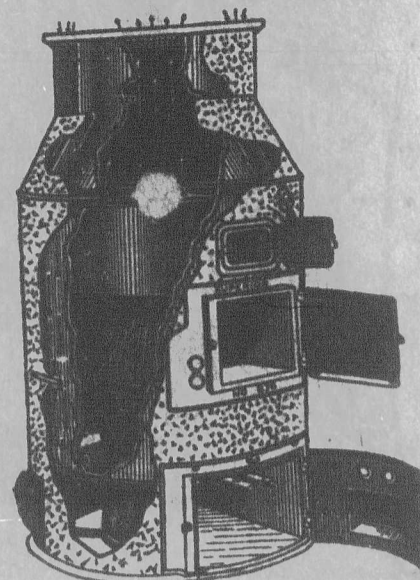
4-pt. 4" Galv. Cabled, per 100 lbs	\$5.00	\$5.25	\$5.50
4-pt. 6" Galv. Cabled, per 80-rod spool	6.70	6.95	7.20
2-pt. 5" Galv. Cabled, per 80-rod spool	6.40	6.65	6.90

Our Guarantee—"Ideal" Fence is guaranteed to be made as the best fence should be made,—to be made exactly as represented. If you are not satisfied with "Ideal," return it at our expense and get a new lot or your money back. This guarantee covers everything—no conditions—no loop-holes.

Reference—The Canadian Bank of Commerce.

Ideal Fence and Spring Company of Canada, Limited
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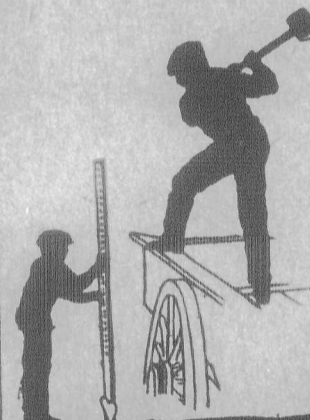
The Pilot Superior Supplies Moist, Warm Air



By means of the properly-located water pan the warm air is kept pure and healthful, and the proper amount of moisture is insured. The heat of the furnace vaporizes the water and sends it up in just the right quantities, providing a balmy atmosphere. This humidifier also eliminates the danger of drying out furniture and warping woodwork. A PILOT SUPERIOR PIPELESS FURNACE can be installed in six hours.

Manufactured by

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Easy to Drive. Holds Firmly in Place.

If you've been accustomed to the back-breaking job of digging post-holes, handling heavy wood posts, filling in and tamping, you'll be delighted with the ease, speed and economy with which PRESTON STEEL POSTS

are erected. The sharp bevelled point goes in with a few hammer-blows, and the anchor-plate binds the post so firmly that no replacements are required. Haul enough at one load to fence a 40 acre field—drive them in a day—have a good-looking, permanent fence. Write for Folder.

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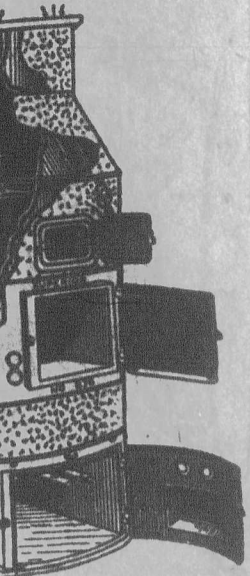
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prevents drying out furniture
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MODEL can be installed in six

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Drive.
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wood posts, filling in and
will be delighted with the
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POSTS

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few hammer-blows, and
late binds the post so
no replacements are re-
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the field—drive them in a
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Buy a Gilson Engine without charge
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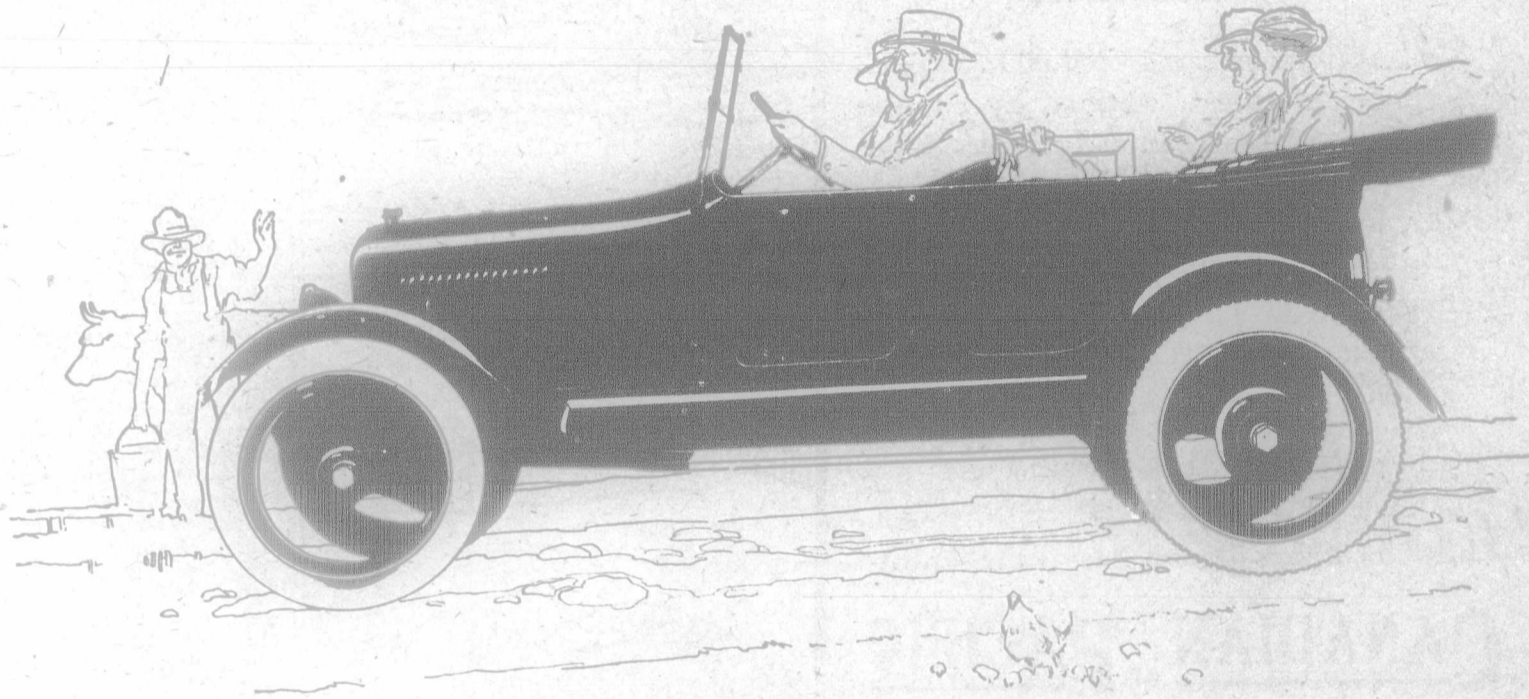
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FARMERS want facts. It is a fact that farmers all over
Canada testify to the remarkable comfort, economy and
sturdiness of the Overland.

It is a fact that the car has demonstrated its stamina to
farmers in every province—its capacity to stand all kinds of
punishment without damage.

It is a fact that farmers everywhere are finding that the
Overland handles and turns easily, and that it costs little to
own and operate.

Examine its bright, weather-resisting enamel finish.

See how easily its detachable upholstery removes
for carrying farm produce to town, or farm supplies
from the city.

Experience its many conveniences, such as electric
starting and lighting, and three-speed transmission.

Note how high-grade and complete it is in every
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To fully appreciate how smoothly it rides, pick out
rough roads and drive it.

Then you *know* what a wonderful car the Overland
really is for rural districts and varied uses on the farm,
and why it is gaining in popularity among farmers.

In one large Canadian plant, the Overland is built
under the supervision of Canadians who appreciate
Canadian conditions and build accordingly.

Have your nearest Overland dealer demonstrate
this car over a particularly rough stretch of road.

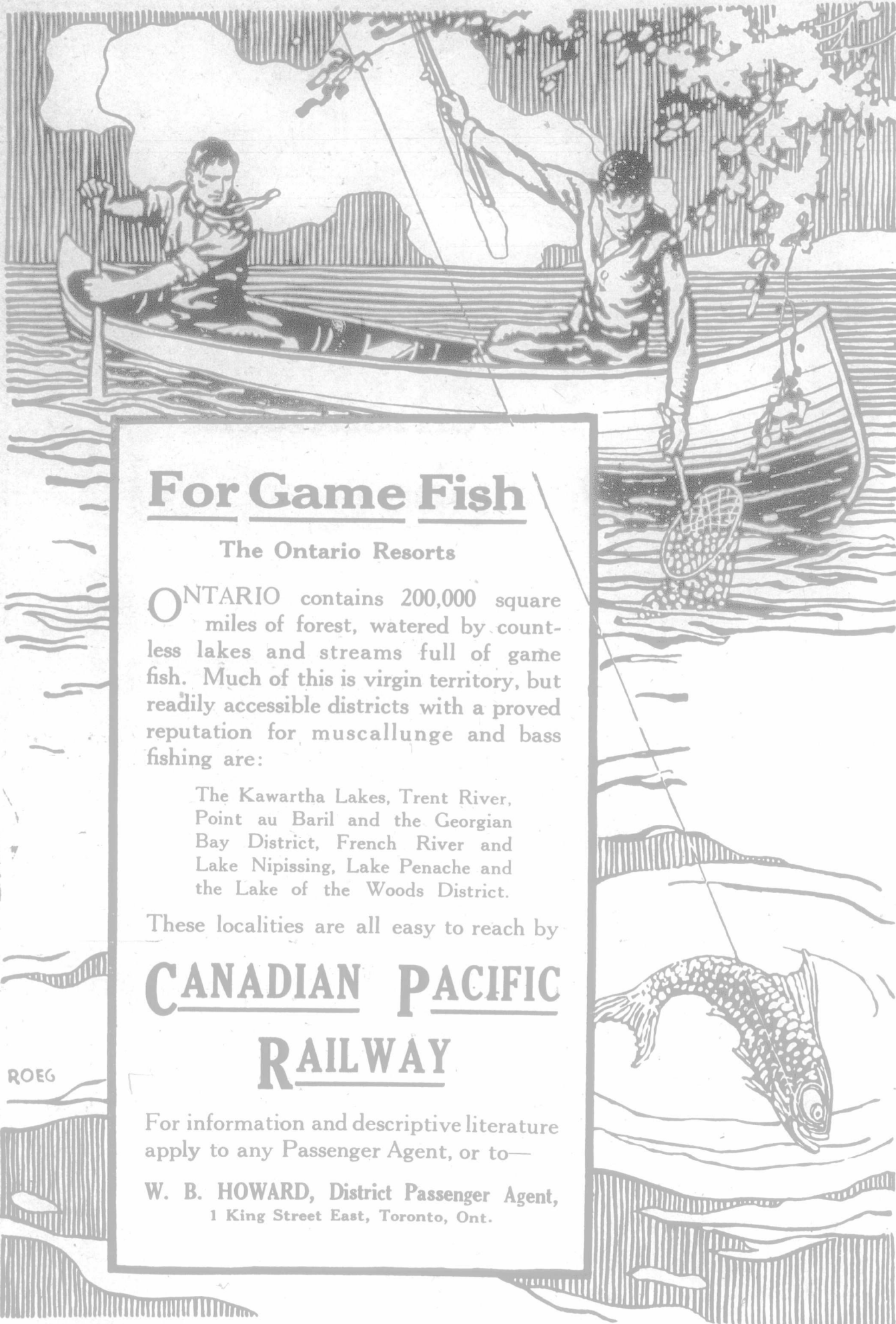
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The Ontario Resorts

ONTARIO contains 200,000 square miles of forest, watered by countless lakes and streams full of game fish. Much of this is virgin territory, but readily accessible districts with a proved reputation for muscallunge and bass fishing are:

The Kawartha Lakes, Trent River, Point au Baril and the Georgian Bay District, French River and Lake Nipissing, Lake Penache and the Lake of the Woods District.

These localities are all easy to reach by

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ROEG

Corn Smut.

(Experimental Farms Note.)

The smut of corn is well known to farmers. The smut masses which usually appear as swollen outgrowths may be found on the ears, stem or leaves. These outgrowths are sometimes quite large and make the smut very conspicuous. They are at first covered by a thin membrane, which soon breaks away and exposes the black mass of spores. The mass soon becomes powdery and the myriads of spores which each mass contains are readily blown about by the wind. It is these spores that spread the disease during the growing season and carry the smut over the winter to the next crop.

In many of the smuts, as the smut of oats and the stinking smut or bunt of wheat, the spores get on the seed and when the seed is planted begin growing with it and attack the young seedling. Treatment with a solution of formaldehyde is effective in killing the spores on the seed and preventing infection of the young plants. In the cases of the loose smut of wheat and the loose smut of barley the spores are blown about at blossoming time and grow into the very young seed. The hot water treatment of the seed is used to kill the smut inside the seed. In the case of corn smut seed treatment of any kind has been found to be of no use, as the smut spores live over in the soil or in manure rather than in or on the seed. So the only way to control the corn smut is to prevent the smut spores getting into the soil or the manure. Not only do the spores live in the manure pile for some time, but they may actually increase rapidly in number if the conditions are favorable.

Corn smut is found in all parts of Canada where corn is grown, but is more common in Eastern Canada. Generally it is not very prevalent and the losses are not great. Where it is common, measures should be taken to prevent its spread. The smut masses should be cut out during the growing season. They should be removed before they have broken open and spread their spores. They should not be left lying where they may reach manure or refuse and be carried back to the soil but they should be gathered and burned. Rotation of crops is also valuable in preventing corn smut. The smut does not live long in the soil and will not attack any other crop, so time should be given for the smut to die out in the soil before another crop of corn is planted. Seed treatment has not been found to be of any use in corn smut.—W. P. Fraser, Plant Pathologist.

"Practical "Horse Talk."

Copies of the following suggestions about the care of horses in hot weather were sent to the principal daily newspapers in Massachusetts by the Angell Memorial Animal Hospital, Boston:

The Horse to His Driver in Summer.

If a horse could talk he would have many things to say to his driver in summer. He would say:—

"Water me often when the heat is intense, a little at a time if I am warm; don't water me too soon after I have eaten, and always at night when I have eaten my hay.

"When the sun is hot let me breathe once in a while in the shade of some house or tree. Anything upon my head, to keep off the sun, is bad for me unless it is kept wet, or unless the air can circulate freely underneath it.

"If I stop sweating suddenly, or if I act strangely, breathe short and quick, or if my ears droop, get me into the shade at once, remove harness and bridle, wash out my mouth, sponge me all over, shower my legs, and give me two ounces of aromatic spirits of ammonia, or two ounces of sweet spirits of nitre in a pint of water, or a pint of warm coffee. Cool my head at once, using cold water or if necessary chopped ice wrapped in a cloth.

"A warm night in a narrow stall neither properly cleaned nor bedded unfits me for work.

"Turning the hose on me is too risky a thing to do unless you are looking for a sick horse. Spraying the legs and feet when I am not too warm on a hot day would be agreeable.

"Please sponge out my eyes and nose and dock when I come in tired and dusty at night with clean cool water, and also sponge me under the collar and saddle of the harness."—Our Dumb Animals

RENNIE'S CALF MEAL

GIVES THE BEST RESULTS OBTAINABLE

Obtain from Your Dealer or write to
THE WILLIAM RENNIE COMPANY
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corn Smut.

mental Farms Note.)
 corn is well known to
 nut masses which usually
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 sometimes quite large
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 P. Fraser, Plant Path-

"Horse Talk."

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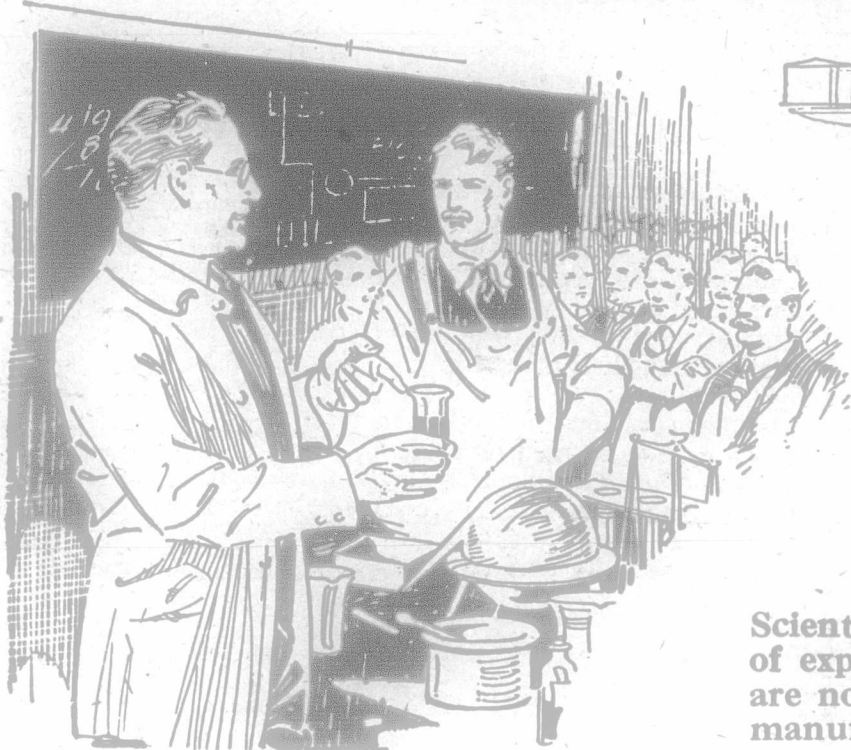
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 oo warm on a hot day
 e.

out my eyes and nose
 come in tired and dusty
 n cool water, and also
 the collar and saddle of
 or Dumb Animals

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Scientific processes of refining, developed during 35 years of experience and testing in the En-ar-co laboratories, are not entrusted to "green" hands when it comes to manufacture.

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 A pure, dry engine fuel, that means extra power and "pep."

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 A smooth, wear-resisting grease, that removes the grind and squeak from axles.

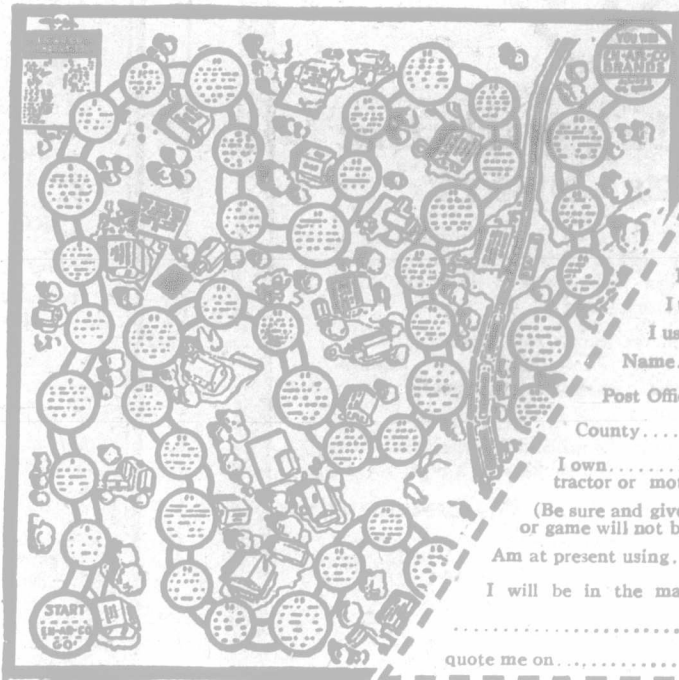
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- I use.....gals. Gasoline per yr.
- I use.....gals. Motor Oil per yr.
- I use.....gals. Kerosene per year.
- I use.....gals. Tractor Oil per year.
- I use.....lbs. Motor Grease per year.
- I use.....lbs. Axle Grease per year.

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I own.....(make of auto, tractor or motor boat.)

(Be sure and give make of auto, tractor or motor boat, or game will not be sent.)

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.....and you may quote me on.....gals. En-ar-co Motor Oil.

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Naturally the cream separator does not make or break the average farm user. The majority of them have no sure means of knowing just what their separator may be saving or wasting.

But the big user in the whole milk creamery or city milk and cream plant does know, and in the long run the separator means success or failure in his case.



That's the reason why 98% of the world's users of factory size cream separators use the De Laval, and why the few such machines of other makes occasionally sold soon find their way to the scrap heap.

And it may well be remembered that De Laval superiority means relatively just as much to the small as to the big user. Ten dollars a month means as much to the farmer as ten dollars a day to the creameryman.

It's not only a matter of quantity and quality of cream, but of capacity, labor saving,

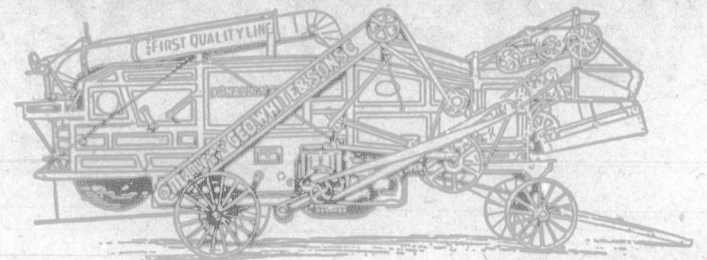
dependability and durability over a long term of years.

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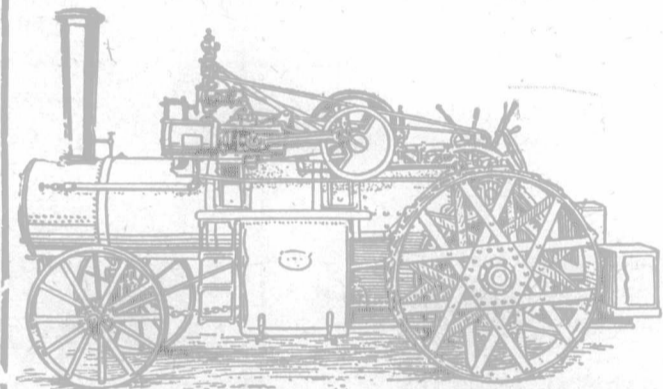
Altogether, breakdowns are very expensive for a thresherman. That's why it pays to get good machinery at the start, and that's why we build our machines with such great over-strength in every part. That's why we choose the highest grade of material. That's why we are so particular about the workmanship that goes into "The First Quality Line."

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LV.

LONDON, ONTARIO, JULY 1, 1920.

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EDITORIAL.

If you haven't yet swatted the rooster, swat him now.

The hens that lay well during July and August are likely to lay well next winter.

If all men were really neighborly, co-operation would be the simplest thing in the world.

It is going to take a lot of hard sledding and years of effort to oust the scrub bull from his position on the farms of Eastern Canada.

On many farms an extra silo is needed for summer silage, and on others there are no silos at all. Now is the time to make plans for building.

If milk producers for the city trade are to get an eight months' winter price, it will soon be time to think about what a fair price ought to be.

The Ontario Milk and Cream Testing Act cannot go into effect too soon. There are many complaints throughout the country of unfair tests.

The recent rains have meant a great deal to the crops throughout Ontario, although it is too much to expect that they will be able to bring the hay crop along as fast as if they had come earlier.

On June 17 we saw some alfalfa well up to 75 per cent. in bloom in the County of Peel. In that neighborhood a little alfalfa had already been cut, while in the Hamilton district cutting was quite general. The rains would not be of any benefit to these fields.

It is a source of satisfaction to know that the Provincial Government is at last about to put the practice of veterinary science in Ontario on a footing of equality with other professions. The day of the old-time "horse doctor" passed years ago, but its passing has just been officially announced.

If attempts have actually been made to bribe members of Parliament, those to whom the bribes were offered should not have mentioned the matter unless they were prepared to make known the names of the offenders. Treason is the only political crime more serious than bribing a government member or official.

Notwithstanding the remarkable development of co-operation by the United Farmers of Ontario and other provinces, its growth in individual localities is comparatively slow. The spirit of indifference and independence must first be overcome, and we believe that social gatherings, picnics, etc., will go a long way toward attaining this end.

The Federal Government may be doing a good thing in cleaning up some of the waste in the government service, but we cannot see that letting good experienced men go for the sake of a reasonable increase in salary fits in very well with this policy. A policy that provides for mediocre men at low salaries inevitably means a larger number of civil servants and less efficiency.

The Animal Diseases Eradication Board has a big task ahead of it. The control of tuberculosis, hog cholera and kindred diseases is one of the biggest agricultural problems of the day, and we are hopeful that the new board composed of producers, packers and representatives of the Federal Government will be able to act more effectively than has been possible in the past for government agencies acting alone.

Alternative Milk Markets.

The rapid and comparatively recent growth in Canada of the condensed and milk powder business has added another factor to the milk marketing problem which has proven at times to be somewhat disturbing. The producer who forsook the cheese factory or the creamery for the condensery or powder factory has not found, in all cases, a bed of roses. The first thing he found was that he sometimes felt dissatisfied about the price he was getting, just as he used to do when the milk went to the cheese factory. He also realized later on that though he was only a cog in the wheel before, the wheel was bigger now and himself a figure of less significance than when he patronized the local factory. In other words, changing his patronage from the small community cheese factory to the large manufacturing firm with no particular responsibility to the community, threw him into a wider circle where he was farther from the centre of control and lessened his individual importance. In cases of dissatisfaction on any score, his individual protest had lost some of its effectiveness. The large volume of milk handled by the condensery or milk powder plant made his individual contribution of less importance relatively and unless he could regain or better his former status by joint action with other patrons, the only thing he could do was to "grin and bear it" or get out. But even the banding together of patrons into local milk producers' associations has been, in many cases comparatively ineffective so far as they have gone, for the reason that the demand for a large volume of milk has caused the establishment of receiving stations or subsidiary plants in practically all territory contiguous to the larger and original plant of each company. This has resulted in the acquiring or closing down of nearly every competing cheese factory in some districts, and the condensery or powder factory in such districts has become virtually master of the field—sometimes to the serious discomfiture of its patrons. We have in mind one plant which, deliberately or not, has by this method gained practical control of about 150,000 pounds of milk daily, leaving no desirable alternative market for its patrons, who probably number several hundred.

Whether this was done deliberately or not does not alter the fact that it was good business for everyone but the producer. He, however, can scarcely blame anyone but himself because other people cannot be depended upon to look after his financial interests to the detriment of their own. Condenseries and powder factories are carrying on important and legitimate businesses, and where a large volume of milk is required the most natural thing to do is to endeavor to get it and keep it. It is for the producer to remedy his own conditions, and we believe a remedy is available if it is adopted. Organizations such as the Ontario Milk and Cream Producers' Association are splendid and necessary, but they must be backed up by more permanent local associations than are at present affiliated with it. If producers are dissatisfied they must be prepared to market their milk elsewhere, but to do this effectively and to get the best market for the milk of a community, action must be co-operative or collective rather than individual.

An article in this issue (the fourth of a series now appearing in "The Farmer's Advocate") suggests co-operative milk distributing plants as the most practicable method for marketing the milk produced in a community. There is no reason why such a method of selling milk should not prove eminently successful. There is no reason either why the individual milk producer should not have within his reach several alternative markets. Not much of an investment would be required on the part of each patron to put the whole milk market, the cheese market, the butter market and the cream market within the reach of every milk producer in the community. Moreover,

the patrons could elect annually a board of directors who would handle the entire production of all members for the year, and these few men could handle the resulting large volume of milk to much better advantage than each individual member could handle his own small supply. There is no reason that we can see why the milk of the organization should not be hauled to the factory co-operatively, tested there, and delivered there to the purchaser if disposed of as whole milk. Co-operation is needed in the milk-producing business as much or more than in any other branch of agriculture. Co-operative selling of milk is the most business-like method of sale for the dairymen, and is also the most satisfactory way of remedying the conditions that now exist in some condensery and milk powder districts. The producers should never have let the cheese factories get away from them, but co-operation can still remedy this oversight.

O. A. C. Courses.

Last week we announced a change in the courses which will henceforth be given in agriculture at the Ontario Agricultural College. These changes we believe to be for the better, and we are glad that the Minister of Agriculture has decided to put them into effect. For forty-five years the Ontario Agricultural College has been materially contributing to the agricultural progress of Ontario and of the Dominion as a whole. In fact, its sphere of influence has extended over the whole world, for students have been drawn by the excellence of its courses from the four quarters of the globe, and a very large percentage of them have gone out to add further lustre to its previous high standing among institutions of its kind. Its graduates fill important positions all over the North American Continent; many of the colleges and experiment stations of the United States are directed by former O. A. C. students; and farmers and professional agriculturists in nearly every country lead the way in agriculture for their fellow countrymen by virtue of their training here.

However brilliant the success of the O. A. C., a change in the courses must prove an advantage. The primary function of the College was to give the Ontario farm boy an opportunity of coming into closer touch with the best of agricultural art, and with sufficient of the several contributory sciences to enable him to return to the farm at the end of a two-years' course better equipped to achieve success in animal and crop production, and to understand the nature of his problems as they developed. It was not intended that the farm boy should be lured from the farm by the hope of a degree and a professional position, but the combining of the two-year practical course and the four-year degree course undoubtedly did have a tendency to bring this about. The prospect now is for a two-year course designed to be as practical as possible, so that the boy who is going back to the farm will be given nothing that will afterwards prove unnecessary to him as a practical farmer and an industrious, intelligent citizen.

It is not, we hope, with any prospect of lessening the practical knowledge of the professional agriculturist that the four-year or degree course is separated from the shorter and more simple associate course. It would be wise rather to insure even more practical knowledge by requiring additional practical experience before entering. At least this would be advisable on the part of those who are to take the Agricultural, Horticultural, Dairy or Poultry options. Generally speaking, the requirement of Junior Matriculation standing will make it more likely that the graduate will take his place ably as a professional exponent of the world's primary industry, especially if it is strengthened by a strong course designed to teach the principles of agricultural science and organization. The men who lead the way in live stock and crop production, in horticulture, dairying, and poultry husbandry must be strong men

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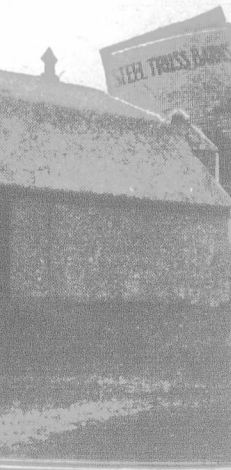
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The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

Published weekly by
THE WILLIAM WELD COMPANY (Limited).

JOHN WELD, Manager.
Agents for "The Farmer's Advocate and Home Journal,"
Winnipeg, Man.

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well equipped to meet each problem as it arises and they must qualify for either farm management, teaching, investigation or research. It is perhaps a fair criticism of the past history of the College to say that a few men have been graduated who should not have been given the degree. It is possible, too, that under the new arrangement a few men will not take the four-year course because of the necessity for Matriculation standing, who would otherwise go on and become a credit to the institution and their calling. Time may bring about a modification of the present proposals to take care of such outstanding men, especially if they be students particularly successful in the more practical subjects, and have a desire to take up professional work. We feel that the change is in the right direction, but experience alone can tell whether the departure is correct in all respects.

Disease-free live stock should be the aim of everyone interested in the live stock industry. The tuberculin test properly conducted with reliable tuberculin will, in nearly every case, detect the animals infected. There may be poor lots of tuberculin placed on the market, and the material may have been used by some unscrupulous persons to their own gain, which has made some dubious of its effectiveness as a detective of the disease. The material may be procured quite easily, and it is unfortunate that the different brands have not always given similar results. Having the tuberculin under Government control should insure greater uniformity in the quality sent out, which would lead to more accurate results.

It is estimated that Canada produced in 1919 dairy products to the value of \$251,526,201 made up of the following: Cheese, 167,734,982 lbs.; creamery butter, 101,554,131 lbs.; dairy butter, 125,000,000 lbs.; whey butter, 1,396,814 lbs.; cascin, 199,013 lbs.; sterilized milk, 7,460,400 lbs.; condensed milk, 61,898,303 lbs.; evaporated milk, 16,107,934 lbs.; condensed skim-milk, 494,973 lbs.; milk powder, 6,591,099 lbs.; ice cream, 2,892,974 gallons; milk sold as milk, worth \$72,000,000; buttermilk worth \$254,147; butter-fat in cream sold, 6,380,727 lbs.; whey cream, 414,627 lbs.; whey worth \$55,665. The dairy industry shows a steady growth year by year, as can be seen from these figures, as well

as by a study of the figures, showing the total number of dairy patrons, which give 252,416 as the number for 1918, as compared with 212,927 for 1915, 221,192 for 1916, and 248,683 for 1917.

By-Products and Loose Ends.

It is the marvel of the uninitiated that business firms doing a large manufacturing or other mercantile business can sometimes suffer large temporary losses, due to fluctuating markets or other adverse conditions, without serious handicap. They are not seriously crippled by these losses, as a rule, and can weather the storm without much more than temporary inconvenience. The reason for this, in most cases, is the fact that the business is conducted along lines of efficiency and all loose ends are carefully checked up as the business progresses. If it is a manufacturing business in all probability there are valuable by-products which are made use of to the best possible advantage. In fact, one very frequently hears this statement: "We make practically all of our money out of this end of our business," reference being made to a feature which in all probability would escape the eye of the average man, but which serves, nevertheless, as a balance wheel in the operations of the company, and provides revenue from which occasional and inevitable losses on the main product can be met. In other words, the successful merchant, manufacturer or other business man develops his by-products, and gathers up all the loose ends of his business to act as a sort of profit insurance in times of depression. These odd items of revenue thus have a steadying effect on the business like the governor on an engine, and are an every-ready reliance in times of difficulty.

There are many by-products of the farm and many loose ends also, but it cannot always be said that the farmer's failure to secure a satisfactory return for his year's work is in spite of careful attention to these details. Too often it is because of lack of such attention. The individual farmer does not, in the usual sense of the word, supply a product which bears his own individual brand, as is the case with the manufacturer. He sells milk, butter, prime steers, number one oats or wheat, or number one apples, as do thousands of other farmers, while the manufacturer caters to the whims of a consuming public with articles made distinctive by his brand and method of manufacture, and stamped with the individuality of his firm. The manufacturer makes a market for his product that he can at least partly control, and supports the framework of his business with a careful utilization of all raw material not required for the main articles manufactured. The farmer supplies the world's market and does not control it. Given an equal acreage, equally fertile land, equally good live stock and equal ability as feeders or growers of crops, two men engaged in farming may make the same amount of money from the same kind of crops and live stock, because the consumer pays practically the same for both products which, in this case, also cost practically the same. Farming is a business of few or no special markets. The man who succeeds above his fellows uses his capital to better advantage, or he seizes upon some small sources of revenue that his less successful neighbor neglects. Perhaps he begins to use a pure-bred bull instead of a scrub or grade, and thus gets a greater return for feed and labor. Perhaps he takes care of the farm orchard, or replaces the poor hens in the flock with good layers, or treats his seed grain for smut. He may plan a more efficient rotation, or erect a silo for summer use, or feed a better balanced ration to his stock. He may suffer less loss of live stock from disease and accident, or use fertilizers to more advantage. He may be a co-operator and save a little here and there in buying or selling. In short, he can only be more successful than his neighbor by keeping his eyes open wider. The question is merely one of taking better advantage of the same ultimate market. So many sciences contribute to successful farming, so many useful arts play a part in every-day farm life, and so many avenues of waste open up on the average farm with its comparatively small capital investment, that in farming as in "big" business, the winner is the one who gathers up the loose ends and keeps an eagle eye on the by-products.

Do not forget that the young calf does best if it is not allowed to run out in the hot sun of an unshaded pasture. Flies and the sun should never be allowed to check the growth of the calf under six months old. Keep in a darkened stable, or allow to run in a handy paddock during the night when the heat is not so intense.

Nature's Diary.

BY A. BROOKER KLUGH, M. A.

In the waters of our lakes, ponds and streams there is a great wealth of life, and a little while spent in close observation at the margin of any body of fresh water will lead to the discovery of many extremely interesting forms of animal life.

Insects are abundant in pools, lakes and streams, as they are in every habitat we investigate, the adults of a good many species living there, and the young of hosts of other species which are aerial in their adult state, such as the dragon-flies, damsel-flies, shad-flies, and caddis-flies.

A good number of the adult insects which are found in the water belong to the order Hemiptera, that is the order of Bugs in the true entomological sense, and not in the loose sense in which this much over-worked word, bug, is used in popular parlance. Very common are the little oval, mottled bugs known as Water-boatmen. (Fig. 1.) They are usually seen swimming about on the surface, but they can descend below the surface and remain there for a long time, since they carry down with them a film of air held by the fine hairs which cover the

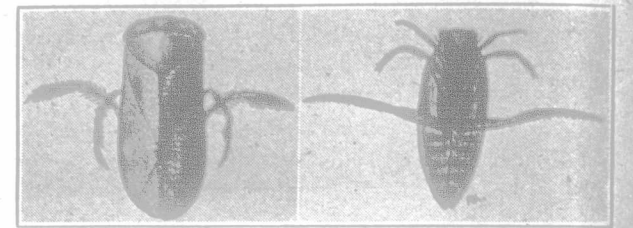


Fig. 1—*Corisa*. Fig. 2—*Notonecta undulata*.
A water-boatman. A back swimmer.

body. They have very sharp beaks, by means of which they pierce the bodies of other aquatic animals and suck their juices, and, like some of the other water-bugs, they must be handled with care as their beaks can also pierce the skin of one's finger. Their eggs are attached to the stems of aquatic plants. When the cold weather comes on the Water-boatmen descend to the bottom and hibernate in the mud.

The Back-swimmers, another group of aquatic bugs, swim, as is indicated by their name, with the back downwards, propelled by the powerful strokes of their long, oar-like, hind legs. (Fig. 2.) The eggs are laid in the stems of water-plants, which are pierced by the sharp ovipositor of the female, two-thirds of the egg being pushed into the stem and the other third left protruding. The Back-swimmers feed on small fish and other aquatic animals, which they kill with their sharp beaks. When they dive they carry down so much air, held in the hairs of the body, that they have to hold on to some submerged object with their front legs to prevent themselves from popping to the surface.

The Water-striders (Fig. 3) are long-legged, aquatic bugs which may be seen skating over the surface of still waters. One can discover how these insects are able to skate over the surface of the water by looking at the shadow of a Water-strider cast on the bottom of shallow water. We notice that the shadow shows a rounded spot at the end of each of the four legs which touch the water. This spot is caused by the bending in of the

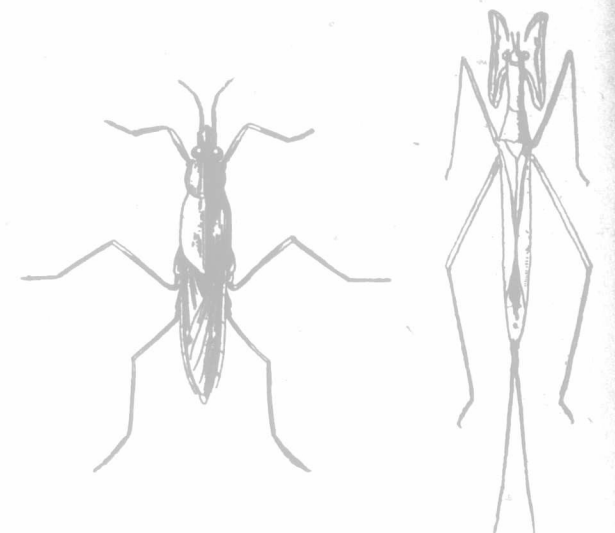


Fig. 3—A Water Strider. Fig. 4—Water Scorpion.

surface film of the water by the insect's foot, and they are able to travel over the surface because their feet are not wetted, and their slight weight thus dimples, but does not break through, the surface film. The Water-striders feed on insects, both living and dead, which they find on the surface of the water. The eggs are laid on the leaves and stems of water plants and hatch in about two weeks. The adults pass the winter in the mud of the banks.

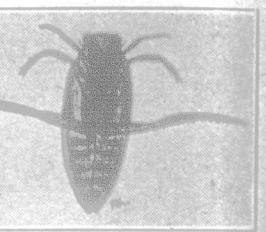
The Water-scorpions (Fig. 4) are bugs which crawl about on the bottom of ponds and streams. The long, tail-like projection at the posterior end consists of two half-tubes, which when brought together form a cylinder that conveys air to the insect when the rest of the body is submerged and the tip of the tube is projecting. The eggs are pushed into the stems of aquatic plants with the ovipositor. These eggs are peculiar in that they have several long filaments which project from the slit in which they are laid. The Water-scorpions feed on the eggs of fishes and on small fishes and aquatic insects.

Diary.

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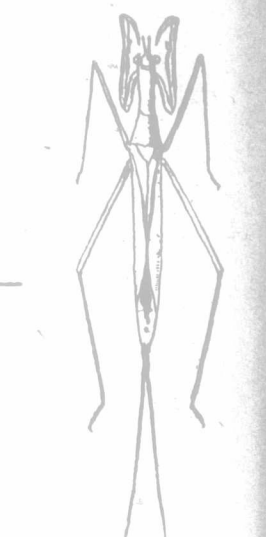
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Notonecta undulata.
A back swimmer.

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Farm Labor and the Cost of Living.

BY ALLAN MCDIARMID.

By chance I recently met a farmer who had just come across from England to visit his son, who was homesteading a section of land in Saskatchewan. He was anxious to get what information he could of this country and was equally willing to tell all he knew of conditions in the land he had come from.

The subject of prices and the general cost of living is always interesting and it wasn't long till he got around to it.

"You may think values of farm produce and other things have increased in this country since the war," he said, "but, so far as I've been able to make out, we've beaten you to it in Great Britain, and most of the other old lands. Take the price of hay for instance. When I left it was selling at £16 a ton, or over \$80 in your money. Oat-straw was worth thirty-five dollars a ton, and wheat-straw about thirty. Pork brought the farmer fifty cents a pound, dressed, and beef very little less."

"How is it on the other hand," I inquired, "That is, for what the farmer has to buy?"

"Well," he replied, "before the war we could get a self-binder for one hundred and ten dollars. Now they cost two hundred and twenty-five. A mower cost fifty dollars then, now you can't get one less than one hundred. We used to pay the blacksmith less than half what he now charges for shoeing our horses. For new shoes for a heavy horse it costs us just five dollars.

"As an example of the way things go at auction sales I saw, just before I came away, a lorry, somewhat similar to your lumber wagons, sold for two hundred and forty dollars. A few years ago it had been sold at another sale for fifty.

"If a farmer wants to retire and move to town it will cost him four thousand dollars for a cottage that he could have bought for five hundred before the war.

"A suit of clothes that retailed at twelve dollars can't be had for less than forty. Farmers have made a lot of money lately, but the ones that are better off than they were are those that have not been compelled to buy much in the way of live stock or implements. In other words, those who were well stocked up before the rise in prices began.

"It is in paying for labor that the average farmer over in England gets hit the hardest. The labor unions are beginning to get control of the farmer's hired help, and there is going to be some trouble in reaching a satisfactory settlement of the question. The labor-unions want an eight-hour-day on the farm, as elsewhere, and, of course, this don't suit the farmer, who would have to pay his men on wet days, when they were idle perhaps half the time, and then get only the eight hours of work from them on fine days when there might be a chance to make up for time that had been lost. The heads of the labor unions have told the farmers that they will issue special permits to allow the men to work overtime on certain days, as requested by the farmers. This overtime would have to be paid for at the rate of fifty per cent. extra, and double time for any work done on Sundays. But the difficulty about this special permission business is that there isn't time for the farmer to send in his application and have it attended to after he sees that the weather is going to be favorable for his work. The problem is going to take a good deal more working out before the farmer and his help are both satisfied.

"No question about it, the eight-hour-day is too short, if the production of the farms are going to be kept up. This applies particularly to the seedtime and to haying and harvesting. So many hours a day and pay by the hour sounds like business, but when the day is shortened beyond a certain point production falls off, in spite of the extra rest and recreation the laborer may get. A short day is supposed to bring increased efficiency, but for two or three months, it is all nonsense to suppose that a man can't be up to his best, when working more than eight hours of the twenty-four. But if the labor unions are going to insist on their demands being granted, another plan has been proposed that may be tried out before long. That is, to have on the farm what manufacturing concerns call a 'double-shift.' The large farmer who keeps, say six men would have three of them come on early in the morning, work their eight hours, and then give place to the other three who would work for eight hours longer. Or it might suit better to have only two in the first part of the day and then have the remaining four for the afternoon. In this way the farmers machinery and horses would be worked to capacity and the laborer and the labor unions be satisfied. Some sort of a compromise will have to be made, anyway, as labor has the matter pretty much in its own hands at present."

"What wages have you to pay now?" I asked.
"Oh, anywhere from three pounds a week up," replied my friend, "which means about sixty dollars a month, as you would put it in this country. We used to get all the help we wanted for twelve shillings a week, which would be three dollars, and the man had to board himself out of that."

"How in the world could he do it," said I, "and perhaps keep a family besides?" "Oh, yes," he returned, he nearly always had a family. But the English laboring man used to live a very plain, simple life."

"He surely did, if one can judge from the wages you paid him," I laughed. "It was time the labor unions got busy."

I don't know whether anything will ever come of my English friends idea of a "double-shift" for labor on the farm, but it might be worth thinking over. Payment by the hour and a specified length of day is coming for the farm laborer, it is almost certain. It is the only thing I know of that will prevent the last of our help

migrating to the towns. And for the farmer who could keep two, or more hands, the "double-shift" idea may be something to meditate upon until he hits on something better. It has one strong point in its favor. It would lead to larger machinery and teams of from four to six horses. Even with one man who would work for eight hours, the farmer, by working for the balance of the time, would get in the full, old-fashioned day. So everybody might be satisfied.

THE HORSE.

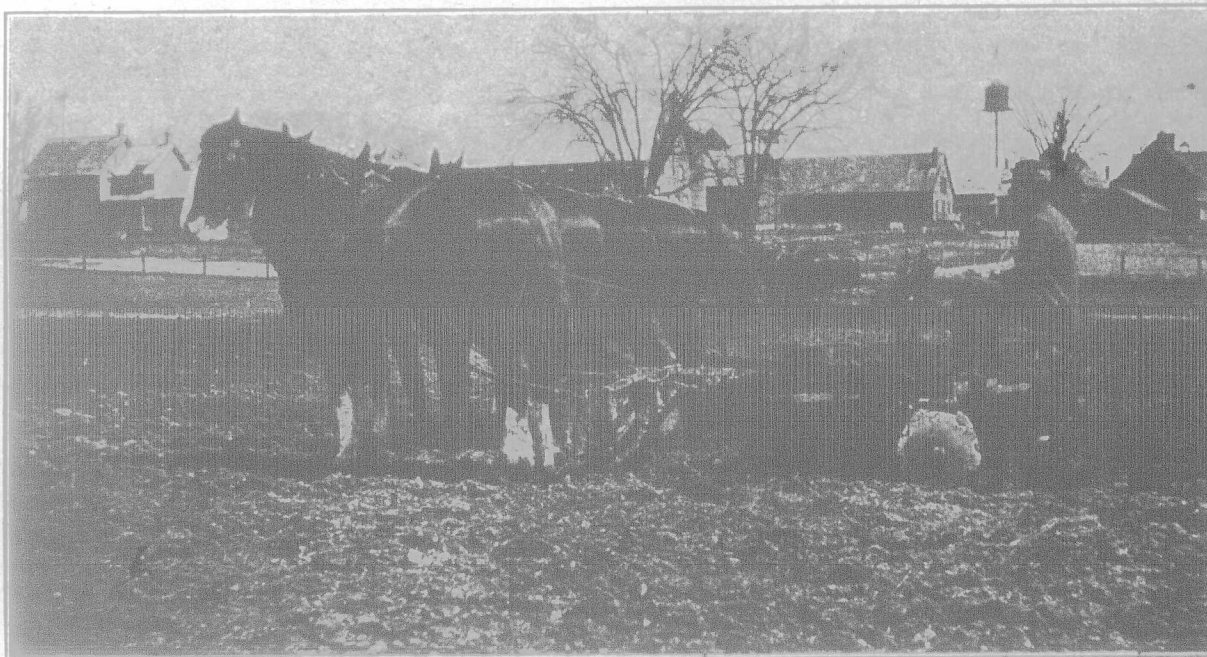
Examination of Horses as to Soundness.

II.—(Continued.)

Having examined the mouth, the examiner will pass his hand carefully and slowly upwards and backwards in the maxillary space, (the space between the branches of the lower jaw) to ascertain whether there be any enlargement or hardening of the sub-maxillary glands. Such a condition of these glands must always be looked upon as suspicious, as it indicates chronic catarrh, or nasal gleet, and, if the glands be enlarged, hardened and adherent to the bone, it indicates glanders. He must then look carefully at the throat, and observe whether there is an enlargement of the glands, either below the ear or in the region of anterior aspect of the wind-pipe; an enlargement of these glands, while not symptomatic of any serious disease, is still undesirable, and may be considered an unsoundness. He will then place his finger upon, and press upon the juglar vein to ascertain whether it be pervious, which can be told by the vein raising between the point of pressure and the throat. The vein may be obliterated, and still the

single, and not quite close to the joint, is not usually considered an unsoundness, but if quite large, double, (that is, appearing on both the inner and outer aspect of the limb) or so near the joint that there is danger of the articulation becoming involved, it should be considered as constituting unsoundness. Next the fetlock joint should be examined for abnormalities, the most common of which is brusal enlargements, commonly called "wind galls." These, if small and soft, are not considered serious, but if large and tense are quite liable to cause lameness, hence are an unsoundness; bony enlargements in this region must also condemn a horse. Between the fetlock joint and the hoof we must examine carefully for ringbone. A ringbone does not necessarily entirely surround the pastern, it may be apparent on only one or on both sides, or may extend all around. We must remember that on each side of the lower extremity of the fetlock bone there is a normal protuberance, which is quite apparent in hot-blooded horses, with little or no long hair in this region. These protuberances must not be mistaken for ringbone. The existence of ringbone, whether or not lameness be shown, must be considered an unsoundness. We next examine for sidebone. This consists in a conversion into bone of one of the lateral cartilages. The lateral cartilages are two for each foot. They are irregularly-shaped, and one surmounts each wing of the os pedes bone of the foot). The cartilages can be readily felt in the healthy horse. They extend above the hoof at each heel, for 1 1/4 to 2 inches with a somewhat semi-lunar shaped boundary. They are just beneath the skin and are rubber-like to pressure, yield readily, but so soon as pressure be relieved immediately regain their former position. When diseased there is more or less of an enlargement and they gradually become hard and unyielding. Whether or not lameness be shown, the existence of sidebone must be considered an unsoundness. This condition is much more frequently seen in heavy than in light horses.

We should look carefully for sores or eruptions of the coronet, and observe whether the wall of the foot be even and smooth. A ridgy or uneven wall must always



Most Teamsters Take Delight in Working a Well-kept Heavy-draft Team.

animal show no symptoms to indicate the trouble, but if he should be turned out on pasture, or fed off the floor, there would soon be a swelling of the head and throat; hence a horse with an obliterated juglar vein is decidedly unsound. The examiner will then carefully look at the withers for existing, or evidence of pre-existing fistulous withers or other abnormality. Evidence of existing or pre-existing fistula should condemn him as unsound. Then the shoulders should be examined for tumors, abscesses or raw surfaces, any of which constitute temporary unsoundness. Passing downwards, examine the elbow for tumors or abscesses, (called capped elbow), then pass down to the knee, looking for abnormalities on the fore arm. The knee should be carefully examined for bony enlargements, broken knees, or scars that indicate the previous existence of this condition. It must be understood that the term "broken knees" does not necessarily refer to a fracture, as bruises, cuts, etc., that occur as a result of an animal stumbling and falling on his knees; the injury being more or less serious, all go under the name of "broken knees." Symptoms of present or pre-existent broken knees must always be looked upon as a serious matter, as it indicates a tendency to stumble, and the condition is liable to recur at any time. The inner aspect of the joint, and the limb below the joint, should be examined for enlargements, soreness, or thickening of the tissues, which indicate "speedy stroke" (the knocking of the limb with the shoe of the opposite foot). This habit, which is usually due to faulty conformation of the pasterns and feet, (the toes being turned outwards, called "soldier-toed") causes abscesses, or tumors, and is liable to cause stumbling. While an animal may have undesirable conformation of any point and still be sound, any abnormality that has been caused by reason of that conformation must be considered an unsoundness. Passing the hand and eye carefully down the cannon bone, the examiner feels and looks for splints, bowed tendons, buck shins, etc. A splint, if small,

be looked upon with suspicion. We must also examine for fissures running from above downwards (called false quarter), also for sand cracks or quarter cracks, any of which is sufficient to condemn the animal. The feet should be of equal size and similar in shape, any considerable difference in size and general appearance indicate that the smaller one may, at some previous period, have suffered from some inflammatory disease which interfered with the growth of horn, hence the foot is smaller than its fellow, and sometimes uneven and ridgy. The foot should now be lifted and the frog and sole carefully examined for thrush, canker, gutter, seedy toe and other abnormalities. It is good practice to remove the shoe and pare the sole down in the quarters to search for corns. Corns may exist and not cause lameness, or any symptoms which would lead the examiner to suspect their presence, but at the same time they are liable to cause lameness at any time, hence it is well to remove the shoes and search for them, as a horse with corns cannot be considered sound. When it is considered necessary to remove the shoes for this purpose, it is well to not do so until after the horse has been exercised to test action and wind. WHIP.

(To be continued.)

Scraping sods and a good deal of gravel from the shoulder of the road to the ditch does not look like good road-making. Ditches are to take the water off the road, rather than to be blocked with sods to hold water to soften the foundation. The road grader in some men's hands has proven detrimental to good road-making.

The newly-formed Canadian Society of Technical Agriculturists will be as valuable as its officers make it.

LIVE STOCK.

The Farrow Sale Makes \$760 Average.

The Farrow sale of Scotch Shorthorns, held at Hickory Ridge Farm, Oakville, on Wednesday, June 16, was one of the most successful sales of Shorthorn cattle ever held in Ontario. As has been previously mentioned in these columns, Mr. Farrow was retaining the majority of his one and two-year-old heifers, and selling his breeding cows only. There were, in some cases, a calf at foot with these breeding cows, and in every case all were bred to the great young herd sire, Pride of Escana. The heifers which were listed included a number which had been recently purchased of Mr. Gerry, of Belwood, and the majority of these were under ten months of age. Here it is worthy of note that the cows with two or three exceptions were from eight to eleven years of age, and the heifers were nearly all under breeding age, but despite this, the general average for the 38 head was \$760.39, which brought the total receipts of the sale up to \$28,895. Another feature of the sale were two imported heifers, recently purchased from Mr. Elliott, of Guelph, and sold, guaranteed to

the service of the newly-imported \$34,000 sire, Millhills Comet. These heifers brought \$3,975, or an average of \$1,987 each. Jealousy Pride, a 14-months Jealousy heifer, made the better price of the two and went to Sir Frank Bailey, of Oakville, at \$2,500. A summary of the prices shows that 22 cows made an average of \$762, 4 two-year-old heifers, \$1,092, and 12 yearling heifers, \$643. Nine head sold for \$1,000 and over, and 4 sold for \$1,500 and over. The cattle were brought out in splendid condition and, from the averages quoted above, it is quite evident that they were appreciated. The purchases were all made by Canadian breeders, there being no Americans present. The following is a list of the purchasers and the prices paid:—

FEMALES.	
Scottish Maid 34th, J. J. McAinsh, Guelph.....	\$ 410
Crimson Vine 3rd, W. F. Batty, Brooklin.....	235
Golden Bride (imp.), A. W. Etherington, Hensall.....	1,350
Nonpareil Countess, Jas. McGillawee, Shaké-speare.....	450
Flore Morn, Sir Frank Bailey, Oakville.....	500
Athelstane Rosewood 5th, Wm. Griese, Oakville.....	1,700
Victoria Princess 8th, H. McGee, Islington.....	1,800
Fairy Queen 7th, Wm. Griese.....	705
Clarinda 17th (imp.), Sir Frank Bailey.....	600
Donrobin Rose Girl 2nd, Rae Bros., Corunna.....	810
Glen Buell Clipper 3rd, Robinson Bros.....	800
Village Queen 8th, J. H. Lockie, Zephyr.....	625
Princess Royal 8th, W. J. Rynard, Zephyr.....	560

Rosebud 18th, Sir Frank Bailey.....	\$ 850
Mary Ann of Lancaster 34th, Sir Frank Bailey.....	1,100
Glen Buell Mildred 3rd, John Scott, Claremont.....	525
Glen Buell Mildred 14th, J. J. Merner, Seaforth.....	1,000
Red Imogene, H. J. Miller, Keene.....	450
Retana, C. J. Slack, Claremont.....	610
Glen Buell Clipper, W. J. Rynard.....	450
Glen Buell Mildred 16th, T. A. Russell, Downs-view.....	800
Roan Lady O. A. C. 4th, Sir Frank Bailey.....	1,900
Glen Buell Mildred 17th, Jno. Miller, Jr., Ashburn.....	450
Walnut Rosebud, J. F. Osborne, Newcastle.....	1,360
Glen Buell Mildred 18th, Blue Mountain Farms, Camperdown.....	660
Newton Tiara (imp.), A. W. Etherington.....	1,475
Jealousy Pride (imp.), Sir Frank Bailey.....	2,500
Pretty Princess 4th, Wm. Griese.....	360
Mayflower 3rd, W. Platt, Toronto.....	290
Lady Belle, Thos. Robson, Cookstown.....	350
Red Cherry, T. Howie, Paisley.....	460
Roan Lady, T. A. Russell.....	470
Miss Stamford, A. W. Etherington.....	360
Clara 40th, J. J. Merner.....	400
Pretty Matchless, W. T. Millson, Chatsworth.....	325
Belwood Belle, E. W. McCannis, Millbrook.....	325
Roan Lady 2nd, Chas. Barclay, Claremont.....	405

MALES.	
Lord Rosewood, C. W. Carney, Red Wing.....	400
Choice Favorite, A. J. Clark, Saskatchewan.....	280

Ormstown's Eleventh Annual Show.

FROM a very modest beginning in 1910, the annual spring show held at Ormstown, Quebec, has not only become the largest live stock exhibition in Quebec, but the 1920 show which closed on the evening of June 18, was well deserving of a place well up among the largest live stock shows of the Dominion. It may be said that the town of Ormstown is far too small a place for the home of an exhibition of these proportions, but aside from furnishing the public with lodging, this drawback has apparently proved a very slight handicap, and the officers of the show have every reason to feel proud of the show they have built up under existing conditions. The show ground, which includes splendid stabling, as well as a large closed-in live stock arena, is well worthy of the attention of many a provincial exhibition, and the same may be said of the management which comes under the direction of Secretary, W. G. McGerrigle. Contrary to the usual prophecy, the show has each year depended entirely upon features agriculturally to draw the attendance, and an increase of almost 200 per cent. in the gate receipts shown this year over any previous year is best evidence that it has met with success. As regards the entry list, figures are probably necessary to show the growth of the exhibition as an educational event. Beginning with the year 1918, the entry list showed an increase of almost 100 per cent. over the previous year, while 1919 increased again a third, and the show just closed again ran up the figures until the total list exceeded 1,600 entries. Of these 462 were in the horse division, 278 of which came forward in the pure-bred sections; while the cattle, including grades and pure-breds, reached almost 500 entries. Holsteins for the first time, were leading with 189 entries, an increase of over a 100 in two years; while the Ayrshires, although not showing so great an increase, followed closely with 179 entries. Beef cattle was once more a disappointment, there being only a very few entries in one or two classes and among them not more than three which could be said to be show animals. Sheep and swine entries, although showing an increase in numbers, did not strengthen up to any great extent in quality although there were some fair Shropshires and Southdowns and an entry or so in Dorsets and Leicesters which were worthy. The judging in the pure-bred horse and cattle sections was all carried on in the arena during the day time, while the evenings were given up entirely to the harness classes of the light horse section. These harness classes have always been relied on to furnish the major part of the evening program, and perhaps no where else in Eastern Canada can a better performance of this class be put on than at Ormstown.

On Thursday, usually considered the best day of the show, the exhibition was honored by the presence of the Minister of Agriculture, Hon. Dr. Tolmie; the Deputy Minister of Agriculture, Dr. J. H. Grisdale; the Live Stock Commissioner, H. S. Arkell, and several Quebec representatives of the Federal House, all of which were guests at the noon-day luncheon, where the Hon. Dr. Tolmie, who was the chief speaker, gave some interesting figures regarding the live stock industry of the Dominion. At this luncheon Dr. McEchran, the first President and founder of the show, urged upon the management the advisability of again reviving the public sale of a pure-bred stock, which, until three years ago, was held in conjunction with the show. Other speakers complimented the management upon the rapid growth of the show, and often referred to it as Canada's only purely agricultural exhibition.

HEAVY HORSES.

For the first time in the history of the show, the heavy horse sections surpassed in numbers the entries of those in the light sections, commonly called the harness classes of the show. For the most part, these heavy sections were made up of local horses, there being only one Ontario stable represented. Clydesdales, as usual, were the big feature, although the dozen or

more Percherons which came forward, included more good horses of this breed than had been seen out in combined shows of all other years. Imported classes in Clydesdales, while not filled nearly as well as they were in the early years of the show, were considerably heavier than they were last year, and were made up from a number of small stables throughout the Ormstown and Howick district as well as Ontario. Here, we might add, that for the success of the show the management would be well advised to make the imported class, as is done at nearly every exhibition of any importance, an open class, and not confine the entries entirely to imported horses. An imported horse, which is not able to compete with a Canadian-bred horse, is surely not worthy of the additional expense which he is sure to cost the Canadian breeder. The judges in the horse sections were: Light Horses: Robert Graham, Toronto; Heavy Horses: G. A. Barber, Gatineau Point, Que.

Clydesdales: With this breed at Ormstown, no one breeder can be credited with furnishing the major part of the exhibit. It is doubtful if any show in any of the nine provinces of the Dominion can furnish a larger number of exhibitors, even though they show a much greater number of entries. This probably is responsible for the exceptional interest shown about the ring side at this show, where even the racing which is in progress at the same time, fails to attract one-quarter of the number of spectators that are to be found about the Clydesdale Arena. The grade entries in the heavy horse sections at this show should also, for the most part, rightly come under the heading of Clydesdales. Both the teams and the singles, shown in harness, are of sufficient Clydesdale type, to all appearances, to make them eligible for the pure-bred sections. Like all other shows, during the past few years, imported horses failed to come forward in any great number, but quality in every case, was much in evidence, and if any criticisms are to be offered, lack of size is probably the only one that could be forthcoming.

Exhibitors.—R. Ness & Sons, Howick; David Cavers, Ormstown; L. Papineau, St. Louis; J. G. Wilson, Stottsville; S. McGerrigle, Ormstown; M. Grigg, Allan's Corners; Wm. Hamilton, Brysonville; J. B. Cairncross, St. Anns; J. I. McDougal, Ormstown; Batiste Parent,

St. Etienne; Taylor Bros., Ormstown; J. C. McEwen, St. Louis; Wm. Nussey, Howick; Alex. McEdwards, Huntingdon; Robert Milne, Ormstown; Cummings Bros., Lancaster, Ont.; Hunter Bros., St. Etienne; Chas. Turner, St. Etienne; Andrew Boa, Dorval; Richard Nussey, Howick; Harry Nussey, Howick; Albert Nussey, Howick; D. A. McCormick, Brysonville; Melville Kerr, Howick; J. T. Thompson, Bainsville; Geo. H. Goodfellow, Lancaster, Ont.; Jas. Sangster, Lancaster, Ont.; John Logan, Howick; E. C. Budge, Beauharnois; Hamilton Elliott, Ormstown; Robert Kerr, Howick; T. Reid, Ormstown; Alex. Steele, Brysonville; Robt. L. McCaig, Ormstown; Wesley Peddie, Howick; W. J. Graham, Huntingdon; Assina Beaulieu, St. Stanislas; Geo. Hope, Ormstown; Robt. Elliott, Ormstown; Reid Bros., Chateaugay; R. O'Donnell, Montreal; Stanley Bryson, Brysonville; Adam Cullen, Howick.

The aged-class for Imported Stallions included mostly horses that have been out at previous Ormstown shows. Baron Stanley the well-known son of Baron's Pride, never came into the ring in better bloom and easily won over Papineau's Sir Robert, a horse of good sized bone, but not so flashed in his make-up.

The 3rd went to Lanark Lad. The three-year-old class was represented by one lone entry in Iron Signet, a well-made, short-coupled horse with splendid bone and action both of which easily gained him championship honors later. The two-year-old class also saw a lone entry in Ness & Sons newly imported colt, Jutland. This is a very promising individual, although not showing in bloom, and being got by Signet and out of a Dunure Foot Print dam, he is probably one of the best bred colts brought to Canada in years. These three classes made up the imported stallion exhibit. Yeld mares were only three in number, two of which were well above the average, while the third had little show ring quality, to commend her. Brood mares were also light with three entries only, and the old time winner, Corona, had no difficulty in holding her place at the top. Bonnie Cynthia, by Bonnie Buchlyvie and Thrieve Lady by Mendel, two newly imported colts, were by themselves in the two-year-old mare class, and naturally had not yet gotten in shape after their trip across the water.

The Canadian bred made up one of the best showings ever seen at Ormstown. The aged stallion class



Blackfaces in Their Native Haunts.

Frank Bailey	850
Scott, Claremont	1,100
Merner, Seaforth	525
.....	1,000
.....	450
.....	610
.....	450
Russell, Downs	800
.....	1,900
Bank Bailey	450
Miller, Jr., Ashburn	1,360
Newcastle	660
Mountain Farms	1,475
.....	2,500
.....	360
.....	290
.....	350
.....	460
.....	470
.....	360
.....	400
.....	325
.....	325
.....	405
.....	400
.....	280

was well filled with seven entries, and Spencer of the Briars again stood at the top over Oakhurst Baron's Pride, although he did not show his old time movement or bloom and the decision may easily have been reversed. Gallant Spencer, another son of Sir Spencer came 3rd. The stallion class for three-year-olds, brought forward two entries only, but the two-year-old class filled well with eight. The year-old class found nothing sensational, and only three were forward. Three-year-old mares have in the past brought out more quality, but it may be said that all showed evidence of having earned their way in the harness. The yield mare class, as usual, made up the best showing of the exhibit, and saw Woodside Janey and Jean of the Briars, two Sir Spencer mares at the top. Brood mares brought out eight matrons, and while Cherry Bank Queen, the winner and Daisy Spencer, in 2nd, were outstanding, the class throughout was creditable. Two-year fillies were only four in number, but each came forward later in separate entries and helped to strengthen the group sections.

Awards.—(Imported) Aged Stallions: 1, Ness on Baron Stanley; 2, Papineau on Sir Robert; 3, Cavers on Lanark Lad. Stallion, three years, Ness, on Iron Signet. Stallion, two years, 1, Ness on Jutland. Brood mares, 1, S. McGerrigle on Corona. Yield mares, 1, Ness on Bonnie Cynthia. Champion stallion, Iron Signet. Champion mare, Bonnie Cynthia. Grand champion stallion, Iron Signet. Grand champion mare, Bonnie Cynthia.

(Canadian Breeds) Aged Stallions:—1, Taylor Bros. on Spencer of the Briar; 2, Wm. Nussie on Oakhurst Baron's Pride; 3, McEwen on Gallant Spencer; 4, A. Nussie on Sir Hugo of Cherrybank. Stallion, 3 years, 1, Ness on Woodside Seal; 2, S. McGerrigle on Osborne. Stallion, 2 years, 1, Ness on Woodside Rising Star; 2, Cummings Bros. on Herminius; 3, Milne on Cherrybank Baron; 4, A. McCormick on Sir Robert. Stallion, 1 year: 1, Wm. Nussie; 2, Chas. Turner; 3, Arthur Hunter. Brood mare: 1, Wm. Nussie on Cherrybank Queen; 2, A. Nussie on Daisy Spencer; 3, H. Nussie on Faron's Belle; 4, W. J. McGerrigle on Gipsy Warner; 5, Turner on Maude of Tathurst. Yield mare: 1, Ness on Woodside Jeanie; 2, McCormick on Jean of the Briars; 3, Ness on Woodside Lady; 4, Wm. Nussie on Oakhurst Water Lily; 5, S. McGerrigle on Tathurst

in every case they have sufficient quality to make them noticeable. The two-year-old class was also strong with Logan's Kellock Volunteer at the top and another Sunnyside-bred bull in second. Senior yearling bulls were only two in number but the junior yearling class brought out well on to a dozen of the best young bulls ever seen at Ormstown. The junior classes ran all the way from seven to fifteen entries and included many promising youngsters. The females, especially those in milk, put up an exceptional showing. In the aged-class Chapmanton Henny, the oft-times champion, although over 12 months in milk, once more stood at the top with Orange Blossom an exceptionally well-developed cow in 2nd, and Florence 2nd another cow of the same type in 3rd. Three-year-olds in milk were not a strong class if taken in comparison with the others, while the two-year-old heifers fell off badly with only four entries. The dry cow class brought out a lot of good commercial cows, with very little difference between the top or bottom end of the line. Younger female classes, without exception, were filled to overflowing in each section, and were pronounced equal to the exhibit made at any previous show.

Exhibitors:—J. P. Cavers, Ormstown; R. R. Ness, Howick; Chas. Moe, Ormstown; Cummings Bros., Lancaster, Ont.; D. N. Watt, St. Louis; D. T. Ness, Howick; Melville Kerr, Howick; Robt. Holmes, Howick; James Houston, Riverfield; Robt. Arthur, Huntingdon; J. G. Wilson, Stottsville; Jno. Logan, J. T. Thompson, Bainsville, Ont.; P. D. McArthur, Howick; Jno. Gibson, Howick; Lachlan Van Vliet, Lacolles; C. E. Budge, Beauharnois.

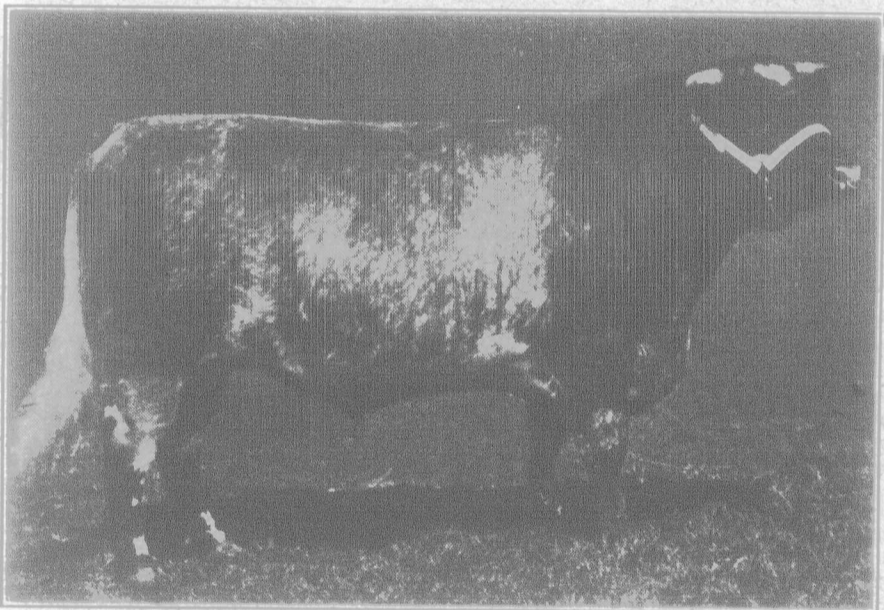
Awards.—Aged Bulls: 1, R. R. Ness, on Holehouse Hopeful; 2, Cummings Bros., on Glenhurst Torrs Mayor; 3, D. T. Ness, on Bonnie Brae Lad; 4, Cavers, on Burnside Fanny Sensier; 5, Watt, on Kellock Gold Flake. Bull, 2 years: 1, Logan, on Kellock Volunteer; 2, Kerr, on Sunnyside Russel; 3, Wilson, on Master Piece Western; 5, J. Houston, on Bill Wallace. Senior yearling bull: 1, Thompson; 2, McArthur. Junior yearling bull: 1, 2, 3 and 4, Ness; 5, McArthur. Senior bull calf: 1 and 5, Ness; 2, Gibson; 3, Arthur; 4, D. T. Ness. Junior bull calf: 1, Watt; 2, Ness; 3, Arthur; 4, Cavers; 5, Van Vliet. Cow in milk: 1, Ness on Chapmanton; 2 and 3, Cavers, on Orange Blossom

Each year, too, sees a marked advancement in the individual entries themselves, and the major part of those out this year were good commercial cattle at least. Very few of the breeders, however, seem at all familiar to the names of the animals, and as there is no catalogue of the entries issued in many cases it is impossible to get the names when the awards are made. The bull classes could scarcely be said to be on a par with the females, although Sangster's senior yearling calf, Perfection of Pleasant Valley, which was made champion of the show, is a real outstanding calf, and would stand plenty of competition in any company. The aged-bull class, although it numbered 6 entries, was not a strong class, and the two-year-old bulls were very little better. The females, however, especially the aged-cow class, brought forward some splendid individuals, which were in every way well worthy of the breed. In aged cows in milk, Harvey had two choice things in Maple Hill Faith and Gano's Bessie Favorit, and also had an outstanding heifer in 3-year-olds in milk. The latter was 3rd-prize heifer at the National Dairy Show last year, and was sold by Mr. Harvey the afternoon of the show for what was stated to be a very pleasing figure. Harvey again had the winner in the class for two-year heifers, in milk. In the dry class for aged cows, Sangster won 1, 2 and 3 with cows of his own breeding, and in every case they showed every evidence of being producers. The dry two-year-olds were not a strong class, although there were nine on the entry list. Senior yearling heifers were an even dozen in number, and the junior yearling brought out a class of ten which were probably the most uniform of any lot shown. There were also some nice things in both the senior and junior calves.

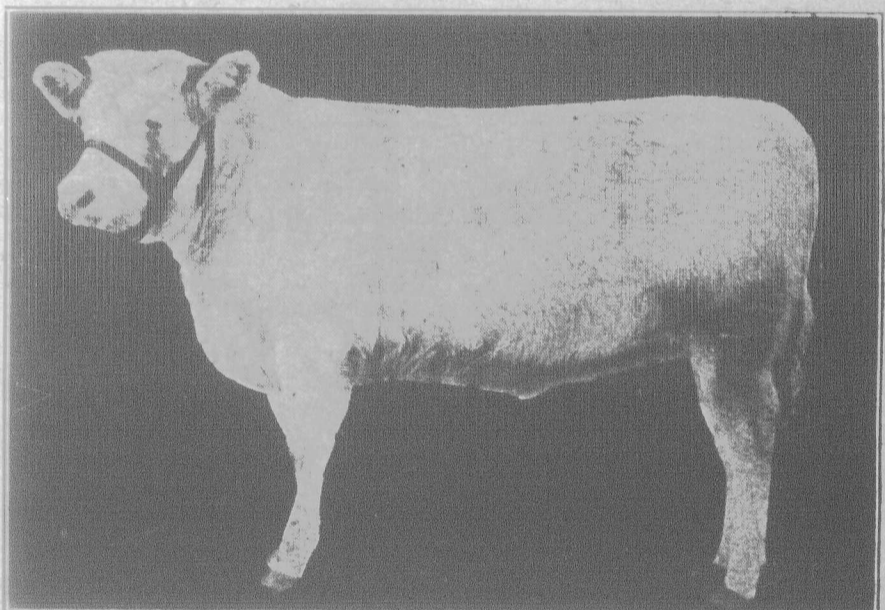
Exhibitors:—John Harvey, Frelighsburg; D. A. McGregor, Moose Creek; Chas. Collum, Ormstown; James Winter, Ormstown; J. J. Alexander, St. Louis; Helm Bros., Huntingdon; Joseph Anderson, Anderson Corners; John Hudman, Huntingdon; W. Marshall, Ormstown; Neil Sangster, Ormstown; Jno. McRae, Howick; R. S. Dunn, Ormstown; Albert Nussey, Howick; G. H. Goodfellow, Lancaster, Ont.

Awards.—Aged Bulls: 1, Helm Bros., on Peerless Ormsby Count; 2, Collum, on Gano's Paul Posch; 3, Winter, on Prince Artis of Pinedale; 4, McGregor; 5, Harvey. Bull, 2 years: 1, Sangster, on Nixon of Pleasant

W.
Ormsby; J. C. McEwen, Howick; Alex. McEwen, Ormstown; Cummings Bros., St. Etienne; Chas. Boa, Dorval; Richard Howick; Albert Nussey, Howick; Melville Kerr, Howick; Geo. H. Goodfellow, Lancaster, Ont.; C. E. Budge, Beauharnois; Robert Kerr, Howick; J. J. Alexander, St. Louis; W. J. Beaulieu, St. Stanislas; J. J. Elliott, Ormstown; Reid Bell, Montreal; Stanley Innes, Howick. Stallions included mostly from previous Ormstown shows, and were of good sized make-up. The three-year-old class brought in Iron Signet, a splendid specimen with splendid bone and splendid championship class also saw a lone imported colt, Jutland, although not showing at and out of a Dunure one of the best bred. These three classes exhibit. Yield mares which were well above little show ring quality, were also light with time winner, Corona, at the top. Bonnie and Thrieve Lady by themselves and naturally had a trip across the water. One of the best show- aged stallion class



Inschfield Clipper King, Champion Shorthorn Male at Glasgow.



A Winning Shorthorn Heifer at Several 1919 Shows.

Belle. Filly, 2 years: 1, W. J. McGerrigle on Hilda of Rosedale; 2, Turner on Dolly Markthill; 3, McDougall. Filly, 1 year: 1, Ness on Woodside Bess; 2, D. A. McCormick on Roselyn of the Briars; 3, Cairncross on Cairnbrae Lady; 4, Goodfellow on Elmview Aucheloch. Get of sire: 1, Wm. Nussie; 2, D. A. McCormick; 3, A. A. Nussie. Champion stallion: Woodside Rising Star. Champion mare: Woodside Jeanie. Registered Team and Harness: 1, D. A. McCormick; 2, S. McGerrigle; 3, E. C. Budge.

Percherons.—As mentioned above, the Percheron classes were not large, but there were among them several real outstanding specimens of the breed. The aged-stallion class with six entries was a strong one from top to bottom. The 1, 2 and 4 winners, were all owned by John Innes of St. Anns., while 3rd went to J. A. Hanna of Ormstown. All four horses, although not large, were a real quality lot throughout. Innes also had 1 and 2 winner in the 3-year-old class, while E. C. Budge of Beauharnois had a lone entry in the 2-year-old class. There were no females shown.

DAIRY CATTLE.

Ayrshires.—Ormstown or any other live stock exhibition in the Province of Quebec can always be relied on to bring forward an Ayrshire exhibit equal to any other exhibition in any part of Canada. It is true that for the first time in the show Holsteins outnumbered the Ayrshire entries, but it is also true that the quality of the Ayrshire exhibits taken as a whole was far superior to that of any other dairy breed. The aged-bull class brought forward seven entries and while Holehouse Hopeful, which stood third in the class last year, went of the top of this year's showing, he has improved wonderfully and was a deserving winner. There were, nevertheless, several more sires in the lot which will no doubt be seen at many of these larger exhibitions throughout Eastern Canada this fall, and

and Florence 2nd; 4 and 5, R. R. Ness, on Burnside Pearlina and Fanny of Gladden Hill. Cow, three years (in milk): 1, R. R. Ness, and Burnside Pearlina 3rd; 2, Elliott, on Edna; 3, Cavers, on Braeburn Lou; 4, Kerr, on Hillhouse Cherry; 5, Logan. Heifer, two years (in milk): 1, Wilson Estate on Nellie; 2, D. T. Ness, on Edgewood Lady Mae; 3, Logan; 4, Moe on Fieldhouse Bonnie. Dry cow: 1 and 4, Cavers, on Violet 5th, and Ryan Oque Grenville; 2, D. T. Ness, on Ravendale Tinkerbell; 3, R. R. Ness on Chapmanton Topsy. Senior yearling heifer: 1, 3 and 5, R. R. Ness, on Burnside Henny Chapmanton, Holehouse Sheila and Burnside Rosy Harley; 2, Budge, on Palmerston Snowdrop; 4, D. T. Ness, on Edgewood Lady May. Junior yearling heifer: 1, Caver; 2, 3 and 5, R. R. Ness; 4, Budge. Senior heifer calf, 1, 3 and 4, R. R. Ness; 2, D. T. Ness. Junior heifer calf: 1, R. R. Ness; 2, J. W. Wilson; 3, D. T. Ness; 4, Kerr; 5, Cavers. Champion bull: Holehouse Hopeful. Champion cow: Chapmanton Henny. Four calves bred by exhibitors: 1, R. R. Ness; 2, D. T. Ness; 3, Cavers. Graded herd: 1, R. R. Ness; 2, Cavers; 3, D. T. Ness; 4, Logan. Junior herd: 1, R. R. Ness; 2, Cavers; 3, D. T. Ness. Get of sire: 1, R. R. Ness, on the Get of Materpiece; 2, Cavers on the get of Burnside Fanny's Senior; 3, R. R. Ness on the get of Hillhouse Hopeful; 4, Cavers.

Holsteins.—From a very modest beginning of half dozen entries in 1910, the Holstein exhibit at Ormstown has grown to outnumber the entries of any other cattle breed. There are many, however, among them which have no right to the title of show cattle, but the improvement shown over that of last year is probably more marked here than in any other exhibit. The small breeders of the district have come back year after year with several entries each, and the interest shown here no doubt is probably responsible for the breed having made such rapid gains, not only at the show, but with the dairymen throughout this district.

Valley; 2, Stewart, on Prince Echo Segis; 3, McRae on Count Echo Alcartra; 4, J. Anderson, on Paul Ormsby; 5, Helm Bros., on Sir Rooker Schuiling. Senior Yearling: 1, Sangster, on Perfection of Pleasant Valley; 2, Harvey on Dutchland Artis Canary. Senior calves: 1, Harvey; 2, Sangster; 3, Helm; 4, Anderson; 5, A. Nussie. Cow in milk: 1 and 2, Harvey on Maple Hill Faith and Gano's Bessie Favorit; 3, Goodfellow on Inka Sylvia 6th; 4, Sangster, on Lady Rhoda; 5, Helm Bros., on Artis Queen. Cow three years (in milk): 1, 2 and 3, Harvey, on Belle Abbeker 2nd, Lady Roberts Colantha, Fanny B. B. Pietertje; 4, Goodfellow, on Eastview Jean Sylvia; 5, Helm Bros., on Evertje Segis Alcartra. Heifer 2 years (in milk): 1, Harvey; 2, Helm on Rosy De Kol Alcartra; 3, McRae, on Countess Pietje Wade; 4, Stewart, on Johanna Sylvia Segis; 5, Sangster on Lady Rhoda. Dry cow: 1, 2 and 3, Sangster on Lena of Pleasant Valley, Helena of Pleasant Valley, and Edna Duchess of Hengerveld; 4, Harvey, on Sadie Mignone Segis; 5, Stewart, on North Star Cassie De Kol. Heifer, two years (dry): 1 and 2, Harvey, on Artis Segis Korndyke and Princess Segis Berman; 3, Sangster, on Hilda of Pleasant Valley; 4, McGregor, on Vrouka Ormond; 5, Herdman, on Stella Posch. Heifer senior yearling: 1, Helm, 2 and 3, Goodfellow; 4, Herdman; 5, Harvey. Heifer junior yearling: 1, Goodfellow; 2 and 3, Herdman; 4 and 5, McGregor. Heifer senior calf: 1, Herdman; 2, Harvey; 3, Winter; 4 and 5, Stewart. Heifer junior calf: 1, Stewart; 2, 3 and 4, Helm; 5, Alexander. Graded herd: 1 and 2, Harvey. Junior herd: 1, Herdman; 2, Stewart; 3, Harvey; 4, Sangster; 5, Helm. Champion bull: Sangster, on Perfection of Pleasant Valley. Champion female: Harvey, on Belle Abbeker 2nd.

Other Breeds.—Contrary to last year, when Jerseys made a real creditable exhibit, there were this year only four of five animals on the ground. Short-horns, too, were once more a disappointment, although

the few that were present were somewhat of an improvement of previous exhibits. Jno. Harvey, of Frelighsburg, had most of the breeding cattle that were out, and Thos. Stobbart, of Weston, Ontario, had several entries in the fat classes to compete for the Dominion Government specials. E. Sylvester, with a half dozen entries, had the only French-Canadian cattle at the show.

SHEEP AND SWINE.

Although the numbers were increased this year considerable, Ormstown has as yet failed to put up a show in either division which would either do justice to the show or to the district in which the show was held. The sheep exhibitors who carried away most of the prize money came from Ontario, these being Jno. R. Kelsey, of Woodville; G. H. Mark & Sons, at Little Britain; Wm. Clarkson, of Weston, and A. Ayr, of Hampton. Other exhibitors included David Pringle, John Pursell, both of Huntingdon; E. & S. Sylvester, of St. Hyacinthe, and H. Carpenter, of Clairvaux. Hogs were shown by Mannagh Bros., of Havelock, and W. S. Todd and Robert Elliott, of Ormstown. The sheep entries number 132, and the swine 102.

Experiences With Scrub Sires.

The most convincing argument in favor of the pure-bred sire instead of the grade and scrub are the actual reports which have been obtained from the use of both types.

The following are actual experiences of farmers on their own farms:

A farmer in Dufferin County, Ontario, had a calf dropped March 18th, 1919, which he sold on December 12th of the same year at 23½ cents per pound. This baby beef brought \$169.20. This calf was out of a good grade cow, which was herself sired by a pure-bred bull. The calf was also sired by an approved type of pure-bred sire. In the same stable on similar feeding and treatment at the same time was a calf also out of a fairly good grade cow but sired by a grade bull. This calf was dropped November 5th, 1918, and was sold on the same day as the calf already referred to (Dec. 12, 1919). He brought 19 cents per pound, or 4½ cents less per pound than his stable mate by the pure-bred bull, and he brought \$174.80. He was 4½ months older, had taken more feed and care, but did not have as good quality, and so was not as profitable as his better bred stable mate. These calves were exceptionally well fed, but breeding counted to the extent of 4½ cents per pound and enabled the feeder to market his best calf at very close to as much money in 4½ months shorter time. This is a case where the feeding was right in both cases, and where the pure-bred bull was directly responsible for the difference.

The experience of a London Township farmer, Middlesex County, with pure-bred and scrub bulls shows very closely the place of the scrub sire. Six years ago he had in his herd eight very even pure-bred cows that gave him eight bull calves from pure-bred sire. These were made steers and kept until two and one-half years old, finished on grass, and when sold averaged \$140 each. The next year the farmer was ailing and was unable to take his cows' a distance to a pure-bred sire. A neighbor offered him the use of his scrub sire. The progeny from this mating, from which five steers were kept, fed and marketed under the same conditions, brought \$114 each, although there had been a slight rise in price during the year. This farmer stated that on the five steers he lost \$130 in one year, and to the average farmer using a scrub sire on 10 females the loss would be \$260 from a beef standpoint alone. If the daughters of the scrub bull were kept in the herd this loss would show in their calves in lesser degree. This man claims that as soon as farmers keep an accurate profit and loss account the scrub bull will disappear.

A Peel County farmer's experience is as follows:—"Though we had been using pure-bred bulls for many years previous to a time about nine years ago, we yielded to temptation on a growthy looking, well-built grade Shorthorn for which we paid \$35, at six months old. (Why should he not produce as good stock as a registered calf costing \$75, more or less?) When his first calves were about four or five months old they seemed a poor lot, but the bull was kept for another season in spite of our observations. When the steers were put in to feed when rising two years, as is our custom, the folly of our selection most glaringly stared us in the face every time we went to feed them. They wouldn't respond to good feeding and attention. There was little pleasure in trying to fatten them, and they went to market with few exceptions an inferior bunch. We had learned our lesson, and sometimes think it was fortunate that we did keep the bull long enough to be really impressed forever by the experience and loss of a cheap sire.

"Our next bull was of Gainford Marquis blood, costing \$100 at six months. Our first crop of calves healed our wounds. Fine growthy fellows, they accounted for any feed given, were a source of pleasure to the eye, and brought the best price when sent to market. Counting the difference in weight, adding the extra value per pound and making allowance for feed consumed, there was a balance of from \$20 to \$25 per steer in favor of the good bull. A worse case was that of the heifers from the scrub bull. They had to be sold for beef. Instead of being able to select good heifers we had lost two years by using the scrub. Though it cannot be counted in dollars and cents, the satisfaction in feeding and caring for good animals is really worth more than all other features combined."

Can you afford to use a grade or scrub bull?

WADE TOOLE.

Prof. Animal Husbandry, O. A. C., Guelph.

THE FARM.

Manitoba Rural School Consolidation.

EDITOR "THE FARMER'S ADVOCATE":

In a former article (May 6th) the results were given of actual experience with rural school consolidation at Guelph, Ont., Middleton, Nova Scotia and in Prince Edward Island. In two of these the original consolidation was reduced in size through some sections dropping out and the P. E. I. school was discontinued temporarily at least. The latter was said to have been started on rather too elaborate a scale. The chief obstacle seems to have been the difficulty of transport over bad winter roads, and the cost, though the educational results were conceded to be superior. One plain conclusion was that the area consolidated should not be too great and the school population fairly compact. Other consolidations have been undertaken in Eastern Canada, and because of the decline in rural population and the desire for improved rural education, the subject is being widely discussed in Ontario. Owing to the distances pupils had to traverse in going to school, coupled with a characteristic spirit of progressiveness in trying out what promised to be better suited to their educational needs, the Western provinces have led off in consolidation. In Manitoba it was instituted at Virden and Holland in 1905, and from the last report (1919) of the Minister of Education, (Hon. Dr. R. S. Thornton), the number has steadily increased to over one hundred. There are, however, still 1,526 one-room schools in that province with an enrolment of about 40,000 pupils. The Manitoba definition of "consolidation" is "the joining together of two or more school districts under one board of trustees and providing transportation to school for the children. By gathering the pupils in larger groups the object sought is to provide advantages more nearly equal to those of the city-graded schools." During the year 1918-19 nine new consolidations were approved, each covering from two to five districts or sections. An examination of the reports of individual Divisional School Inspectors is instructive. In the main they are favorable to consolidation. No. 3 (Hamiota) reports an increased percentage of children attending such schools from 35 to 55 during eight years and the absorption of 30 one-room schools into larger units. One district voted \$25,000 for the erection of a four-room school. In No. 4, (Virden) four out of six plans were approved, ratepayers favoring the smaller district because of shorter van routes. Deloraine commended the idea because it meant a more extended education. In Brandon Divisions some of the consolidation have found it necessary to increase their accommodation. In the Portage la Prairie Division where most of the one-room schools are old, the Inspector advises that they be discarded and consolidation, as far as possible, adopted. In Division No. 16 some small schools have been revived and improved, and in one case 100 per cent. of enrolment was present at each visit. One new consolidated school was formed by uniting two districts. In Division 17, two consolidated boards have each purchased ten-acre sites and were erecting splendid buildings. Greenridge Consolidated District took a vote to dissolve consolidation, but a large majority opposed the change. In St. Boniface (No. 22 Div.) there is one consolidated district at Sperling operated for several years to the satisfaction of the community. In Division 24 there was talk of consolidation at Eriksdale, but the state of the roads proved the chief obstacle.

A special report on consolidation by the Department of Education shows that at Dec. 31st, 1917, when 84 such schools were in full operation, they averaged in territory 41½ sections each. (A section means 640 acres.) Consolidation is credited with increasing the pupil enrolment and attendance. For example, Wellwood, comprising three districts, had in the last term prior to consolidation an average daily attendance of 55 pupils or 58 per cent., and in the first term under consolidation 85.36 or 77.6 per cent. Taking the record of attendance, a provincial table shows that the number of pupils attending more than 100 days in the ordinary rural school was 53 per cent. as against 74 per cent. in the consolidated schools. The average number of days attended by each pupil enrolled in ungraded rural schools was 115, in two teacher consolidated schools 132, and in consolidated schools of more than four teachers 149. Rural pupils transported to schools make a better showing of attendance than those in the village who walk. The report in question puts the average annual cost per pupil attending consolidated schools at \$88.68. At that date (1917) the Dept. of Education contributed toward the expense by giving an initial grant not exceeding \$500 towards equipment, and an annual grant on a 50-50 basis towards transportation. It was expected that the use of motor vans would lessen the cost and the time on the road. In a table of 78 schools the number of van routes was given as 241, or a fraction of over 3 to this school, and an average length of 33.22 miles. The total number of pupils transported was 3,572, and the total cost \$170,967. Winter vans were constructed by taking bobsleighs with extra wide bunks and building upon them a box with side seats and a canvas top like the old prairie schooner. The official regulations provided that the pupils conveyed were those residing more than one mile from school and more than one-half mile from a van route. Manitoba has not hurried consolidation, preferring to learn by experience where it was practicable and desired by the

people. During fifteen years, above one hundred consolidations have been effected by natural growth. ALPHA.

NOTE.—The experience of Alberta and Saskatchewan will be given in a later issue.—Editor.

Crop Conditions in Middlesex County.

The long drought has been broken by copious showers, and at time of writing the crops are showing the benefit of a refreshing drink. There are places, however, where there was too much rain. Around Glencoe and Appin, on the 24th of June, considerable water was still lying on the fields from rain which had fallen a couple of days previous. Many corn fields in that vicinity were showing the effects. Early in the week the ditches and water courses were overflowing their banks, similar to a spring freshet. In the vicinity of London there were good showers but they fell gently and the water was absorbed by the soil; in fact, there was scarcely enough to start the water running in the ditches. At time of writing the country is looking its best in most localities. A representative of "The Farmer's Advocate" recently motored through the southwestern part of Middlesex County, which is largely devoted to mixed farming. Hay will not be up to the average this year, although there are some fields which look very promising. The fall wheat which looked good in the spring has fallen a prey to the Hessian fly in many districts. On examining a field near Glencoe, we found the larvae of the fly in practically every stalk of wheat examined. In fact, in some there were three or four larvae or "flax seeds" as they are sometimes called. This was causing many of the stalks to break over and others were badly stunted. Several fields will hardly be worth cutting, in fact, one man has turned his herd into the wheat in order to make use of what feed there is there. It is generally claimed that late sowing of wheat will largely avoid attacks of the Hessian fly. One of the worst fields we saw was not sown until the first week in October. The fly seemed to be working in the wheat sown on both summerfallow and sod. The damage done this year will undoubtedly make many farmers in the infested districts dubious about sowing much wheat this fall. The spring crops are looking fine at time of writing. There is a good stand of oats and they have a healthy color.

In the district visited a good many farmers are devoting a large acreage to sugar beets this year. In most cases the stand is good, but the plants have gotten a little ahead of the men with the hoes owing to the work having been delayed by the wet weather. Belgians and Indians are largely engaged to hoe and thin the plants.

The pastures have picked up considerably since the drought was broken and stockmen report the cattle making satisfactory gains. A few complain about the cattle being worried by the heel-fly, but on the whole the men who are grazing large numbers of steers are fairly optimistic regarding the gains made on the grass and the prospects for the market.

THE DAIRY.

Westside Ayrshire Herd Sold by Auction.

Due to ill health, the splendid, though small, Ayrshire herd of David A. Ashworth, Denfield, Ontario, was disposed of by auction on Thursday, June 24. In all twenty-one head were sold for a total of \$3,605. There were fifteen females, including two calves, one yearling, four two-year-olds, two three-year-olds, and six mature cows, that averaged \$208. A yearling and a three-year-old bull each sold for \$150, while a calf, out of Lady May 2nd, that sold to T. F. Kingsmill, London, for \$600, the high price of the sale, went to S. Rogers, Lashburn, Sask., for \$200. Mr. Kingsmill bought the three high-priced animals in the sale, acquiring in addition to Lady May 2nd the mature cow, Sister Kate, for \$375, and Westside Princess May, a two-year-old daughter of Lady May 2nd, for \$300. Mr. Ashworth's cattle were of good size, splendid quality, and uniform. Below is given a complete list of individual sales for \$100 or over. In addition to the cattle, a few brood sows, some young pigs, as well as the work horses, and implements were sold.

FEMALES.

Butter Alice, Frank Byrne, Quebec, Que.	\$230
Lady May 2nd, T. F. Kingsmill, London.	600
Calf, S. Rogers, Lashburn, Sask.	100
Gladden Hill Lady May, C. D. Woolley, Simcoe.	250
Sister Kate, T. F. Kingsmill.	375
Marigold, E. B. Stansell, Vienna.	175
Trout Run Grace Darling, Jno. Barr, Blyth.	175
Bonnie Brae White Rose, A. H. Ashworth, Denfield.	150
Mayflower 2nd, C. D. Woolley.	165
May Mitchell of Menie 4th, E. A. McCook, Campbellford.	200
Queen's Milkmaid, W. T. Meharg, Tillsonburg.	105
Westside Kitty, A. H. Ashworth.	130
Westside Princess May, T. F. Kingsmill.	300
Westside Lady May, S. Rogers.	100

MALES.

Westside Buster Brown, J. L. Stansell, Straffordville.	150
St. Nicholas of Orkney, A. H. Ashworth.	150

Finding a Market for Our Milk.

IV. THE CONDENSED MILK MARKET.

Dairying is one of the oldest of Canadian industries, having been established with the earliest settlers as early as 1610. Our first cows came from Brittany and Normandy and the Ayrshire is the oldest of the pure-breeds as now known in Canada. The first of these were imported in 1821 by Lord Dalhousie, then Governor of Nova Scotia, to be followed by further additions from time to time until the first importations by private breeders in 1845, 1850 and 1853. Next came the Jerseys in 1868, the Guernseys, in 1878, and the first Holsteins were imported into Ontario from the United States in 1882 and 1883. In 1919 it was estimated by the Dominion Bureau of Statistics that there were 3,547,437 milch cows in Canada and that 1,140,016 were owned in Ontario and 1,056,347 in Quebec, with something over 938,000 in the prairie provinces.

The first cheese factory was built in Canada four years before the first Jerseys were introduced into Canada; the first creamery was built in Quebec midway between the coming of the Jersey and the Guernsey; and the introduction of the condensing industry into Canada occurred one year after the first appearance of the popular black-and-whites. Truro, Nova Scotia, was the home of the first condensed milk factory in Canada, and this one was followed by others, most of them being established in Ontario. At the present time Canadian condensed milk factories are located at Charlottetown, in Prince Edward Island; Truro, in Nova Scotia; Huntingdon, in Quebec; Norwich, Ingersoll, Tillsonburg, Aylmer, Springfield, Brockville, St. George, Chesterville, Ottawa, Peterboro, Woodstock and Sydenham, in Ontario; Winnipeg, in Manitoba; and at Ladner and Courtenay, in British Columbia. Commissioner J. A. Ruddick, Dairy and Cold Storage Branch, Ottawa, from whom much of the above historical data has been secured, also informs us that the first milk powder factory in Canada was established in Oxford County, Ontario, in the early nineties, and that plants are now established at Brownsville, Glanworth, Burford, Hickson, Belmont, Russell, Beachville, Picton and Courtenay, with receiving stations at Verschoyle, Corinth, Harrietsville, Nilestown, Westminster, Gladstone, Mapleton, New Durham, Ratho and Brooksdale.

GROWTH OF THE CONDENSED MILK INDUSTRY.

Growth of the condensing industry in Canada is thus seen to have been quite rapid, but additional weight to this statement is given by the fact that during the last ten years this industry has increased its proportion of our total annual export of dairy products from 1.9 per cent. to 15.1 per cent. Add to this the statement of several company managers that they are not attempting to develop the export market very strongly but have a greater demand than they can supply at home and one can appreciate the estimated 1919 production of condensed milk products which is valued at approximately \$13,500,000 made up as follows: 61,898,303 pounds of condensed milk valued at \$9,425,076 (Ontario \$8,384,780, Quebec, \$621,559, and Nova Scotia, \$418,737); 16,107,934 pounds of evaporated milk valued at \$1,789,089 (Ontario \$1,279,165 and British Columbia \$509,924); 494,973 pounds of condensed skim-milk valued at \$32,921 (Ontario \$4,401, Manitoba \$15,443 and Alberta \$12,977); 6,591,099 pounds of milk powder valued at \$1,539,272 (Ontario only); and probably 1,500,000 pounds of butter worth about \$750,000 and manufactured in milk powder and condensed skim-milk factories. Taking into consideration again the statement already made with regard to the home market, the following export values of condensed milk products for the period 1914-1920 (year ending March 31.) serve to further emphasize the extensive recent development of this branch of the dairy industry: \$666,941 in 1914; \$1,181,300 in 1915; \$770,566 in 1916; \$1,371,610 in 1917; \$4,955,048 in 1918; \$7,035,297 in 1919; and \$8,517,771 in 1920. It may or may not be significant, however, that the production of condensed and evaporated milk in 1919 showed a decrease of 1,306,339 pounds as compared with 1918, the former having increased from 40,700,209 pounds in 1918 to 61,898,303 pounds in 1919, while the latter decreased from 38,612,367 pounds in 1918 to 16,107,934 pounds in

1919. Milk powder increased from 5,530,915 pounds in 1918 to 6,591,099 pounds in 1919. From the point of view of pounds of milk required from the producer the increase during 1918-19 was appreciable, for the reason that whereas the decrease of 1,306,339 pounds of condensed and evaporated milk meant a decrease of probably 3,500,000 pounds of raw milk, the increase of 1,060,184 pounds of milk powder meant an increase in raw milk of about 11,000,000 pounds. These figures, we should point out, are estimated, but it is known that the increase in milk required for the condensing industry from 1917 to 1918 was from 195,671,689 pounds to 260,778,432 pounds (157,805,002 pounds in 1917 and 216,237,844 pounds in 1918 for Ontario alone).

A COMPARISON WITH CHEESE.

The condensed milk industry is similar to the city milk market and different from the butter or cheese markets in that it utilizes all of the milk solids, with the exception of condensed skim-milk or skim-milk powder. Here also, however, the remaining fat of the milk is used in the manufacture of butter or cream powder. This advantage is magnified by the fact that the various products can be temptingly preserved for the consumer and that their bulk is small. A fact to be considered very seriously also is the control of this industry by a comparatively few corporations. The eight milk-powder plants in Ontario are owned by three firms, one of which owns six of the factories and operates all of the receiving stations already named. Of the twenty condensed and evaporated milk plants in Canada, one firm owns six and two others two each, while a few of the remainder are operated by city dairy or creamery companies. This fact need not necessarily be alarming to the producer, but it is perfectly true that in dealing with a large corporation the individual producer is relatively of less consequence to the business and therefore can exert less influence as regards, say, the matter of milk prices. There were in 1918, 1,885 cheese factories, 990 creameries and 22 condensed, evaporated and milk powder factories in Canada. There was \$10,674,866 capital invested in creameries, \$4,516,464 invested in cheese factories and \$4,051,708 invested in the 22 condensed milk factories. In other words the capital invested in the average condensed milk factory was seventy-eight times that of the average cheese factory and eighteen times as much as the average creamery. Not only was this true, but whereas the cheese milk producer received 87 per cent. of the factory selling price of the cheese and the creamery-milk producer 80 per cent. of the factory selling price of the butter, the condensed milk producer (including evaporated milk and milk powder) received only 47 per cent. of the factory selling price of its products. Further, dairy factory statistics also show that whereas total expenses in the manufacture of cheese amounted to 97 per cent. of the selling price of the cheese, leaving a margin of 3 per cent. or \$700,000 to be divided up among the 1,885 factories for other possible charges and profit, there was a margin of 7 per cent. or \$3,000,000 to be divided among 990 creameries and 8 per cent. or \$900,000 to be divided among 22 condensed milk factories. A still further analysis of available dairy factory figures compiled by the Dominion Bureau of Statistics show that cheese-milk manufactured into cheese sold at the factory for approximately 2.1 cents per pound, while condensery-milk when manufactured sold for 4.7 cents per pound. The margin to the cheese factory over total expenses was less than .1 cent per pound, and the margin to the condensery over total expenses was about .3 cents per pound.

WHAT THE FIGURES MEAN.

These figures do not necessarily mean that the condensery patron was not getting a correspondingly good price for his milk, because approximate figures show that he got 2.2 cents per pound as compared with 1.8 cents per pound (plus whey, for cheese-milk). We are convinced, however, that if they mean nothing else they mean that the individual producer, when dealing with large companies whose methods and expenses of manufacture are so different from those pertaining to the cheese or small-creamery industry, must follow different methods of bargaining if he is to get the full

market price for his product. It was found necessary for the grain growers of the West to unite in marketing their wheat through the large milling companies and over the great railroads; it was necessary for the Western farmers and more lately the Ontario farmers to unite in the marketing of live stock through the large packing houses; it has been found necessary for farmers to unite in the marketing of eggs and poultry through the large cold storage and produce dealers; and it is even more necessary for milk producers to unite in the marketing of milk which is now the basis of an annual quarter-billion-dollar industry in this country. Not long ago a representative of "The Farmer's Advocate" was present at a meeting representative of ten local milk producers' associations, all of which were primarily interested in marketing their milk through one company in the condensing industry. These men wanted an increase in the price of milk for the succeeding month because they felt that they had not been getting prices that compared with cheese-milk prices. After three hours a resolution was framed up delegating to the provincial association the right to negotiate for an increase of 10 cents per 100 pounds. Not without some difficulty the increase was secured, in spite of what would otherwise have proven a substantial reduction in price the following month. Diplomacy won for the provincial executive, combined with the business intelligence of the company. It is doubtful if the local associations could have secured the increase, because it meant that other companies must meet any increase in price made by this one. But it is more certain that had the company been very stubborn they could have won at least a temporary victory and the producers executive been forced to report failure. If such a failure had occurred it would not have indicated their inefficiency but it would have emphasized the inefficiency of the local organizations as they exist at present. Fortunately the increase was secured and several thousand producers benefitted to the extent of probably 25 to 35 cents per 100 pounds for the heaviest month of the year. From the standpoint of dollars and cents the outcome was satisfactory, but if the incident proved anything it proved the value of good marketing organization rather than the efficiency of the present local associations.

NECESSITY FOR ALTERNATIVE MILK MARKETS.

It has frequently been said and in fact, figures which we have presented in previous articles indicate the fact, that the cheese industry has been affected by the rapid growth of the condensing industry. Cheese making, however, is only one way of marketing milk and if the cheese industry cannot stand up it must fall down. But the milk producer as well as the cheese industry has been affected. At one time he was one of a comparatively few patrons of the local cheese factory. Now he is a patron of a large company and in some cases does not even deliver it to the company's manufacturing plant, but takes it to a receiving station from which it is handled in ways which do not concern him. In many cases, as a matter of fact, he still takes it to the same old place, now no longer a cheese factory but a transformed factor in the dairy business, submerged, as he himself has been, in the operations of a firm, one of whose manufacturing plants alone is seventy-eight times as large in point of capital as his time-worn friend the cheese factory. Instead of having his say in the appointment of the cheese factory salesman, he has already found it necessary to organize a local milk producers' association so that the big company will listen to him when he wants to talk prices. He has not yet got beyond the point of realizing that he made a mistake when he let the old cheese factory slip out of his hands. At least 52 cheese factories have been affected in Ontario up to the beginning of 1920. Some were closed down for a season, some were put out of business, and some were bought or rented by the condensing companies. Some still function as receiving stations, but for the producer they are no longer evidences of the cheese industry. We are not blaming the companies, who are, like most other people, out to make money. They want raw material as cheaply as it can be obtained and in quantity; the farmer wants the best possible market for his milk and wants it steadily. He

above one hundred
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ALPHA.
berta and Saskatchewan
ditor.

n Middlesex

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are showing the benefit
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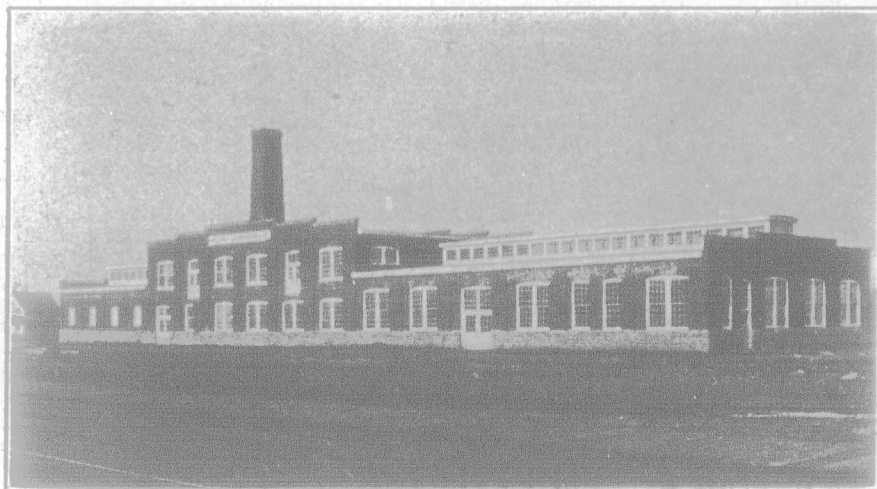
IRY.

Herd Sold by

l, though small, Ayr-
h, Denfield, Ontario,
Thursday, June 24,
for a total of \$3,605.
ding two calves, one
three-year-olds, and
208. A yearling and
or \$150, while a calf,
to T. F. Kingsmill,
of the sale, went to
\$200. Mr. Kingsmill
imals in the sale, ac-
2nd the mature cow,
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May 2nd, for \$300.
size, splendid quality,
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n to the cattle, a few
ll as the work horses,

, Que.....\$230
ondon..... 600
..... 100
olley, Simcoe... 250
..... 375
..... 175
arr, Blyth..... 175
worth, Denfield. 150
..... 165
McCook, Camp-
..... 200
Tillsonburg..... 105
..... 130
smill..... 300
..... 100

nsell, Stratford-
..... 150
worth..... 150



A Large Condenser in Eastern Ontario that Utilizes as Much as 200,000 Pounds of Milk per Day.



Formerly a 200-ton Cheese Factory in Western Ontario: now Merely a Milk Receiving Station.

has a steady market, but not necessarily the best one. If it does not happen to be the best he can only buy hogs and a separator and ship cream, or continue to reflect that his one available market is not the best and that the cheese factory is no more.

CO-OPERATIVE MILK DISTRIBUTING PLANTS A REMEDY.

The incident related above with respect to a ten-cent increase might just as readily have proven a failure as a success. Had it proven unsuccessful it is almost certain that the majority of the patrons would have continued to supply the company. They would of course, have been dissatisfied and the company was wise enough to recognize this fact. They made a concession to their patrons and not a business deal in the real sense of the word. In all probability the elements of the same kind of a situation have come together in much the same way many times during the last few years with other companies as well as this particular one. We submit that an entirely different complexion would have been put upon the matter if, instead of a number of local associations depending upon the good luck and prestige of a provincial executive, there had been the same number of associations owning their own co-operative milk receiving and distributing plants, with an experienced butter and cheese-maker in charge and equipment installed for the testing and separation of milk and the manufacture of cheese or butter. Had this been the case the company would have dealt with a provincial executive representing say a dozen local companies, each of which was in a position to supply 25,000 or 50,000 pounds of milk daily during the month under dispute. Had the company not been able to grant an increase a dozen boards of directors would have met and possibly told the cheese-maker in charge to make cheese after the first of the month. A few might have made butter, shipped some cream, or decided to continue at the low price. Suppose it had required a \$150 investment from each patron to establish these co-operative milk distributing plants? What would that amount to with an output of from 25,000 to 50,000 pounds of

Second National Ayrshire Sale.

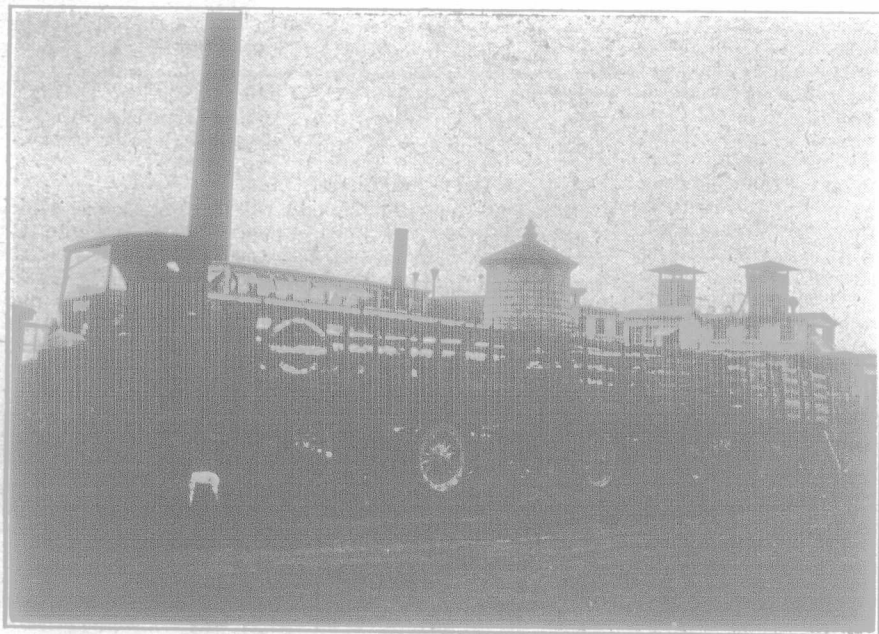
Reference was made last week to the Second National Ayrshire sale, held at Springfield, Mass., on June 10. There were 44 animals sold for an average of \$965, which compares with an average last year of \$1,625. Eight Canadian animals averaged \$707, 3 from the herd of R. R. Ness, Howick, Quebec, averaging \$966, 3 consigned by Gilbert McMillan, Huntingdon, Quebec, averaging \$666, and 2 from D. T. Ness, Howick, Quebec, averaging \$380. The following is a list of sales for \$1,000 and over:

Addington Princess, Weymouth Farms, Weymouth, Mass.	\$1,400
Barclay's General Haig, J. E. Whiting, Uxbridge, Mass.	1,100
Barclay's White Lily, Hugh J. Chisholm, Port Chester, N. Y.	2,000
Barclay's Nightingale, Adam Seitz, Waukesha, Wis.	1,275
Jean Armour's Big Kate, P. O. Reyman, Wheeling, W. Va.	2,100
Lessnessock Violet 7th, Barclay Farms, Rosamont, Pa.	1,000
Craigley Ada, Stephen Bull, Racine, Wis.	1,000
Auchenbrain Hannah 3rd, H. A. Tuttle, Upton, Mass.	2,400
Willowmoor Cristina, W. P. Towner, Townersville, Pa.	1,100
Castlemains Kate, Wendover Farm, Bernardsville, N. J.	1,500
Ridgewood's Milkmaid, Capt. A. H. Higginson, South Lincoln, Mass.	1,500
Otterkill Roseleaf, J. E. Whiting, Uxbridge, Mass.	2,550
Henderson's Betty, Peter Bradley, North Weymouth, Mass.	4,100
Otterkill Katherine, J. E. Whiting, Uxbridge, Mass.	1,050

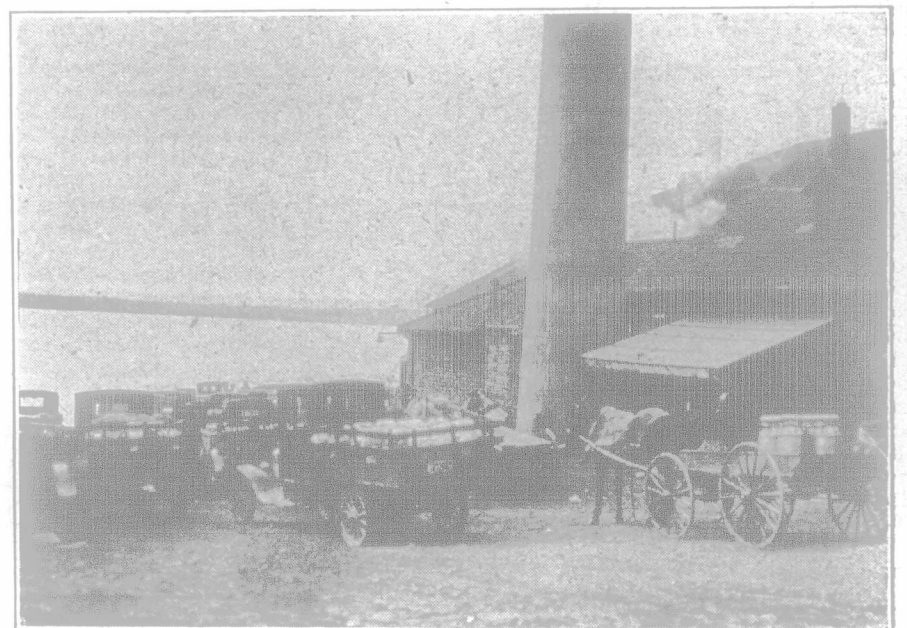
Trixy G., W. W. Ballantyne, Stratford	140
Trixy G. 2nd, Geo. Pearson & Son, Waterdown	145
Mollie 3rd, S. Rogers	170
Miss Bartley 2nd, S. Rogers	225
Miss Bartley 3rd, Peter Cairns	140
Adalia 5th, S. Rogers	155
Adalia 6th, H. A. Swart	125
Arvilia 2nd, S. Rogers	405
White Arvilia, Wm. Thorne, Lyndoch	180
Garclaugh Alpha, Peter Cairns	270
Alpha 2nd, H. A. Swart	105
Alpha 3rd, C. D. Woolley, Simcoe	130
Annie Laurie 3rd, W. W. Ballantyne	145
Annie Laurie 4th, C. D. Woolley	160
Garclaugh Belle, C. D. Woolley	145
Ishbel, H. L. Roberts, Simcoe	175
Garclaugh Star, T. F. Kingsmill	240
Star 4th, H. A. Swart	200
Star 5th, Peter Cairns	270
Star 6th, Geo. Apel, Mitchell	245
Star 7th, Geo. Apel	130
Star A. 2nd, Jno. Morrison, Mount Elgin	105
Daisy Queen 5th, C. D. Woolley	170
Daisy Queen 6th, H. A. Swart	195
Daisy Queen 7th, H. A. Swart	110
Daisy Queen 8th, H. L. Roberts	100
Edna, H. A. Swart	280
Edna 2nd, S. Rogers	155
Christmas Belle 2nd, T. F. Kingsmill	260
Christmas Belle 4th, Peter Cairns	185
Christmas Belle 8th, Geo. Apel	175
Christmas Belle 11th, H. A. Swart	105
Advance of Walnut Lodge, Sol. MacCallum, Belmont	120

Hood Farm Jersey Sale.

At the recent Hood Farm sale of Jerseys at Lowell, Mass, 71 head were sold for an average of \$756. All but one were bred at Hood Farm and the lot included over 40 animals less than two years old and about 20 less



A Sample Truck and Trailers for Hauling Milk to a Milk Powder Factory.



A Few of the Trucks Waiting to Unload at an Eastern Ontario Condensery.

milk daily from a single community to protect? What would be the value to the milk producer of three or four alternative markets for his milk? The community has we will say, \$100,000 worth of milk to sell every year. If the plants costs \$15,000, interest at 7 per cent. amounts to \$1,050. Is it worth this much to make sure of three or four markets instead of one and very probably sell the milk for more than would otherwise be secured? One hundred producers averaging ten 5,000-pound cows will sell 5,000,000 pounds of milk annually. At an increase of 5 cents per 100 pounds due to co-operative marketing the increase would be \$2,500, or enough to pay the interest on \$15,000 at 7 per cent., and depreciation at more than 9 per cent. An investment as heavy as this would rarely be made. The average creamery represented an investment of only \$10,674 in 1918. Moreover, the incident already referred to shows that the benefits from co-operation amount to far more than 5 cents per 100 pounds. What are producers going to do about it? We believe that such a system of marketing milk would be infinitely better for the producer, and not a bit less satisfactory for the companies concerned. They would have the satisfaction of dealing with five men instead of fifty or one hundred. They would be assured of a steady volume of milk and would be dealing with men who would understand marketing conditions much more fully than is now possible for each individual patron. Anxiety would give way to confidence on the part of all concerned, and co-operative marketing would do much to put the condensing industry on a fairly competitive basis with other branches of dairying. We hope to see some development in this direction, and believe that it must come if milk producers are to get the most out of the condensed milk market.

Live stock is at the foundation of soil fertility. The more stock a farm will keep in condition the year round, the larger the crops it will produce in the future, provided, of course, it is drained and properly cultivated.

Auchinbay Ella, W. P. Towner, Townersville, Pa.	2,000
Duchrae Jenny 2nd, Hugh J. Chisholm, Port Chester, N. Y.	1,200

Homestead Ayrshire Dispersal.

A sale of forty-eight pure-bred Ayrshire cattle from the Homestead Farm herd, owned by MacVicar Bros., Belmont, Ontario, was held at the farm on Wednesday, June 23. On the whole it was fairly successful, the forty-eight head selling for a total of \$7,810. Forty-four females sold for \$7,580 or an average of \$172. Included among the females were ten yearlings, fourteen two-year-olds, ten three-year-olds, and three four-year-olds. Considering the numbers of young heifers, and the fact that a number of them were rather small on account of the fact that they had been bred early, the average may be said to have been satisfactory. The breeding of the herd was undoubtedly good, and all were brought into the ring in good salable condition. Only four males were offered, a six-year-old which went for \$120, a two-year-old which was not sold, and two spring calves. The crowd was very good considering the weather, which had been threatening all day. About the middle of the sale it rained quite sharply for some time, during which a few animals went at easy prices. The high price of the sale was \$405, paid by S. Rogers, Lashburn, Sask., for Arvilia 2nd, a two-year-old heifer got by the herd sire Advance of Walnut Lodge, and from a daughter of Arvilia, that has a record of 12,819 lbs. of milk and 508 lbs. of fat. A list of individual sales for \$100 or over follows:

Robins Queen, John Hunter, Grimbsy	\$210
Garclaugh Delphine, Peter Cairns, Brantford	350
Robins Queen 2nd, S. Rogers, Lashburn, Sask.	205
Delphine, H. A. Swart, Simcoe	140
Robins Queen 3rd, T. F. Kingsmill, London	120
Dorothy 2nd, S. Rogers	185
Trixy 4th, T. F. Kingsmill	115

than one year old. Ten animals sold for \$1,000 or over and the top price of the sale was \$6,300 secured for Sophie's Elbert purchased by W. J. Glatfelter, Spring Grove, Pa. Ed C. Lasater, Falfurrias, Texas, was the largest purchaser, paying \$13,170 for 19 head at an average price of \$693. Sophie's Gentle Lady was the only animal sold to a Canadian. She was purchased by R. J. Fleming, Toronto, for \$675.

Holstein Records for May.

During the month of May official records of 33 mature Holstein cows, 7 senior four-year-olds, 5 junior four-year-olds, 6 senior three-year-olds, 10 junior three-year-olds, 8 senior two-year-olds and 23 junior two-year-olds were received and accepted for entry in the R. O. M. No less than eight records are above the 30-lb. mark and of these, two are junior three-year-olds. Five mature cows made 30-lb. records as follows: Simcoe Mercedes Queen with 32.46 lbs. butter from 499.3 lbs. milk at 9 years; her stable mate Shamrock 3rd with 32.38 lbs. butter from 555.6 lbs. milk at 6 years; Pauline Colantha Posch with 32.24 lbs. butter from 614.6 lbs. milk at 12 years; Korndyke Segis Hartog with 31.92 lbs. butter from 577.5 lbs. milk at 7 years; and Riverdale May Echo Lyons with 31.13 lbs. butter from 665.1 lbs. milk at 7 years. Colony Sadie Canary leads the senior four-year-olds with 31.75 lbs. butter from 587.9 lbs. milk and Colony Korndyke Belle leads the junior four-year-olds with 24.27 lbs. butter from 484.9 lbs. milk. Senior three-year-olds are led by Rosa Lee Sylvia with 25.11 lbs. butter from 592 lbs. milk while among junior three-year-olds Pietertje Mechthilde Walker has 31.58 lbs. butter from 578.4 lbs. milk and her stablemate Mechthilde Korndyke Walker has 30.22 lbs. butter from 721.4 lbs. milk. Lady Waldorf Sylvia leads the senior two-year-olds with 22.94 lbs. butter from 556.2 lbs. milk while the 23 juniors are headed by Sylvia Bell Pontiac with 26.50 lbs. butter from 417.8 lbs. milk. Both are from the same stable as the two 30-lb. three-year-olds. Only 13 cows completed semi-

FOUNDED 1866

ford.....	140
Waterdown.....	145
.....	170
.....	225
.....	140
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.....	125
.....	405
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.....	270
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.....	160
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.....	200
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.....	245
.....	130
Elgin.....	105
.....	170
.....	195
.....	110
.....	100
.....	280
.....	155
.....	260
.....	185
.....	175
.....	105
.....	120

Key Sale.
 of Jerseys at Lowell,
 average of \$756. All but
 the lot included over
 and about 20 less



Ontario Condensery.
 sold for \$1,000 or over
 \$6,300 secured for
 Glatfelter, Spring
 Texas, was the
 for 19 head at an
 Gentle Lady was the
 She was purchased

for May.
 Official records of 33
 r-year-olds, 5 junior
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 and 23 junior two-
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 s as follows: Simcoe
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 at 6 years; Pauline
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official R. O. P. tests. Johanna Jemina Posch as a six-year-old leads the mature class with 1,215 lbs. butter from 26,415 lbs. milk. Vale Lyons is the first of two three-year-olds with 558.75 lbs. butter from 13,846 lbs. milk, and Home Farm May Lyons leads 4 two-year-olds with 511.25 lbs. butter from 13,180 lbs. milk.

Roycroft Holsteins Average \$757.
 The sale of fifty-head of Roycroft Holsteins, held on the Canadian National Exhibition grounds, Toronto, Friday, June 25, included forty-six head which sold for \$35,320, or an average of \$757 per head. There were forty-four females that averaged \$782, and six females sold at prices ranging from \$1,000 to \$4,500. Many of the females were heifers and the lot included seven yearlings, averaging \$294; eleven two-year-olds averaging \$1,035; eight three-year-olds averaging \$429; and five four-year-olds averaging \$1,258. There were only eight mature cows, and these averaged \$736. The high price of the sale was \$4,500, paid for Countess Alcartra Segis, by Gordon S. Gooderham, Clarkson, Ontario. This two-year-old heifer was consigned by E. B. Purtelle, Bloomfield, Ont., and she has a 30-day world's record of 106.34 lbs. of butter from 1,719.60 lbs. of milk, made at the age of one year, eleven months and nine days. Mr. Purtelle also consigned Keyes Segis Alcartra that sold for \$2,000, and May Sylvia Alcartra, an April calf, that sold for \$3,900. Helena Burke Keyes, an eight-year-old cow that sold to Gordon S. Gooderham for \$1,750, was consigned by A. B. Foster & Sons, Bloomfield, Ont. She has a seven-day record at seven years of 33.28 lbs. butter from 713 lbs. of milk. This cow weighs nearly a ton, and has a 32-lb. record at six years. The attendance at the sale was not large, and there were only a few Ontario farmers present, probably because of the fine weather which kept them on the farms. Nevertheless, the high-priced stuff all stayed in Canada. Quite a number of the offerings went to the States of Michigan, New York and Pennsylvania. The following is a detailed list of sales for \$100 and over:

FEMALES.	
Roycroft Belle Echo, Banwood Farms, Romeo, Michigan.....	\$ 225
Het Loo Francie Echo, Sherrick Bros., Bethesda, N. Y.....	770
Roycroft Echo Boon, Geo. Abbott, Courtland, N. Y.....	350
Roycroft Echo Elsie, Rancocas Stock Farms, Jobston, N. Y.....	205
Het Loo Gerben, David Powrie, Brampton.....	450
Roycroft Echo Gerben, Banwood Farms.....	275
Roycroft Tidy, G. A. Abbott.....	200
Roycroft Pontiac Tidy, J. N. Cameron, Norval.....	220
Roycroft Tidy Abbekerk, G. H. Burdick, Pittsburg, Pa.....	380
Roycroft Abbekerk Beets, A. W. Copeland, Detroit, Mich.....	450
Roycroft Abbekerk, Rancocas Stock Farms.....	625
Roycroft Abbekerk Pontiac, D. Raymond, Vaudreuil, Que.....	410
Roycroft Netherland, Harry Smith, Port Perry.....	250
Roycroft Devires, Rancocas Stock Farms.....	255
Keyes Segis Alcartra, P. J. Salley, Lachine Rapids, Que.....	2,000
Countess Alcartra Segis, Gordon S. Gooderham, Clarkson.....	4,500
Roycroft Keyes Segis, D. Raymond.....	800
Oakville Inka Johanna, G. A. Abbott.....	370
Het Loo Inka, E. E. Muirhead, Clarkson.....	670
Roycroft Inka Echo, A. C. Hardy, Brockville.....	450
Roycroft Inka, R. M. Holtby, Port Perry.....	285
Roycroft Inka Pontiac, A. W. Copeland.....	260
Helena Burke Keyes, Gordon S. Gooderham.....	1,750
Princess Posch Albino, W. H. Miner, Granby, Que.....	980
May Sylvia Alcartra, E. E. Muirhead.....	3,900
Roycroft Keyes, E. E. Muirhead.....	800
Het Loo Clothilde Korndyke, Gordon S. Gooderham.....	4,400
Countess Walker Segis, E. A. Hardy, Rochester, Mich.....	350
Roycroft Princess, E. A. Hardy.....	700
Roycroft Segis Walker, D. Raymond.....	1,000
Burkeyje Hengerveld May Echo, W. F. Elliott.....	1,000
Pietje Inka Pontiac, G. A. Burdick, Pittsburg.....	700
Roycroft Hengerveld, H. M. Vanderlip, Brantford.....	610
Francie Dutchland Hengerveld, N. I. Metcalf, Bowmanville.....	325
Inka Sylvia Echo, D. Raymond.....	400
Roycroft Francie Echo, Harvey Smith.....	430
Het Loo Wayne, Walter Bathford, Amherstburg.....	220
Roycroft Bessie, Brentwood Farm.....	305
Het Loo Rag Apple, Banwood Farms.....	410
Roycroft Zella, Wm. Fendley, Norval.....	390
Roycroft Mary Echo, G. A. Burdick.....	280
Roycroft Colantha Echo, G. A. Burdick.....	270
Roycroft Artis Echo, Harvey Smith.....	275
Het Loo Boon, W. R. Cummings, Cumming's Bridge.....	525
MALES.	
Male calf, W. F. Elliott.....	350
Roycroft Prince Segis Pontiac, Carman Baker, Brighton.....	550

There is now and likely will be for some time a good demand for the right kind of breeding stock. It is never too late to commence improving the herd. There are many good animals changing hands at private and auction sales. The price of breedy, high-quality stuff appears high compared with pre-war prices. But think in the terms of oats or wheat, and the rise in price of stock has not been so great.

THE APIARY.

Swarming Devices

EDITOR "THE FARMER'S ADVOCATE":

Every apiarist engaged in the production of honey should certainly have the wings of all his queens clipped. He cannot afford not to unless he uses perforated zinc. It is much more difficult to take care of swarms when queens are allowed to go with the swarm. But as there are some who dislike to "disfigure" or "mutilate" their queens, and as some swarms in any case will get out with a virgin queen, it is best to describe some of the various devices for capturing swarms with unclipped queens.

Almost every apiarist has his own peculiar notion as to how a swarming device should be constructed. Some of these implements are very ingenious and of valuable assistance during the swarming season. Their particular use is to remove a swarm after it has clustered and place it in the hive where it is desired that it take up a new abode.

The first one to which attention is called, not because it is the best but because it is the simplest, is a sort of butterfly-catch. The hoop is made of band iron and is about 20 inches in diameter. The ends are secured to a suitable pole. The bag is to be put under the swarm, and the hoop is then made to cut off the cluster so that the bees will fall into the bag. It is then turned edge-wise, so as to confine them while being taken down and carried to the hive. It may be necessary to hold the bag in the air to catch the flying bees. These will shortly cluster on the outside. As the bag is made of cheesecloth the bees inside have plenty of air. To empty the bees, turn it inside out.

Another swarming device consists of a wire-cloth basket made in the shape of an inverted pyramid, and pivoted at the opposite corners so as to hang always in an upright position. When a swarm is captured the basket may be grasped by the ring at the small end and inverted, dumping the bees into the hive prepared for them.

As soon as the cluster beginning to form on a tree or bush is half or nearly completed, the basket is shoved up to and around the cone of bees. An assistant, if present, gives the limb a jar, so as to disengage the bees into the basket. In case no one is ready to assist,



A Fine Sheltered Apiary that Should Make Money for the Owner.

a sliding movement will precipitate the cluster into the wire-cloth cage, when it is quickly lowered. This operation, in passing down through the limbs, will usually catch the wire-cloth lid and close it with a slam. In case it is not closed, the apiarist steps forward and does it himself. Half or two-thirds of the bees are generally confined. In all probability the queen is there also. As the bees cannot get out, those still flying in the air will usually cluster on the outside of the cage. To make this more expeditious the tripod is adjusted and the cage suspended in the air right where the bees are flying the thickest. In five or ten minutes the remainder of the bees will be clustered on the outside. At this stage of proceeding the apiarist comes forward, folds the two short legs against the pole, grasps it at its centre and walks off to the hive which he has prepared. One of the special features of the arrangement is that the basket can be put to almost any position from two to ten feet off the ground. All that is necessary is to adjust the tripod so that the basket will be held where the bees are flying. In the meantime, unless the hive is already prepared, the apiarist has ample time to get it ready. After this he returns to the swarm just now clustered. Most devices require to be held until the bees have settled. It is a tedious job to hold a pole at arm's length with face upturned. If the swarm clusters very high, some other arrangement would be better, but for the modern height it is just the thing.

In case of an absence of any special tools to make a swarming device, a simple one may be quickly made by selecting a slim sapling about fifteen to twenty feet long, and after cutting off all the branches and leaving a crotch at the end a common bushel basket may be attached. As soon as the swarm is captured the basket may be taken off the pole and carried to the new hive. After the basket is hooked on to the end of the pole, it is elevated to a point just below where the swarm is hanging on the tree, and is gradually pushed up until the swarm is nicely placed therein. The pole is given a sharp push upwards, care being taken not to unhook the basket. This sudden jar will dislodge the swarm,

and before the bees have an opportunity to take wing the basket is lowered and unhooked from the end of the pole. It may now be dumped in front of the hive where it is to be placed. If some bees get out and cluster on the old spot, they may be secured after a second trial.

HIVING THE NEW SWARM.

With most of the hiving devices a hiving-hook can be used to good advantage. It is simply an iron hook on a long pole, resembling somewhat a shepherd's crook. One of the hiving devices is passed beneath the swarm, while the hook on the pole is hooked over the limb. By one or two sharp jerks the bees are jarred into the basket, bag or box. Sometimes a swarm will alight upon a limb beyond the reach of any ladder! Possibly, also, the limb upon which the bees are clustered is so far out from the body of the tree that it would not sustain the weight of anyone climbing after them. Such a swarm can usually be reached in the following manner. A stone about as large as one's fist is tied at the end of a good line. If one is not a good thrower himself, he can get some boy who is a good ball player to perform the throwing act. He should uncoil a considerable quantity of the line, then throw the stone into a crotch, if one is near the swarm. If he is lucky enough to land the stone in the crotch, he should draw gently on the line until the stone catches in the fork. One quick jerk will dislodge the bees, and after that the limb should be kept in a tremble until the bees cluster on some other spot, which they will do presently if the limb is kept agitated for five or ten minutes. They may cluster higher up, but the probabilities are they will seek some other spot more accessible. If there is no convenient crotch at the right point, the stone should be thrown so it will pass, taking about one foot of line. The string should be given a good jerk, causing the stone with the line to whirl around the limb a couple of times. If one does not succeed the first time or two, a third or fourth attempt may be successful. It is not a very difficult trick; but the main thing is to get the line attached to the limb at some point near the swarm. Then the rest is easy.

One of the most useful implements in the apiary when queens are not clipped is a good hand force-pump. A swarm of bees in the air with a queen that might otherwise circle about for fifteen or twenty minutes can usually be made to cluster in from two to five minutes by its use. Whether the fine particles of water dampen

the wings and so impede their flight, or cause the bees to think it is raining, or both, and that, therefore, they had better cluster at once, cannot be proven, but certainly the spray has a very decided effect. One who becomes moderately expert will be able not only to make the bees settle but to compel them to cluster on some point easily accessible to any of the ordinary hiving devices. Occasionally a swarm will make for the top of a tall tree. With a pump they can be headed off, causing them to settle on a lower branch. Even when a swarm is clustered twenty or thirty feet from the ground, by adjusting the stream nozzle and letting it play directly on the swarm itself, it can many times be dislodged, thus causing them to take wing and finally settle again upon a lower point of attachment. Again, several swarms will come out simultaneously, and two or more attempt to cluster together. By the timely use of the spray, each swarm can be kept separate by dampening the wings of the stragglers of the two swarms, about to come together. A good many times a swarm that is about to abscond can be headed off and made to cluster.

York Co., Ont.

M. A. BOAG.

POULTRY.

First Nova Scotia Egg Laying Contest.

Reports of the first Nova Scotia Egg-Laying Contest conducted by the Nova Scotia Department of Agriculture under the supervision of J. P. Landry show that up to June 18, a total of 14,825 eggs have been laid by 30 pens of 5 birds each. Twelve varieties of birds are represented, with white Wyandottes, S. C. white Leghorns, Barred Plymouth Rocks, R. C. Rhode Island Reds and S. C. Rhode Island Reds in greatest numbers. A pen of R. C. Rhode Island Reds had laid 743 eggs to June 18, that weighed 1,574 1/2 ounces. The next

nearest was a pen of Barred Plymouth Rocks with 629 eggs weighing 1,275 ounces. Of the 14 pens that had laid 1,000 ounces of eggs or over there were three out of three pens of S. C. Rhode Island Reds, one out of three pens of R. C. Rhode Island Reds, four out of five pens of Barred Plymouth Rocks, one out of two pens of S. C. Anconas, the only pen of S. C. Brown Leghorns, two out of five pens of S. C. white Leghorns and two out of six pens of white Wyandottes. The best hen was a R. C. Rhode Island Red, and laid 176 eggs up to June 11, while the poorest hen was also a R. C. Rhode Island Red and laid 4 eggs. The second best hen was a Barred Plymouth Rock and laid 173 eggs. The contest began November 1, 1919, and since that time 58 birds have laid over 100 eggs up to June 11.

Market Good Eggs Frequently.

A review of the poultry and egg-market situation published under date of June 22, by the Poultry Division, Live Stock Branch, Department of Agriculture, Ottawa, has this to say about marketing eggs in hot weather: "With the market at its present level, producers have every incentive to gather and market their eggs frequently and regularly. Many shipments are now showing signs of incubation and of having been held under unfavorable conditions, and the loss to the individual producer and to the country is rapidly assuming tremendous proportions. 'Remove male birds,' 'gather frequently,' 'keep eggs cool and free from contaminating influences,' 'market frequently,' are points worth remembering and acting upon at this season.

Discussing the various methods of selling eggs an earlier report described them as follows:

"There are three ways of selling eggs, 'Case-Count,' 'Loss-Off,' and 'Quality-Payment.' In the 'Case-Count' system the eggs are bought at a flat rate—rotten eggs bring as much as those of the highest quality. The dealer guesses at the percentage of bad eggs he will have to discard, and fixes his price accordingly. This system offers no inducement for the production of high-class eggs.

"The 'Loss-Off' system provides for the payment of all eggs, except those not fit for food, at a flat rate. Rotten eggs are not paid for. Here again no inducement is offered to produce high-grade eggs. The small, dirty or held eggs bring as much as the best quality.

"'Quality-Payment' provides for the purchase of eggs according to their actual quality. It is the system that pays a premium to the careful producer who takes pride in marketing a first-class article.

"Co-operative selling organizations use the 'Quality-Payment' plan. As the 'Loss-Off' was a step in advance of the 'Case-Count' method, so 'Quality-Payment' is another step, and points toward a better product, a higher price to the producer, less loss to the dealer, and a better satisfied consumer."

HORTICULTURE.

Fruit Conditions in B. C.

EDITOR "THE FARMER'S ADVOCATE":

Crop returns are generally of interest to growers, especially those in fruit and vegetable farming because of the light it will throw on the prices that are likely to prevail.

The soft fruit this year in the Okanagan Valley is somewhat the same as the apple crop—best described as "patchy." The peach harvest is gradually disappearing from the valley and soon all the peaches practically will have been pulled out, for most of them were planted only as fillers (a very poor policy) in the orchards. However, this year there seems to be a bigger crop than last year.

Apricots are still on the increase, and eventually this crop is going to be as valuable to the country as is the apple crop. This year will see a big increase in the number of bearing trees, and the total crop will be very good; possibly about a third more than last year. With this crop as with other stone fruits the sugar situation will largely influence the results to the growers. Last season the shortage of sugar was a heavy blow on soft fruit, and the people had not become acquainted with the fact that soft fruits can be preserved as well without sugar as with it. Sugar is not a preservative, and farmers who grow fruit should help advertise this fact to the limit.

Plums seem to have suffered less than any other of the stone fruits by the dry season, and they will be a very good crop—equal to last season. The increase that yearly makes itself felt from here will not be as great as with other soft fruits, as these have not been as extensively increased.

Small soft fruits, such as berries, have increased very little in here so far as the acreage is concerned. A late spring frost made itself felt in other parts of the Province, and told on the berry crop in some places rather heavily.

Pears are ever increasing, and a good showing of blossom and setting of the bloom is seen. This fruit, however, is rather erratic. Last season was the driest that this section of the country has ever experienced, and where a tree was on a dry rise of ground it had not the vitality to bring the crop along and mature it under the cool spring conditions. We had a light frost that made itself felt over the most of the Province late this spring and trees with a lack of vitality were pretty well robbed of their crop. We notice the same with apples as with pears, and from the same condition. Last fall a rather early and severe

frost no doubt had its effect registered in the setting of the crop this spring. Many tons of apples were never picked and many trees were hardly ripe enough. Pears are on the increase in the plantings and have been for the past four years, being nearly as popular as apricots. The result is that the increase in this crop is greater each year and on the whole will be considerably greater this year than last.

Apples, although severely injured in spots in almost every orchard by the conditions mentioned above, are considerably greater in promise this year. Less thinning will be necessary, but a considerably greater yield will result from the younger orchards and their yield will be of the more valuable desert varieties such as Newtown, Jonathan, Grimes Golden, etc., apples that are of the very best quality for box packing and in demand in the discriminating markets.

The quality will be good. This season one fruit company alone distributed over five car loads of lime sulphur to be used in Summerland, alone, a district of some 20 square miles. A very great number of power sprayers were sold here this season as well as a number of extra fine nozzles which insure better work on the older trees. From these indications we can hope for a good quality crop; for what is true of Summerland is also true of the other localities in the valley.

Storage is still quite a problem and every place is trying to work out its own situation to be ready for the fall. A large storage plant is to be erected here and not a few of the growers are putting up small bank storages. One man put up a storage last year and this spring sold three carloads on a high market, getting his fruit off in good shape.

Shipping is quite a problem and now a bigger staff and better cold storage cars are being arranged for this season. We anticipate a bigger demand this season than last year for cars, and whether, with the shortage of labor, the railways will meet it, is only a matter of conjecture so far.

Our markets have increased greatly. We are getting right into the markets which eastern Canada should be holding and we are making headway practically because we are using the box pack and putting up apples of desert quality and fine appearance. Last year we made a big hit with a few car loads of Winter Banana apples in Newfoundland and this year we will be in Montreal and Toronto with quite a few extra carloads.

On the whole the season's prospects are quite good for the Okanagan and will be better if sugar is at all plentiful.

British Columbia.

WALTER M. WRIGHT.

FARM BULLETIN.

Commissioner Murdock Resigns From Board of Commerce.

Commissioner James Murdock, the representative of Labor on the Board of Commerce and formerly Vice-President of the Brotherhood of Railway Trainmen of America, resigned from the Board of Commerce on Wednesday, June 23. He accused the Government of trying to make "a joke of the law" and objected to becoming "a high salaried time-server." He further accused the majority of Cabinet Members of not being in sympathy with the interest of the Board of Commerce Act and charged Judge Robson, former Chairman of the Board with working in the interests of the "big business." There are now no remaining members of the Board of Commerce, which was appointed in 1919.



W. E. Ashton.

Newly appointed field man for Ontario and Quebec Jersey breeders.

Jersey Breeders Appoint a Field Man.

It is announced that breeders of pure-bred Jersey cattle in Ontario and Quebec have appointed a field man in the person of W. E. Ashton, a graduate this year of Macdonald College, Quebec. We understand that Mr. Ashton's headquarters will be at Brampton, Ontario, and that he will be glad to be of service to any Jersey breeder, or to advance in any way the interests

of the Jersey breed. He is a grandson of W. H. Martin, Warden, Quebec, who is a veteran Jersey breeder, and Mr. Ashton successfully exhibited the Martin herd for several years. He was a member of the Macdonald College judging team at Chicago last year, and joined the Canadian air force during the late war.

Message to Ontario Farmers.

The following paragraphs contain a message from Dr. G. C. Creelman, for many years the genial and well-known president of the Ontario Agricultural College, Guelph, who sailed last week for England to take up there his new duties as Agent-General for Ontario. Dr. Creelman asks us to transmit a message from him to the farmers of Ontario, with whom he has been for so long acquainted, and this we gladly do, knowing that thousands of our readers have, at one time or another during the last twenty-five years, known him or heard him speak at farmers' gatherings, and have gone away impressed with his outstanding ability as a speaker.

"For the past twenty years I have been intimately and actively connected with agricultural work in the Province. Aside from administrative responsibilities it has been my duty and privilege to address and meet personally thousands of farmers in all parts of the Province. In breaking this association, which I do at the end of June, to accept the position of Agent-General for Ontario in Great Britain, I desire to express through your columns my keen appreciation of the kindness and courtesy which I have always received from the farmers of Ontario.

"Moreover, I wish to gratefully acknowledge the confidence and co-operation which has resulted in such distinct progress for better agriculture. Let me mention briefly a few of the outstanding facts. In 1903, the year before I came to the College, the total attendance in all courses and classes was 728, with 299 boys in the general two and four-year agricultural courses. In 1919 the total in all courses and classes was 2,115, with 615 boys in the general two and four-year agricultural courses. In 1919 the first year class alone almost equalled the total in all classes in 1903. During this period Macdonald Institute has been established, and all departments of the College extended and strengthened so as to bring the largest possible number within the influence of the institution. During that time thousands of young men have returned to their farms to be more capable and more prosperous farmers, and at the same time the B. S. A. men have been in ever-increasing demand for positions of ever-increasing responsibility and ever-increasing remuneration. Judging from the requests which come to me for trained men from all over the Dominion, I have no hesitation in saying the B. S. A. degree stands higher to-day than at any time in the history of the College.

"On the material side, I may remark, the buildings and equipment have increased in extent and value to a point which surpasses the entire extent and value of the plant as it was fifteen years ago.

"Let us never forget also that nearly five years of this period was covered by the terrible war, retarding peaceful development, but writing the most illustrious chapter in the history of the institution. In its leadership in matters of production, in its military effort in which it was represented by 750 graduates and undergraduates overseas, in the constant flow of comforts sent forward by the women of the college, this institution has made a record which deserves to live.

"Many factors have made for the progress these facts represent, but at the basis of it all has been the confidence and co-operation of the farmers of the Province. There is still room for further progress. The field is large and the needs are great. I bespeak for my successor, Mr. J. B. Reynolds, a gentleman of fine ability and high character, the same co-operation and support which I have received, so that this fine institution may make big advances in the years that are to come.

Sessional Indemnity Increased at Ottawa.

Announcement was made by Premier Borden in the House of Commons on Friday, June 25, that the Government has decided to increase the sessional indemnity of members from \$2,500 to \$4,000, provided the sessions are of substantial length and members are regular in their attendance. The Premier's salary will be increased from \$12,000 to \$15,000, Cabinet Ministers from \$7,000 to \$10,000, Solicitor-General from \$5,000 to \$7,000, Leader of the Opposition from \$7,000 to \$10,000, Speakers of the Senate and House of Commons from \$4,000 to \$6,000, and Deputy Speaker of the House of Commons from \$2,000 to \$4,000. It was pointed out that in several provinces the sessional indemnity has been increased, namely; Alberta from \$1,500 to 2,000 in 1919; Saskatchewan from \$1,500 to \$1,800 in 1920; Quebec from \$1,500 to \$2,000 in 1920; and New Brunswick from \$500 to \$1,000 in 1920. In Australia the members' indemnity has been increased to £1,000 and congressmen in the United States get \$7,500 in addition to an allowance of \$3,200 for clerical assistance. Judicial salaries are also to be increased in Canada as follows: Chief Justice of the supreme Court of Canada from \$10,000 to \$15,000; Puisne Judges of the Superior Court of Canada from \$9,000 to \$12,000; Chief Justices of the Supreme Courts of the Provinces, from \$8,000 to \$10,000; Puisne Judges from \$7,000 to \$9,000; County Court Judges from \$4,000 to \$5,000 where there is a city of 40,000.

Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending June 24.

Receipts and Market Tops.

Dominion Department of Agriculture, Live Stock Branch, Markets Intelligence Division

	CATTLE						CALVES					
	Receipts		Top Price		Good Steers		Receipts		Top Price		Good Calves	
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
Toronto (U. S. Y.)	4,632	4,793	5,364	17.00	14.25	15.50	1,923	1,754	2,878	17.50	19.50	18.50
Montreal (Pt. St. Chas.)	861	467	726	16.50	13.50	16.00	2,379	1,638	2,584	13.50	14.00	16.00
Montreal (East End)	1,287	267	794	16.50	13.50	16.00	2,199	807	1,409	13.50	14.00	16.00
Winnipeg	1,277	513	1,201	17.00	13.50	16.50	265	146	259	17.50	16.00	17.00
Calgary	601	2,778	1,524	12.35	12.50	13.00	45	70	70	14.00	14.00	14.00
Edmonton	325	653	291	12.00	11.75	14.75	98	140	46	15.00	12.50	17.00

	HOGS						SHEEP					
	Receipts		Top Price		Selects		Receipts		Top Price		Good Lambs	
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
Toronto (U. S. Y.)	6,232	9,843	5,689	19.75	23.50	19.50	2,043	1,115	2,689	20.00	22.00	21.50
Montreal (Pt. St. Chas.)	1,368	2,510	1,992	20.25	22.25	20.50	1,318	450	699	20.00	20.00	20.00
Montreal (East End)	1,581	1,115	1,268	20.25	22.25	20.50	1,492	318	785	20.00	20.00	20.00
Winnipeg	2,907	3,943	2,038	18.50	21.50	18.50	318	204	347	16.00	15.00	15.50
Calgary	414	1,623	731	17.75	21.75	18.25	740	547	44	15.00	15.00	15.00
Edmonton	543	563	579	17.75	21.25	18.50	56	2	46			

Market Comments.

Toronto (Union Stock Yards).

With the receipts of cattle about equal to those of the previous week, the market was as a whole very active. There were forty-six hundred and thirty-two cattle offered and these consisted mostly of unfinished cows, light and unfinished butcher cattle. The demand for choice and even well-finished killing beef was very evident throughout the week, as in practically all cases the good stuff was the first over the scales, while the unfinished animals were purchased largely to complete requirements. The market opened on Monday with prices steady with the previous week's close for choice beef, and while unfinished cattle moved very slowly they were cleaned up to fill requirements of packers and local butchers. On Tuesday offerings were light and trade limited with prices steady on all classes and a firm undertone to choice killers which were scarce and quickly picked up. Wednesday's opening found the market very active and prices strong in butcher stuff under a keen demand, while grassers were steady at Wednesday's close; prime stock was from 25 to 50 cents stronger, with heavy bulls moving slowly and light bulls obtaining good prices; other classes held steady. Most of the butchers for the week sold from \$14.75 to \$15.75, with \$17, the top of the market. One choice load of twenty steers averaging eleven hundred and eighty-five pounds topped the market at \$17. One load of twenty-two choice medium weight steers averaging eleven hundred and thirty pounds passed over the scales at \$16.50; one choice baby-beef weighing six hundred and seventy pounds sold at \$18, and numerous others sold from \$16 to \$17. Butcher heifers sold generally from \$14.25 to \$15.25 for good quality stuff, and \$12.25 to \$14.75 for fair. Heavy butcher cows realized good prices topping at \$13.75 with most of the good butcher cows selling from \$12.25 to \$13.25 and \$10 to \$12 for fair. Heavy bulls were draggy, medium weight bulls in good killing condition were in good demand and topped at \$14 with most of the good going from \$11.50 to \$12.50. There were not many canners and cutters on the market and prices remained about steady. Stockers and feeders were not much in evidence either in demand or offerings, and remained steady, choice feeders going at \$12.50 to \$13.50 and stockers from \$11 to \$12. The calf market ended a little stronger than at the opening when prices were about \$1 below the previous week, and closed steady to strong on choice veal from \$16 to \$16.50, and topping at \$17.25.

The sheep market was steady throughout the week and heavy sheep sold from \$6 to \$8, light sheep from \$7 to \$10, and yearlings from \$11 to \$13. Lambs closed \$1 stronger over last week's drop, and were holding firm.

The hog market was steady with prices \$19.50 for most of the selects, fed and watered, and \$19.75 for a few loads, fed and watered.

Of the disposition from the Yards for the week ending June 17, Canadian packing houses purchased 1,743 calves, 5,150 butcher cattle, 52 feeders, 4,720 hogs, 2,595 sheep and 30 lambs. Local butchers purchased 251 calves, 195 butcher cattle, 262 hogs, 295 sheep and

TORONTO					MONTREAL				
CLASSIFICATION	No.	Avg. Price	Price Range Bulk Sales	Top Price	No.	Avg. Price	Price Range Bulk Sales	Top Price	
STEERS heavy finished	141	\$15.50	\$15.00-\$16.00	\$16.50	14				
STEERS good	384	15.25	14.75-15.75	17.00	13	\$16.00	\$15.50-\$16.50	\$16.50	
STEERS 700-1,000	987	15.00	14.50-15.50	18.00	123	12.50	11.00-13.00	13.00	
HEIFERS good	931	14.50	14.25-15.25	15.75	34	14.00	12.50-15.50	15.50	
HEIFERS fair	355	13.25	12.25-14.75	14.75	35	11.00	9.50-11.50	11.50	
HEIFERS common	33	10.25	9.50-11.00	11.00	223	8.50	7.00-9.00	9.00	
COWS good	375	12.75	12.25-13.25	13.75	83	11.00	11.00	12.50	
COWS common	1,140	11.25	10.00-12.00	12.00	874	8.00	7.50-9.00	9.50	
BULLS good	152	12.00	11.50-12.50	14.00	101	11.00	10.50-12.00	12.50	
BULLS common	34	10.00	9.00-11.00	11.00	127	8.00	6.00-9.00	10.50	
CANNERS & CUTTERS	176	5.50	5.00-7.00	7.00	139	6.00	5.00-6.50	6.50	
OXEN					3				
CALVES veal	2,109	16.00	15.00-16.25	17.50	4,309	11.00	8.00-12.00	13.50	
CALVES grass					19	8.25	8.00-9.00	9.00	
STOCKERS good	388	11.75	11.50-12.00	12.00					
STOCKERS fair	63	9.50	9.00-10.00	10.00					
FEEDERS good	155	13.00	12.50-13.50	13.75					
FEEDERS fair	3	11.50	11.00-12.00	12.00					
HOGS selects	5,424	19.60	19.50-19.75	19.75	1,563	20.10	20.00-20.25	20.25	
HOGS heavies	6	18.50	18.50-18.50	18.50	367		18.00-19.00	19.00	
HOGS (fed and watered) lights	341			17.50	305				
HOGS (fed and watered) sows	311	15.00	14.50-16.50	16.50	553	16.00	16.00	16.50	
HOGS (fed and watered) stags	10				31				
LAMBS good	734	18.75	18.50-19.50	20.00	471	17.50	17.00-18.00	20.00	
LAMBS common	14	17.00	16.00-18.00	18.00	663				
SHEEP heavy					305				
SHEEP light	1,013	12.00	11.00-13.00	13.00	327	10.00	10.00	11.50	
SHEEP common	462	8.00	7.00-9.00	9.00	936	8.00	7.00-9.00	9.00	

151 lambs. Canadian shipments were made up of 40 calves, 65 stockers, 326 feeders, 221 hogs and 172 sheep. Shipments to United States points consisted of 224 calves, 3 bulls, 403 butcher cattle, 82 feeders and 154 sheep.

The total receipts from January 1 to June 17, inclusive, were: 133,834 cattle, 44,623 calves, 161,777 hogs and 23,295 sheep; compared with 139,855 cattle, 32,596 calves, 172,491 hogs and 31,016 sheep, received during the corresponding period of 1919.

Montreal.

The break in prices predicted as likely to occur came during the week. Good cattle sold strong but common grass cattle were hard to dispose of at any price. The market was not cleared up at any time during the week. A few cattle were driven out to grass and a number of cattle are likely to be held over for next week's market. The most definite reasons given for the sluggish market were the decline in prices for hides, the statement that common cattle were too dear for boning and that at present there is no other outlet for that grade of stock. Steer hides and cow hides were quoted around 14c., and bulls 10c. Calf skins 20c. to 21c. Two choice show steers from the Orms-town fair weighing together twenty-six hundred and fifty pounds and esti-

mated to yield 60% brought \$18. Twenty one cattle averaging twelve hundred and five pounds brought \$16.50, and twenty-two steers averaging ten hundred and eighty pounds brought \$15.60. The best of the commoner steers brought \$13 to \$13.50, thin yearling steers were weighed up with heifers and bulls, from \$8 to \$8.50, and twenty cows averaging eleven hundred pounds brought \$11.60. The most general price for good cows was \$11. A number of straight car lots were sold at the latter figure. Prices for medium and common cows were variously reported to be from 75 cents to \$1.50 per hundred lower. The lowest canners were sold down to \$4, and \$8 was the most general price for common cows. Thin light yearling bulls were weighed up in some cases at \$6.50. On Thursday eighteen bulls of dairy breeding averaging ten hundred pounds were sold at \$9. The price for calves was fully \$3 to \$3.50 lower than during the previous week and a number of dealers shipped to New York and other markets rather than accept the \$12 per hundred offered by local packers for good lots. Common calves sold as low as \$7. Quebec yearlings moved from \$6.50 to \$7 and grass calves from \$8 to \$9.

There was a slightly easier tone to the market for sheep and lambs. Receipts of lambs are increasing and there will likely be a lowering of prices. \$18 was

the common price for good lambs and \$10 for good sheep. A few choice yearling ewes were weighed up at \$13.50.

The market for hogs was a bit firmer. A number of sales were made to local butchers from \$20 to \$20.25. Prices for mixed and rough lots remained about steady. The price for sows was most generally \$4 per hundred less than the lots they were shipped in.

PT. ST. CHARLES.—The total receipts from January 1st to June 17, inclusive, were: 13,772 cattle, 38,512 calves, 30,250 hogs and 7,494 sheep; compared with 14,500 cattle, 38,117 calves, 32,993 hogs and 7,503 sheep received during the corresponding period of 1919.

EAST END.—Of the disposition from the yards for the week ending June 17, Canadian packing houses and local butchers purchased 1,409 calves, 764 butcher cattle, 1,212 hogs and 785 sheep. Canadian shipments were made up of 56 hogs. There were no shipments made to United States points during the week.

The total receipts from January 1 to June 17, inclusive, were: 15,088 cattle, 30,509 calves, 20,052 hogs and 6,706 sheep; compared with 16,650 cattle, 28,096 calves, 18,271 hogs and 8,107 sheep, received during the corresponding period of 1919.

Winnipeg.

Twelve hundred and seventy-seven

Farmers.

tain a message from years the genial and Ontario Agricultural week for England to Agent-General for to transmit a message p, with whom he has this we gladly do, readers have, at one twenty-five years, farmers' gatherings, with this outstanding

have been intimately cultural work in the ive responsibilities it to address and meet in all parts of the ation, which I do at ion of Agent-General re to express through of the kindness and ved from the farmers

ly acknowledge the has resulted in such re. Let me mention facts. In 1903, the the total attendance with 299 boys in the al courses. In 1919 was 2,115, with 615 ur-year agricultural class alone almost 1903. During this en established, and ended and strength- sible number within During that time ed to their farms to ous farmers, and at have been in ever- of ever-increasing muneratation. Judge to me for trained have no hesitation higher to-day than ollege.

mark, the buildings tent and value to a ent and value of the

nearly five years of rible war, retarding the most illustrious tion. In its leader- s military effort in aduates and under- t flow of comforts college, this institu- es to live.

the progress these it all has been the farmers of the further progress. e great. I bespeak s, a gentleman of same co-operation, so that this fine in the years that

Increased at

Premier Borden in June 25, that the e sessional in \$4,000, provided and members are Premier's salary \$15,000, Cabinet Solicitor-General e Opposition from Senate and House' d Deputy Speaker 000 to \$4,000. It nces the sessional y; Alberta from ewan from \$1,500 to \$2,000 in 1920; 00) in 1920. In as been increased United States get \$3,200 for clerical to be increased in e supreme Court Puise Judges of \$9,000 to \$12,000; of the Provinces, es from \$7,000 to \$4,000 to \$5,000

cattle, two hundred and sixty-five calves, three hundred and eighteen sheep and two thousand nine hundred and seven hogs, made up the weekly receipts. Eastern points accounted for thirty-two stockers and seventy-four butchers, two hundred and twenty-nine hogs were loaded for Vancouver, B. C., and sixty-one butchers and twenty-eight feeders were consigned to South. St. Paul. The movement of stockers and feeders back to country points was much lighter totalling only one hundred and four stockers and three hundred and fifty-eight feeders. Although receipts during the early part of the week were of small volume Monday and Tuesday saw active trading with packers bidding strong for the limited supplies. Heifers and cows of good quality were especially good sellers.

Toronto Produce

Breadstuffs.

Manitoba Wheat.—(In store, Ft. William.) No. 1 northern, \$3.15; No. 2 northern, \$3.12; No. 3 northern, \$3.08.
Manitoba Oats.—(In store, Ft. William.)—No. 2 C.W., \$1.30; No. 3 C.W., \$1.30; extra No. 1 feed, \$1.30; No. 1 feed, \$1.29½; No. 2 feed, \$1.29½.
Manitoba Barley.—(In store, Ft. William.) No. 3 C.W., \$1.63½; No. 4 C.W., \$1.61½; rejected, \$1.61½; feed, \$1.61½.
Ontario Wheat.—(f.o.b. shipping points according to freight)—No. 1 winter, per car lot, \$2 to \$2.01; No. 2 winter, per car lot, \$1.98 to \$2.01; No. 3 winter, per car lot, \$1.92 to \$1.93; No. 1 spring, per car lot, \$2.02 to \$2.03; No. 2 spring, per car lot, \$1.98 to \$2.01; No. 3 spring, per car lot, \$1.95 to \$2.01.
American Corn.—(Track, Toronto, prompt shipment). No. 3 yellow, \$2.40 nominal.
Ontario Oats.—(According to freights outside)—No. 3 white, nominal.
Peas.—(According to freight outside)—No. 2, \$3.
Barley.—(According to freights outside)—Malting, \$1.87 to \$1.89.
Buckwheat.—(According to freight outside)—No. 2, nominal.
Rye.—(According to freights outside) No. 3, \$2.20 to \$2.25.
Manitoba Flour.—(In cotton bags) Government standard, \$14.85, Toronto.
Ontario Flour.—(In jute bags, prompt shipment)—Government standard, \$13, nominal, Montreal and Toronto.
Millfeed.—Car lots, delivered. Montreal freights, (bags included)—Bran, per ton, \$54; shorts, per ton, \$61; good feed flour, per bag, \$3.75 to \$4.
Hay.—(Track, Toronto)—No. 1, per ton, \$31; mixed, per ton, \$27.
Straw.—(Track, Toronto)—Car lots, per ton, \$15 to \$16.

Hides and Skins.

Hides f.o.b. country points—Beef hides, flat cured, 10c. to 12c.; green hides, 9c. to 11c.; deacon or bob calf, 75c. to \$1.25; horse hides, country take-off, \$3 to \$5; No. 1 sheep skins, \$1.50 to \$2.25; yearling lambs, 75c. to \$1; horse hair, farmers' stock, 75c.
City Hides.—City butcher hides, green flats, 15c.; calf skins, green flats, 20c.; veal kip, 15c.; horse hides, city take-off, \$4 to \$5.
Tallow.—City rendered, solids in barrels, 11c. to 12c.; country solids in barrels, No. 1, 10c. to 11c.; cakes, No. 1, 13c. to 14c.
Wool.—Unwashed, coarse, 16 cents, medium, 22 cents; fine, 28 cents.

Farm Produce.

Butter.—The market showed a firming tendency, advancing from one to two cents per pound wholesale, selling as follows: Choice creamery pound prints, 57c. to 59c.; medium creamery, 56c. to 57c.; best dairy, 49c. to 50c.; medium dairy, 46c. to 48c.; bakers dairy, 36c. to 38c. Oleomargarine, 34c. to 38c.
Eggs.—Sold at practically unchanged, price, wholesale, being quoted at 52c. to 53c. per dozen for No. 1's and 55c. to 56c. per dozen for selects.
Cheese.—Cheese did not vary during the past week. Old being quoted at 34c. to 35c. per lb., and new at 32c. per lb., wholesale.
Poultry.—The demand for poultry is very weak and trade slow at a further decline in prices. The following being quoted for live weight varieties.
Chickens, spring, 50c. per lb.; ducklings, 40c. per lb.; hens, under 4 lbs., 28c. per lb.; hens, 4 to 5 lbs., 30c. per lb.; hens, over 5 lbs., 32c. per lb. roosters, 18c. per lb. Guinea hens, per pair, \$1.25.

Wholesale Fruits and Vegetables.

Canadian cherries are coming in in small quantities, and have a wide range of prices as the quality varies so—selling \$1 to \$2.50 per six quarts, and \$2 to \$3.50 per 11-qt. basket.

Strawberries came in with a rush the beginning of the week and slumped in price selling at 10c. to 15c. per box, but recovered towards the latter part and brought from 20c. to 25c. per box.

Hot-house tomatoes came in more freely and declined in price. No. 1's selling at 45c. to 35c. per lb., and No. 2's at 30c. to 35c. per lb.

Green Peas.—Arrived in larger quantities, and had a wide range of prices, namely from \$1 per 11-qt. basket, for small size ordinary variety to \$1.75 and \$2 per 11-qt. basket, for choice large ones.

Beets.—Beets were slightly weaker due to the increased quantities offered selling at 60c. to 75c. per dozen bunches.

Lettuce continues to be shipped in heavily and is practically a glut on the market; the head ranging from 40c. to 75c. per dozen, and leaf at 15c. to 20c. per dozen.

New potatoes are arriving freely, and selling well at \$7.50 per barrel for No. 3's; \$9 to \$11 per barrel for No. 2's and \$14 to \$15 per bbl. for No. 1's.

Old potatoes are practically off the market, the few offered bringing from \$6 to \$6.25 per bag.

White turnips declined in price, selling at 30c. to 60c. per dozen bunches.

Buffalo.

Cattle.—Cattle trade ruled full steady last week on the strictly dry-fed cattle—whether in the shipping steer or handy butchering line—while a decline of from a half dollar to in some cases as much as a dollar and a half decline was noted on grassy cattle generally, the heaviest take off being on light, thin, common kinds, with a medium to fair class of fat cows. It was about a half dollar decline on canners and cutters. Bulls sold a big half lower and demand was slow and weak for anything in the stocker and feeder line. Milk cows and springers showed a \$5 to \$10 per head decline. Trade wound up for the week strong on dry-fed cattle, with grassers weak. Supply was rather liberal of Canadians, best grass steers selling up to \$15.50 to \$15.70.

Steers—Canadians—Best, \$15 to \$15.70; fair to plain, \$14.25 to \$14.75; common and plain, \$12 to \$12.50.

Butchering Steers—Yearlings, good to prime, \$15 to \$17; choice heavy, \$16 to \$16.50; best handy, \$15 to \$15.50; fair to good, \$13.50 to \$14.50; light and common, \$10 to \$12.

Cows and Heifers.—Heavy heifers, \$13 to \$13.50; best butchering heifers, \$13 to \$13.50; good butcher heifers, \$11 to \$11.50; fair butchering heifers, \$8 to \$9.50; light, common, \$7 to \$7.50; very fancy fat cows, \$11 to \$11.50; best heavy fat cows, \$10.50 to \$11; medium to good, \$9 to \$10; cutters, \$5 to \$5.50; canners, good, \$4 to \$4.75; old rims, \$3 to \$3.50.

Bulls.—Best heavy, \$10.50 to \$11; good butchering, \$8.50 to \$9; sausage, \$8 to \$8.50; light bulls, \$7 to \$7.50; oxen, \$9 to \$11.50.

Stockers and Feeders.—Best feeders, \$9.50 to \$10; common to fair, \$8 to \$9; best stockers, \$8 to \$8.50; fair to good, \$7.75 to \$8.25; common, \$6 to \$7; grazing cows, \$7.50 to \$8.

Milkers and Springers.—Best, \$90 to \$125; medium to good, \$60 to \$85.

Hogs.—Hog prices made another gain last week. Monday a few reached \$16.60, with a deck or two \$16.65, but the general price for good hogs was \$16.50 and pigs landed mostly at \$15.50. Tuesday prices were up 25 to 40 cents, top being \$17, Wednesday the bulk of the handy-grades brought \$17.25, with a deck or two \$17.35, Thursday's top was \$17.30, with the majority going at \$17 and Friday light hogs ranged from \$16.75 to \$17, heavies sold at \$16.25 and \$16.50, and pigs landed at \$15.25. Roughs \$13 to \$13.50 and stags \$8 to \$10. Receipts for the past week totalled 24,400 head, as compared with 21,814 head for the week before and 17,000 head for the same week a year ago.

Sheep and Lambs.—Supply was very light again last week, the grand total being 5,400 head, being against 5,360 head for the week previous and 3,000 head for the same week a year ago. Monday a few springers sold up to \$17.50, but the general range all week on the

best was from \$16 to \$17. Best in the yearling line landed at \$14 and \$14.50. Monday sheep were slow at last week's closing prices but by the end of the week values on these were up 25 to 50 cents. Friday best ewes sold from \$7.50 to \$8 and top wethers were quoted from \$8.50 to \$9.

Calves.—Trade was good all of last week. Monday tops sold at \$15.50, with culls ranging from \$12.50 down, Tuesday bulk sold at \$15, Wednesday the trade was the same as Monday, Thursday the best brought \$16 and \$16.50, and Friday the bulk reached \$17.50, with culls selling up to \$15. Canadian calves, of which there were five or six decks (the past week sold around 50 cents under the natives). Receipts for the week were 6,615 head, the week before there were 7,283 head for the same week a year ago 4,900 head.

Montreal.

Dressed Hogs and Provisions.—Dressed hogs showed a slight decline in price, being quoted at 29c. per lb. for fresh-killed, abattoir-dressed stock. Smoked meats were in good demand all round, and prices were steady. Light hams were 45c. per lb.; medium hams, weighing 10 to 15 lbs., 42c.; and heavies, 40c. Breakfast bacon showed no change, being 45c. to 47c. per lb., while Windsor selects were 55c. Lard was in fair demand, selling at 26c. to 30c. per lb. for pure leaf.

Poultry.—No interest was taken in this market, and there were no receipts from the country. Cold store stock continued to be quoted, turkeys being 53c. to 54c. per lb., and chickens 38c. to 40c.

Potatoes.—The tendency of prices of potatoes were downwards, and prices were somewhat below those of a week ago. Some new crop American potatoes were offering, and the easiness in Canadian stock was thus accounted for. Car lots of Quebec white stock was quoted at \$4.75 to \$5 per bag of 90 lbs., ex-track, while about 50c. was added for smaller lots, ex-store.

Maple Products.—Very little maple syrup is changing hands at present but prices are steady, being \$2.75 per gal. tin. Maple sugar is unchanged at 28c. to 30c. per lb.

Eggs.—Prices of eggs remained unchanged last week. Supplies were fairly liberal, and quality was moderately good though deteriorating. Prices were unchanged, being 57c. per doz. for selected fresh, 53c. for No. 1 fresh, and 48c. to 49c. for No. 2 fresh.

Butter.—The tendency of the butter market has been upwards, and prices were higher than they were a week ago. Pasteurized creamery was selling at 58½c. to 58¾c. per lb., while finest creamery was 57c. to 57½c., and fine 56c. to 56½c. per lb.

Cheese.—Country boards are being cleared at 28¼c. to ¼c. per lb., in Eastern Ontario. Prices here were 28½c. to 29c.

Grain.—Oats scarce and dear. Prices \$1.50 per bush. for No. 2 Canadian Western, \$1.49 for No. 3, \$1.48 for No. 2 feed, ex-store.

Flour.—Some large export orders have been placed with the mills and the tendency of prices is higher, though quotations are unchanged at \$14.85 per bbl., in jute, for Manitoba spring wheat flour, ex-track, Montreal freights, with smaller lots at 10c. higher, and a discount of 10c. all round for cash. Ontario winter wheat flour is unchanged, with broken lots of choice grades selling at \$14.40 to \$14.50 per bbl., in new cotton bags, and 40c. less in second-hand jute bags, ex-store. White corn flour is selling at \$12.80 in small lots for shipment to country points, and rye flour at \$12.50 per bbl., in jute.

Millfeed.—Bran in mixed car lots with flour is \$56 per ton, shorts being \$63, while without flour \$4 per ton more is realized, including bags, delivered to the trade.

Baled Hay.—No. 2 timothy hay was steady at \$29 to \$30 per ton, No. 3 being \$27 to \$28, and clover and clover mixed \$25 to \$26 per ton, ex-track.

Hides.—Prices are down again. Steer and cow hides 14c. per lb., bull being 10c. per lb., and calf skins 20c. to 22c., and kips 15c. per lb. Lamb skins are 35c. each and clips 50c. Horse hides are \$5.

Monday's Live Stock Markets.

Toronto. Cattle.—Receipts, 4,723. Market active, with last week's strong prices holding steady. Unfinished stuff fifty cents lower; medium down fifty cents. Stocker and feeder market quiet. Top load of twenty choice steers averaging 1,240 lbs. sold \$16.25. Bulk quality butchers sold 15c. to 16c. Several baby beeves up to 17 cents. Several export orders seem to be responsible for firm market in choice stuff. Quotations: Heavy beef steers; \$15 to \$16.50. Butcher steers, choice, \$14.75 to \$16; good, \$12.75 to \$14.75; medium, \$11.50 to \$12.50; common, \$9 to \$10.25. Butcher heifers, choice, \$14.50 to \$15.75; medium, \$11.50 to \$14; common, \$9 to \$11.50. Butcher cows, choice, \$11.50 to \$14; medium, \$9 to \$11.50. Canners and cutters, \$5 to \$7. Butcher bulls, good, \$11 to \$14; common, \$8 to \$10. Feeding steers, good, \$12.50 to \$13.50; fair, \$11 to \$12. Stockers, good, \$11 to \$12; fair, \$10 to \$11. Calf receipts, 850. Calf market steady to weak with bulk selling from \$16 to \$16.50. Two choice calves sold 19c. Quotations: Choice, \$16 to \$17.50; medium, \$13 to \$13.50; common, \$9.50 to \$12. Milch cows, choice, \$125 to \$160; springer, choice, \$75 to \$120.

Sheep.—Receipts, 1,246. Sheep and lambs steady with weak underline to lambs. Quotations: Ewes, \$8 to \$13; lambs, \$17 to \$19.50.

Hog receipts, 1,748. Hog market 25 cents stronger over last week's close, and holding firm. Quotations, fed and watered basis, selects, \$19.25; lights, \$17.25; heavies, \$18.50; sows, \$14.50 to \$16.50.

Montreal, June 28. Cattle.—Receipts 1,315. Prices for good cattle were 25 to 50 cents lower, and the cattle trade was slower. Harder to sell than good grades, a number of the heaviest loads have not been sold yet. The top price was \$16. Twenty-two cattle, averaging 1,085 lbs., brought \$15.75; one load of lighter steers, averaging about 1,000 pounds, brought \$14.50. The best cattle will be sold between these figures. Good cows were up to \$11. Four baby beeves, averaging 600 lbs. brought \$16; common cattle, bulls, cows and heifers, from \$6 up. Quotations: Butcher steers, choice, \$15 to \$16; good, \$13.50 to \$15; medium, \$11 to \$13; common, \$8 to \$10. Butcher heifers, choice, \$13 to \$15; medium, \$10 to \$12; common, \$6.50 to \$9.50. Butcher cows, choice, \$10 to \$11; medium, \$6.50 to \$9.50; canners, \$4 to \$5; cutters, \$5.50 to \$6. Butcher bulls, good, \$10 to \$10.50; common, \$6 to \$9. Calf receipts, 1,395. Packers are still offering \$12 for fairly good calves. Some sales have been made at \$13. Commission firms are holding the best lots for \$14; common, thin calves from \$6 up; good calves, \$12 to \$14; medium, \$6 to \$10; grass, \$7 to \$9.

Sheep.—Receipts, 1,011. The most common price offered for sheep was \$9. There were a very few good sheep offered. Lambs were selling generally at \$17 for good; ewes, \$7 to \$9.50; lambs, good, \$15 to \$18.

Hogs.—Receipts, 954. For select lots \$20.50 has been paid, on account of former contracts. Mixed lots of Eastern hogs, containing a large percentage of sows and roughs, with few if any selects, have been sold at \$17 to \$19. Quotations: Off-car weights, selects, \$20 to \$20.50; sows, \$16 to \$16.50.

Buffalo.—Receipts consist of 4,000 cattle. Choice shipping steers holding strong with best natives, \$17.75, and best Canadians, \$16.25. Unfinished and grass cattle lower.

9,600 hogs were received. Medium and heavy hogs sold from \$16.75 to \$17. Lights, \$17 to \$17.25.

Sheep.—Receipts, 2,400. Best ewes, \$16.50, with a few at \$8. Spring lambs, \$16.50 to \$17.

2,400 calves with tops selling at \$17.

Markets concluded on page 1230.

"What's the new baby's name?" asked the little girl, aged four.
 "It hasn't any name yet," was the answer.

"Then how do you know it is ours?"
 "Don't you think a girl should marry an economical man?" asked Madge.
 "Oh, I suppose so," answered Dolly; "but I tell you it's awful being engaged to one."

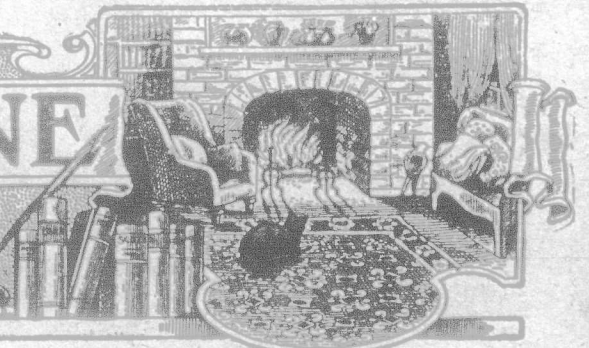
Live Stock Markets.

Cattle.—Receipts, 4,723. With last week's strong trade. Unfinished stuff... medium down fifty... and feeder market quiet... choice steers averaged \$16.25. Bulk quality... to 16c. Several baby... cents. Several export... be responsible for firm... stuff. Quotations: \$15 to \$16.50. Butcher... \$1.75 to \$1.6; good, \$1.275... \$1.50 to \$1.25;... \$1.025. Butcher heifers, \$1.575; medium, \$1.150... \$1.09 to \$1.150. Butcher... \$1.05 to \$1.14; medium, \$0.9... ers and cutters, \$5 to \$10;... ls, good, \$11 to \$14;... Feeding steers, good, \$10; fair, \$11 to \$12. Stock-... \$12; fair, \$10 to \$11. Calf market steady... bulk selling from \$16 to... choice calves sold 19c. Choice, \$16 to \$17.50;... \$13.50; common, \$9.50 to... choice, \$125 to \$160;... \$75 to \$120. Sheep and... 1,246. Sheep and... th weak underline to... ons: Ewes, \$8 to \$13;... \$5. Hog market 25... er last week's close, and... tations, fed and watered... \$19.25; lights, \$17.25;... ows, \$14.50 to \$16.50. Receipts... good cattle were 25 to... d the cattle trade was... o sell than good grades,... heaviest loads have not... e top price was \$16.50... e, averaging 1,085 lbs.,... ne load of lighter steers,... 1,000 pounds, brought... cattle will be sold be-... s. Good cows were up... y heeves, averaging 600... common cattle, bulls,... rom \$6 up. Quotations:... choice, \$15 to \$16; good, \$11 to \$13; com-... Butcher heifers, choice, \$10 to \$12; common, \$8 to \$10; but-... ches, choice, \$6.50 to \$9.50; can-... cutters, \$5.50 to \$6.50; \$10 to \$10.50; com-... Calf receipts, 1,395. Offering \$12 for fairly... me sales have been... Commission firms are... lots for \$14; common, \$6 up; good calves, \$12 to \$16; grass, \$7 to \$10. The most... red for sheep was \$9. Few good sheep offered. Generally at \$17 for \$9.50; lambs, good, \$15 to \$19.50. For select lots... paid, on account of... Mixed lots of Eastern... a large percentage of... with few if any selects, \$17 to \$19. Quota-... ights, selects, \$20 to \$25. Receipts consist of 4,000... hipping steers holding... tives, \$17.75, and best... Unfinished and grass... received. Medium... d from \$16.75 to \$17.25. Receipts, 2,400. Best ewes, \$8 to \$10. Spring lambs, \$6 to \$8. Lambs selling at \$17.



HOME MAGAZINE

LIFE · LITERATURE & EDUCATION



Names.

BY ABBIE FARWELL BROWN.

Many poems are appearing in honor of the "Pilgrim Fathers" tercentenary celebration, which is being celebrated this year over the route which the "fathers" took in 1620. One of best of these, so far, is the following, which appeared in *The Atlantic*:

From Somerset and Devon,
From Kent and Lincolnshire,
The younger sons came sailing
With hearts of steel and fire.

From leafy lane and valley,
Fair glebe and ancient wood,
The counties of old England
Poured forth their warmest blood.

Out of the gray-walled cities,
Away from the castled towns,
Corners of thatch and roses,
Heathery combs and downs;

With neither crown nor penny,
But an iron will they came:
Heirs of a great tradition
And a good old English name.

An empty silence met them,
On a nameless, savage shore;
But they called the wild "*New England*,"
For the sake of the blood they bore.

"*Plymouth, Exeter, Bristol,*
Boston, Windsor, Wells,
Beloved names of England
Rang in their hearts like bells.

They named their rocky farmlands,
Their hamlets by the sea,
For the mother-towns that bred them
In racial loyalty.

"*Cambridge, Hartford, Gloucester,*
Hampton, Norwich, Stowe—
The younger sons looked backward
And sealed their sonship so.

The old blood thrills in answer
As centuries go by,
To names that meant a challenge,
A signal, or a sigh.

Now over friendly waters
The old towns, each to each,
Call with their kinship in a name;
One race, one truth, one speech.

Blue in the Sky.

BY "PUBLICUS."

THE other day there appeared in the newspapers a bit of news that caused rather astounded comment among a great many people. It read somewhat in this wise: "The most highly-paid rural school teacher in Ontario, Mr. Percy P. McCallum, has just been re-engaged for S. S. No. 2, Colchester South, Essex Co., at a salary of \$1,750. It is expected that by the end of the year the minimum average salary in Essex County will be \$1,200." This item tells two stories: (1) That Essex County must be one of the most prosperous districts in the Province, and (2) That, since the school teachers are *purveyors of education*, the fact that they are paid such good salaries shows that the *value of education to the people* is recognized there. It is only to be expected, however, that the standard set for teaching ability in Essex County will be a high one. Half-baked knowledge, indifferent teaching powers, lack of enthusiasm in the teaching force will not likely be tolerated there. "The best teachers—the best chance for the children"—that will no doubt be the slogan in Essex County, and should be everywhere. The right sort of teachers demand that standard—for their own character-development and the satisfaction of their sense of responsibility. The children demand it—

for to-morrow they will have to shoulder the burdens of the world.

Of course, some school sections are not rich—that goes without saying. And in such places the question of salary is bound to loom high. "Here is an excellent teacher. But how can we afford to pay her what she is worth? If we don't, why some other section will pick her up, and no one to blame either." So there it is! The money is not forthcoming—and the children suffer the consequence.

In his speech on education, delivered in the Ontario Legislature some weeks ago, Mr. Thomas Marshall made a suggestion that, in time, may help to solve this problem, *viz.* that the Province should give larger grants for the schools, especially towards salaries. This would tend to equalize teachers' salaries in general, and would ease the payment in some localities which are finding it difficult to make both ends meet in regard to school affairs.

A second bit of blue in the educational sky of rural Ontario is the increasing interest that is being taken in the plan to supersede the present system of isolated rural trustee boards by a linked-up system of township and county boards, running upwards, perhaps, into a Provincial board which can meet in Toronto at the time of the big convention of the Ontario Educational Convention, during the Easter holidays. The idea, in a nutshell, is: To have each rural school

who considered their whole duty done if they secured a teacher—anyhow—and bought firewood, a broom, and chalk.

There is more dignity about the new plan. It gives the trustees a chance to get out a bit from their own shell,—out into the world a bit, where they can see what other sections are doing, and hear what real educationists are proposing for the good of the schools. Given representatives of common sense, a fair education and vision, the new plan should be a bold step upward along the line of educational advancement for the rural districts.

—Also it is just possible that the county educational boards may come into some sort of working grips with the county councils. At present there seems some need of prodding up those august bodies along educational lines—at least if one may judge by the following bits of conversation:

"What is the attitude of the county councils, generally, towards education in the counties?"

The question was addressed to a school inspector of many years' standing. Perhaps he had an attack of indigestion that day, perhaps he had not. At any rate he replied, readily enough:

"I should call it an attitude of polite forbearance. You know"—with mild sarcasm—"the business of county councils is primarily to keep down expenses. Flesh and blood and brains don't count when weighed in the balance with dollars and cents."

"What do you think of the two-room school for the rural districts?"

"Much better than the one-room school,—no doubt about that."

The next person quizzed was a man who has had much to do with municipal affairs.

"What do the township and county councils talk most about in their caucuses?"

He grinned. "Roads, bridges and Houses of Refuge." "What about educating the children?" "Not much. Once in a while they talk about increasing the school grant, but usually it's left at the minimum."

—So there it was again! Still—there is Essex County. And there is the increased grant for education. And there is the talk about township trustee boards. Surely there's enough blue in the educational sky "to make a Dutchman's breeches."

At all events it's up to Canada to be alive and doing.

As someone has well said, "Education is not only a municipal duty; it is Provincial and National." Our cousins to the south of us appear to be realizing that truth. This year was brought up in Congress at Washington the "Smith-Towner Bill" asking that a Federal Department of Education be established in the United States, with an appropriation of hundreds of millions of dollars for education. That such action is in the air foretells a tremendous intellectual advancement in that country. So far, it is true, education in Canada has been more cosmopolitan than in the United States. But the United States may have learned a lesson in the War, and if so there is nothing in the way of her expansion intellectually. It is certainly up to Canada not to lag behind. Her sons should stand side by side with those over the border for all that makes for the high standing of America's people.

Your Health.

By "MEDICUS."

Appendicitis—Can You Prevent It?

OUR ancestors were bigger eaters than some of their descendants. A longer and larger intestinal tract was required in those good old days. (The H. C. of L. had no terrors then). At one time of our evolution, when the Romans were at the height of their glory, there had been some tucks or puckers put in the length of the bowel, and to overcome this handicap the Romans arranged around their banquetting tables, stalls, one immediately behind each guest. When the Epicurean felt any discomfort from overloading his stomach he could get immediate relief in the seclusion of the stall. Once his stomach was emptied he could start all over again. It was a case of "Live to eat." I wonder if they ever had indigestion. They had lots of fun anyhow. What good cook wouldn't enjoy a Roman for a husband? The tuck or pucker in the bowel has become bigger and bigger, and what is left we call the appendix. It is about the size of your little finger, and has nothing to do in the digestion of food, and, like everything (everybody) that is idle, gets into trouble itself or gets somebody else into trouble, and we label the trouble "Appendicitis." Now, what causes appendicitis? Well, grape seeds don't (neither do tomatoes cause cancer). The small concretions found in the appendix, on careful study, are not grape seeds. It is not definitely known what causes this distressing and serious disease. So when you don't know what causes the disease you can't prevent it.



Canada's First Woman Architect.

Miss E. M. Hill, of Toronto, who received the Degree of B. A. Sc. from the University at the recent special convocation.

section send a representative to the township board, which meets at regular intervals to discuss the educational affairs for the township; the township board, in turn, sends a representative to the county board, which discusses the more general educational affairs of the whole county; and the county board, in its turn, sends a representative to the Provincial board—which is in a position to come into close touch with the Department of Education.

On the very face of it this plan promises greater efficiency than could easily be given by the old system of independent trustee boards. Occasionally, it is true, those boards did splendid work; but occasionally they were made up of men

"Do you see any sign of improvement, educationally, here in Canada?"

"Speaking for Ontario, yes, a little," he concluded. "There's some talk out around the country about township trustee boards, and a little about consolidated schools."

"What do you think about consolidated schools?"

"Oh, I'm for them. Of course they're expensive, and there's the trouble about transportation and what to do with some of the old school-houses. But some of the country districts could afford consolidation all right. Certainly more efficient work could be done by having it. Efficiency you know, is usually cheap at any cost."

ded on page 1230.

baby's name?" asked four. "name yet," was the "you know it is ours?"

ask a girl should marry?" asked Madge. "so," answered Dolly; awful being engaged



An Exquisite Garden.

Any handy man can make a sun dial, since the base or pedestal may be any design one chooses.

Symptoms.—Pain, colicky, of sudden onset, usually referred to the navel but may be complained of anywhere in the lower abdomen.

Why you have the pain? Dr. Hilton many generations ago wrote a book entitled "Rest and Pain." He enunciated the theory that pain was Nature's method of telling the body that it required rest. If Dad sprains his ankle and it swells up and is hot, if that ankle didn't pain him he would keep right on working. And if he did he would likely do permanent injury to that joint. So whenever you have a pain in your abdomen it indicates need of rest. Give the stomach and intestines rest. Nature then puts on a splint, just to stop the intestines from moving around. When the doctor puts his hands on the abdominal wall, it is as "hard as a board." The muscles of the abdomen have contracted, and to lessen the tension a bit, your patient draws up his knees, or perhaps just his right knee.

Vomiting soon follows the onset of pain. Why does your patient vomit? If any food or water is left in the stomach it will soon pass into the intestines and cause them to move around some. But Nature wants rest. So your patient empties his stomach to prevent the bowel from doing any work. Nature may cause the bowels to move, thus emptying the whole gastro-intestinal tract.

The patient may have a slight rise in temperature and a pulse around 100 to 120. His facial expression is that of a sick man. He looks sick and depressed.

Treatment.—The most fundamental thing to do is to follow the indications of Nature, our best doctor, give complete rest to the gastro-intestinal tract. Stop all food and water by the mouth. If the bowel is given complete rest adhesions will form between the coils of the bowel and shut off or shut up the appendix in one corner by itself, and thus it becomes a whole lot less dangerous. If the coils of bowel keep moving the adhesions are torn down as fast as they form. Let me repeat—Absolutely no food or water. He will not starve. The greater difficulty is thirst. Allow him to suck ice (but don't swallow the water) or hold water in his mouth. Keep his tongue clean by frequently washing it with normal saline (teaspoonful of salt to a pint of water). Then, too, a saline enema by the bowel is helpful; every 8 hours inject slowly 1 cup of normal salt solution. That will be absorbed and relieve thirst.

Avoid purgatives, especially castor oil. Why? Because purgatives keep the intestinal coils moving, and prevent the formation of adhesions, and these adhesions may save your life. If you give castor oil it almost invariably means an operation. Rarely did my patients require an immediate operation if they were not purged. Purging does not remove the cause of the appendicitis, but it increases the seriousness of the disease.

Locally hot applications or an ice bag can be applied. It is immaterial. Use the one that is handiest and most comforting to the patient. It is an advantage to raise the head of the bed, two brick bats under each corner. That favors the localization of the disease in the lower part of the abdomen, where Nature can deal with inflammation much more readily than with inflammation in the upper abdomen.

Once you have an attack you are liable to have recurrence, and you should be prepared and know exactly what to do. If you have more than two or three attacks it is wiser to have the appendix out. You may have a severe recurrence away from your doctor or a hospital where you could get suitable treatment.

SUMMARY.

(1) Pain usually means rest. In appendicitis it means rest to the whole gastro-intestinal tract. Don't eat or drink. You can go 40 days without eating. Other people have. But you must have water—normal salt enemas two or three times a day—ice to suck. Keep the tongue clean.

(2) Avoid purgation. If the baby has colic, or cramps, or plain belly-ache, it may be appendicitis, and if you give it a dose of castor oil, and it is appendicitis, it invariably means an operation. If you don't purge it and don't feed it, you will likely escape an operation. At the most give it a saline enema.

(3) If you have more than 2 or 3 attacks of appendicitis have the appendix removed.

A Health Slogan.

Wash you hands before you eat and save your life.

Stamford Women's Institute is the first in Ontario to build and own a Memorial Community Hall.

A Successful Year.

For the Women's Institute.

Miss Ethel Chapman, Convener of the W. I. Publicity Committee, reports a very successful year.

In addition to the usual splendid work of sending donations to tubercular and other hospitals, relief work, extension of school medical inspection, demonstration classes in domestic science, sewing, home nursing and first aid, etc., some special features are mentioned. . . . Parkhill, after sending 10,000 cans of fruit to the hospitals, had a balance of over \$600 after all expenses were paid. The canning for 400 homes was done at the centre. . . . In Peel County Child Welfare week has become an institution, the clinic being held this year at Alton. . . . Ripley Institute arranged for planting 100 trees, donated by the farmers, in their Memorial Park. . . . Malton and Erindale branches are arranging to hold school dental clinics during the summer. . . . Kemptville is building a bathing house on the river. . . . Maynard and Eugenia are putting up memorial monuments, Walkerton is fitting up a memorial park, and Lakeview and other institutes are assisting in building memorial halls. Stamford Institute built its own hall, costing \$9,000. At Moose Creek the Women's Institute and U. F. O. are setting a splendid example by co-operating in building a hall. . . . The Algonquin and Maxville Institute and others have established rest-rooms, while Strand, Kirkton, Highgate, Scotland and Athens have given valuable assistance to the libraries. . . . Ceylon Institute (Grey Co.) is establishing a community Church.

At the annual convention of the Institutes of East Simcoe, resolutions were passed endorsing the plan of work outlined by the Ontario Federation, objecting to any relaxation of the present divorce laws, endorsement of Justice Hodgins' recommendations regarding the feeble-minded, supporting higher educational movements (including increased salaries for teachers), and disapproving of the introduction of militarism (not physical training) into the schools.

The weakness of the Act permitting only farmers' wives and daughters to serve as school trustees in unincorporated districts was pointed out in the case of a woman of the district who had been returned to office in an unincorporated

village, and had not been allowed to act by reason of not being a farmer's wife or daughter.

The Ingle Nook

Rules for correspondence in this and other Departments: (1) Kindly write on one side of paper only. (2) Always send name and address with communications. If pen name is also given the real name will not be published. (3) When enclosing a letter to be forwarded to anyone, place it in a stamped envelope ready to be sent on. (4) Allow one month in this department for answers to questions to appear.

A Visit in Peony Time.

THE peonies are over for this year—more's the pity!—yet now, when a vision of them is still in our mind's eye, may be a good time to write (or to read) about them. Some sort of vision precedes every action, and the dream of beautiful flowers that we cherish to-day is fairly likely to push us into procuring some roots of them when planting-time comes in the fall.

Among flowers that may be planted in the fall, by the way, are peonies, perennial phlox, delphiniums (tall larkspur), and Oriental poppies. Some notes on the proper method of planting these will be given when the time comes. To-day—to our "story."

A call to the telephone—long distance. "St. Thomas is calling," came the mechanical, matter-of-fact voice of the telephone girl, and then, in a moment, an enthusiastic one.

"Dr. Bennett's speaking. Say, why don't you come down and see a real town? The peonies are all out in bloom, and—"

No need to tell any horticulturist in Ontario that the enthusiastic voice belonged to Dr. Bennett, the man who "made" St. Thomas grow flowers—grow flowers until its fame as a "flower city" has gone all over Canada and even lopped over into the United States.—Incidentally, just a few days ago (from time of writing) the Doctor's peonies won some of the best prizes at a flower show in Detroit.

Why should not Canadians and United States folk come into companionship over their peonies, and dahlias, and gladioli? . . . Yes, companionship.—There is never mean rivalry at any flower show. I have never seen it. But often I have seen real rejoicing and pride that the "other fellow" was able to grow such splendid blooms. And, of course, it is



Among the Peonies.

Dr. F. E. Bennett, the man who made the City of St. Thomas grow flowers.

been allowed to act as a farmer's wife or

le Nook

ence in this and other...ly write on one side of... send name and address... pen name is also given... published. (3). When... rwarded to anyone, please... be ready to be sent on... in this department for... ppear.

Peony Time.

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always held permissible to be proud over winning a prize.

Well!—The early afternoon electric car found us speeding to St. Thomas, where Dr. B. with a party expectant as "Cook's" tourists, and a big motor car of an appropriate olive green color, were waiting to "do up the town" floriculturally.

Along the streets occupied by the railwaymen's houses the big car hummed its way. Every home had flowers, some more, some less; peonies, and matrimony vine, rose-bushes and Dutchman's pipe vine were among those that one's consciousness was able to grasp in passing. Also one noted boulevarded streets with flower-beds, railway station grounds in process of transformation into parks, and school and church grounds all falling into the march of making St. Thomas beautiful with flowers, shrubs, trees and vines.

At one point a deviation was made on purpose to see a ginkgo tree on somebody's lawn. Its other name is "maiden hair tree," and really the leaves are strikingly like those of the maiden hair fern. The tree is hardy and, as a botanical feature, valuable; as a note in landscape garden effect it is no better than any of our native trees.

On the last lapse of the way before Pinafore Park was reached, the car stopped, and everybody got out. At the first glance one's eyes took in a charming little bungalow, a point of Pinafore Lake, a rustic fence and a veritable hedge of peonies in full bloom. Closer inspection revealed climbing roses over the rustic fence; a delightful little summer-house made of cedar branches with the bark left on (like the fence); a swinging bridge over the water—to the hen-house!—and bird houses up everywhere. There were other flowers also, besides the peonies and roses—whole borders of them.

"I wanted you to see this place," said Dr. B., "because Mr. Rewbotham has made every bit of it himself, fence, summer-house and all. It shows what one man can do in odds and ends of spare time."

And there it is! People have no idea what they can accomplish in this way in "odds and ends of time" until they try. Of course, taste for beautiful things is a requisite; but anyone can cultivate that. One cannot conceive of a man or woman who could not cultivate a taste for beautiful flowers and trees.

Pinafore Park was the next point, and while there I tried to get all the "hunches" I could to pass on to you people who are establishing rural parks here and there through the country.

Pinafore Park (it got its name, by the way, from Sullivan's opera "Pinafore," which happened to be "on" in St. Thomas when the park was opened) has, of course, its stretches of sward for games, etc.; but the most interesting part to me was the portion which is being turned into a botanical garden, with every specimen labelled, so that people who visit the place can pick out the kinds they like best, jot down the names, and finally order the same kinds for their own gardens or parks.

The peony beds were wonderful. No wonder that hundreds of people had visited them the day before—"Peony Sunday!" Going about among the beds I wrote down the names of the kinds I liked best, and here they are:

- Pasteur—Pale pink, very fine.
- Madame de Vetry—Pale pink shading to yellow at heart.
- Mons. Jules Elie—Pink.
- Asa Gray—Pale pink flecked slightly with a deeper pink.
- Livingstone—Pink. Flowers late.
- Gen. McMahon—Deep pink.
- Therese—Pink.
- Albatre—White tinted to yellow at center. Very beautiful.
- Mt. Blanc—White, fringed, tinted to sulphur at centre.
- Florescens—White, like a big white water lily.
- Edouard Andree—Crimson, Single.
- Rubra Triumphans—Very deep cerise.
- L' Eclantanie—Cerise.
- La Rosiere—White.
- Avalanche—White.
- Triumph de la Exposition de Lille—Crimson.

Nor must one forget the satisfactory white *Festiva Maxima*, and a bed full of single peonies from Japan.

Get ready to save the Fruits

Outdoors the fruits are ripening today. The Strawberries are blushing in the meadow, and soon the Raspberries will appear, then the Cherries white and red, and after that the plumper fruits, Plums, Pears, Peaches.

But tomorrow the winter comes, and how your folks will miss the fresh fruits of summer's plenty. So decide NOW to make the most of the season's fruit crop. Think what a shelf full of luscious preserves, jams and jellies will mean when canned fruits and manufactured preserves become almost prohibitive. Do your next winter's marketing now. Provide yourself in time with jars, rings, glasses, utensils. But, above all, do your preserving so that it cannot spoil. Cook all your fruit with LANTIC PURE CANE SUGAR, Nature's great heat and energy food. Have everything at hand as the various fruits ripen in your own garden or orchard, or when they are plentiful and cheapest in the market.

FREE—The Lantic Library, the most complete collection of recipes for sweets ever published. A book on economical preserves, jams, jellies and marmalade. A book on cakes and candies. A book on desserts of all kinds. Sent FREE for a RED BALL Trade-mark cut from bag or top panel of carton.



Lantic Sugar

2 and 5 lb. Cartons - 10, 20 and 100 lb. bags

LANTIC is not only the best sugar for preserving, but the most ECONOMICAL on account of its high sweetening power and "FINE" granulation, which dissolves at once in the hot syrup. Get LANTIC SUGAR in original packages in the size best suited to your needs.

ATLANTIC SUGAR REFINERIES, LIMITED, MONTREAL



Mutual Benefits Day by Day

Every working day the Mutual Life is paying in cash to its policyholders \$12,700.

—is increasing the policyholders' funds at the rate of over \$10,000.

—is assuming new risks at the rate of \$135,418.

—is receiving for all purposes \$28,611.

The net profits, credited entirely to policyholders, amount to \$4,341 for every working day.

The Mutual has \$170,706,000 of life insurance in force on the lives of 70,000 members, an average of \$2,400 each.

Be a Mutualist

Mutual Life of Canada Waterlo-o-ntario

Elsewhere in the grounds we found shrubs and trees growing lustily, quite inviting people to imagine how interesting and beautiful others of the same kind would be about the homes of Canada.

I took note especially of: a beautiful "white fringe" tree, whose more elaborate name is *Chrysanthus virginica*; a Russian olive (*Elaeagnus angustifolia*) with gray foliage, that would be fine to plant anywhere that an appearance of distance is desired (the grays and blues produce that illusion); a lovely fringed tree with purple flowers that made one think of heather—*Tamarix hespida*; the "smoke tree"; a golden Elder (*Sambucus aurea*); and a white elder (*Sambucus acutifolia*).

In another corner the roses were just beginning to bloom.

"What rose would you recommend for home grounds?" we asked.

"The hybrid perpetuals and the rugosas," the Doctor replied, without a moment's hesitation, and then he called our attention to a "Penzance" rose, that looked like a glorified sweet briar, with bright salmon pink flowers, most delightfully scented. "It's a favorite," he said.

An interesting specimen in this part of the grounds was a vine, *Euonymus radicans*. This vine is hardy, will cling to any brick or stone wall, and is very beautiful in autumn and early winter because of its clusters of brilliant red berries.

Before leaving Pinafore Park we saw the very birdhouse at which the famous "battle" between English sparrows and purple martins, described in The Globe some weeks ago, took place. The story was every word true. The birdhouse is a big colony affair—a real apartment house in the bird world and some purple martins had taken possession. Some sparrows came along, ousted the martins

FACE WAS FULL OF PIMPLES

For Three Years. Hard and Awfully Sore. Disfigured. Cuticura Heals.

"I had been suffering with a pimply face for three years. My face was full of pimples and they were hard and awfully sore. They festered and dried up, and were scaly, and disfigured my face. They caused me to lose a lot of sleep, and were awfully itchy, making me scratch and irritate my face.

"I started to use Cuticura Soap and Ointment and I used two cakes of Cuticura Soap and two boxes of Cuticura Ointment when I was healed." (Signed) Clifford Yeomans, East Cheshelcook, N. S.

Use Cuticura for every-day toilet purposes. Bathe with Soap, soothe with Ointment, dust with Talcum.

Soap 25c, Ointment 25 and 50c. Sold throughout the Dominion, Canadian Depot: Lyman, Limited, St. Paul St., Montreal. Cuticura Soap chafes without msg.

and set up their own household effects. But a day or so later the martins came back with a big force of other martins, a battle royal was fought, the sparrows

Eight Fires in One District from One Thunderstorm

8 FIRES IN WAKE OF ELECTRIC STORM

Property Loss of More Than
\$100,000 in Erindale
District.

SIX BIG BARNs DESTROYED

Fine Residence of Price
Brothers Also Falls
Prey to Flames.

Special to The Mail and Empire.
Erindale, June 13.—In the neighborhood of \$100,000 property damage was done within a radius of two miles of Erindale by a succession of three terrific electric storms which centred about this district Saturday night. No less than eight fires occurred in the neighborhood, while the reflections of others at a greater distance were to be seen. The heaviest losers were Price Brothers, whose fine residence and barn were destroyed, the damage being estimated at about \$80,000. T. H. McCracken, of Erindale, lost his barn, the third he has had destroyed through lightning in five years. A storm appeared to follow the day road, and was one of the most severe ever experienced in the district.

Not a Building Protected by

Shinn-Flat

Lightning Rods

Was Injured

Every year the same story is told; the story of loss by lightning. And yet, only a few people have learned the necessity of adequate protection against that remorseless destroyer—lightning. Disasters, such as the storm of June 12th, are likely to happen anywhere any time, and the only absolutely certain safety is under the protection of

Shinn-Flat

Lightning Rods

These pure copper, woven wire, flat shaped cables are proved by science to be the most perfect conductor of electric current, and will carry off with safety a 36% heavier charge than any other form of lightning rod. Prevention is cheaper than insurance, for insurance never pays all the loss, and not one cent for lost time and interruption to the regular work that is so necessary for making profits on the farm. The cheapest and wisest thing that can be done is to make sure of safety by installing Shinn-Flat Lightning Rods, and do it NOW. Full particulars, prices and descriptive booklet on request. We have dealers everywhere who are trained to install the Shinn-Flat Systems correctly. Have you read "Lightning and Its Control," by Prof. Day. This valuable and interesting book will be sent free on request.

Write to-day for interesting booklet on LIGHTNING CONTROL, by Professor Day.

Shinn Mfg. Co. of Canada, Limited, Woolwich St., Guelph, Ont.

were driven off and the martins reigned supreme. They are still there. Truly an apartment house in Pinafore Park is worth fighting for.

—From Pinafore Park to some of the fine old homes of the city—places where magnificent trees spread their shade over velvety lawns, and the flower gardens were given a plot to themselves, as they should be in spacious grounds.

Irises were just at their height of perfection, tall "gas plant" and garden heliotrope, golden coreopsis, clematis arborea (a shrubby plant with flowers very like those of the vine clematis paniculata); pansies; sweet-scented "rockets", almost over for this year; tall blue delphiniums just "coming out."—But it would take a long time even to name the plants in those wonderful gardens; so I must stop here, just pausing to mention a border that interested me perhaps more than anything else. It edged a large bed of flowers with a thick mat of glossy leaves that looked strangely familiar.

"Are those hepaticas!" I exclaimed. And the Lady of the Garden smiled. "Yes," she said. "They grow wonderfully when you take care of them. You should see them when they are all in bloom in spring."

So there they were—the dear little hepaticas of our woods, responding to the loving touch with all their might. One could almost imagine them smiling up into the face of the Garden Lady.

"Isn't it odd how some men seem to hate a tree?" said one of the party, as we admired the tall elms and other forest giants that made the very setting and character of this place. "You'd think," he went on, in disgust, "that they were

Greatest Tire Offer Ever Made!



While other tire dealers advanced their prices 20% on March 1st, we still offer the greatest tire bargains ever known in Canada. These tires will give you more mileage per dollar than any other tire on the market, regardless of price.

We will ship genuine new tires on approval to any address east of Fort William.

All you need do is send in your order by mail or wire. The tires will reach you express paid C.O.D. If you are satisfied—buy them, if not—ship them back at our expense.

You will never get tires elsewhere at these prices. Look at them:

Size	Plain Tread	Non-Skid Tread
30x3 1/2\$	\$16.50
32x3 1/2\$	17.00
31x418.00	26.00
33x4 1/2\$	30.00
34x4 1/2\$	33.00
35x4 1/228.00

Other sizes in proportionately low prices. When ordering state size and style—whether "Clincher" or Straight Wall," plain or non-skid.

Tubes Extraordinary!

30x3 1/2—fully guaranteed—\$2.25

Security Tire Sales Co.

516 Yonge Street, Toronto

never so happy as when cutting one down."

And here I want to enter a protest that, I am sure, would be endorsed by every horticulturist in Canada:

Think well before you sacrifice a single tree about your home grounds. Remember that nothing so adds to the appearance of a place. After them come the flowering shrubs and vines, all invaluable for beauty, and so able to take care of themselves, as a rule, when once properly planted. Last of all, about a country place, consider the low-growing flowers, the perennials perhaps best of all. Who would be without them? Who would be without their refining influence and the thrill of pleasure they give every time one looks at them? A little care they require, of course, but it is time repaid a thousand times over.

Our little trip to the Flower City is past, but we shall remember it long. Nor shall it have been ineffectual if we have passed on to you even one inspiration, or one idea to work out about your own home or in your own community park. JUNIA.

Worth Thinking Over.

There is a lesson in each flower,
A story in each stream and bower;
In every herb on which you tread,
Are written words which, rightly read,
Will lead you from earth's fragrant sod.

To hope and holiness and God.
—From Adams's Quotations.

Meatless Dishes for Sultry Days.

Spinach Eggs.—Four eggs; spinach, Swiss chard, or beet tops; white sauce, butter, cream. Cut in halves the hard boiled eggs and rub the yolks through a sieve. Season some cooked greens with a little butter and cream, and fill the whites of the eggs with the mixture, piling it over the eggs. Pour over the whole a good white sauce, garnish with the yolks of the eggs on top and brown in a quick oven. To make the white sauce rub together 2 tablespoons butter and 2 of flour. Stir into a pint of boiling milk and stir until it thickens to a creamy consistency. Add butter and salt. When it is poured over dust lightly with paprika or pepper.

Bean Fricassee.—One lb. beans, 1 tablespoon butter, 1 cup rich milk, catsup, vinegar, parsley, seasoning. Boil the beans and drain. Brown the butter slightly in a frying-pan, then add the beans, stirring about well. Add a little minced parsley and salt and pepper to taste. Stir in the milk, or thin cream, and let stew for a few minutes. Season with a little vinegar or lemon juice and tomato or mushroom catsup.

Escalloped Tomato.—Two cups canned or stewed tomatoes, 2 cups crumbs, 1/2 cup butter, seasoning. Mix the melted butter with the crumbs. Place in a buttered casserole or pudding dish layers of the tomatoes and crumbs until all are used, having the crumbs on top. Bake to a golden brown and serve very hot.

Corn Chowder. Two cups corn, 4 cups milk, 4 cups diced potatoes, 2 tablespoons butter, 1 onion, 8 crackers, seasoning, 2 cups boiling water. Put half of the butter into a saucepan. Add the sliced onion and cook slowly for 5 minutes. Add the potatoes, corn and boiling water. Let cook 20 minutes. Add the milk, the rest of the butter, and salt and pepper to taste. Break the soda crackers into a dish and pour the chowder over them. Serve at once.

Rice and Cheese Timbales.—One cup boiled rice, 1 cup milk, 1/2 cup grated cheese, 1 egg, 1 tablespoon butter; salt and paprika or pepper. Heat the milk and add the rice, butter, cheese, 1/2 teaspoon salt, 1/4 teaspoon paprika, and the egg beaten light. Pour into buttered cups or ramekin dishes, set in a pan of hot water and bake 1/2 hour. Serve with bread sauce. To make bread sauce scald a little rich milk with a little butter and seasoning. Add fine white bread-crumbs to make it thick.

Nut Loaf.—One pint soft crumbs, 1/2 cup nut meats, 2 eggs, 2 tablespoons butter, 1/2 cup milk, salt, pepper, poultry dressing seasoning. Mix together the dry ingredients, add the milk and the 2 eggs beaten light. Form into a loaf and bake in a shallow pan about half an hour. Serve with thick white or tomato sauce.

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Cleaning Aluminum.

Dear Junia.—It is a long, long time since you heard from me. We still take the "Advocate," and I never fail to read "The Ingle Nook." I cannot tell you how much I appreciate your columns. I noticed by last week's "Advocate" (June 10) where a York Co. Farm Woman was having trouble in keeping her aluminum clean, and also the method given by the "Scientific American," that is to boil rhubarb in the discolored vessels. I know of something better which I will pass along. Get a package of "American Steel Wool," which can be bought at any hardware store. I use "Grade No. 2," directions in every package. I have used it for a year and would not have my house without it. I never use it on the outside of the kettles, if they become a bit discolored I use bon-ami, and let it dry and polish with a cloth or news-paper; I am enclosing several recipes and hope York Co. Farm Woman will be able to get the American Steel Wool.

Graham Gems.—One small cup of yellow sugar, small piece of butter, 1 egg, salt, 1 heaping tablespoon of black strap, 1 cup of sour milk, 2 cups of Graham flour, ½ teaspoon B. powder, 1 teaspoon soda, and a few dates. Sift flour, soda and B. powder together. Bake in a quick oven.

Cucumber Lunch.—Peel and slice 12 medium-sized cucumbers, 6 large onions (cut round), salt and let stand over night. Drain. Dressing: 3 cups of sugar, 1 teaspoon of mustard, 1 teaspoon of curry powder, 1 teaspoon of tumeric, 1 teaspoon of celery seed, ¼ teaspoon of red pepper, 1 tablespoon of flour, vinegar enough to cover, boil ½ hour.
Waterloo Co., Ont. "NELLIE."

Thank you very much, Nellie for your assistance.—Junia.

Sweet Green Tomato Pickle.

The Ingle Nook.—Though I have never written before, I have always taken a keen interest in your problems and helps, and have profited by reading every week.

My method of doing sweet pickle of green tomatoes is to peel and slice as usual and fill the steamer. Steam steadily over a pot of boiling water till clear. In the meantime, I make the same mixture you suggest: vinegar, brown sugar, (always use brown sugar for pickles), cinnamon sticks, cloves if desired, boiled together in a smaller kettle, and when the tomatoes are clear fill into bottles, pour over the liquid, and seal while hot.

I had two reasons for this method. My hands were full with baby and other work, and this way needed no care, as the mixture together on stove burns very readily. It gives the pickle a cheerful bright color and flavor, while the slow, stirring boil darkens the mixture and needs constant attention.

KATHARINE L.
Ontario Co., Ont.

(You Ingle Nook readers are just splendid, I think. You always come to the rescue. I wonder if someone will know the answer to the questions in the letter following this.—Junia.)

Wool Mattresses.

We have taken your paper ever since we were married, almost 28 years ago, and find it very useful, as well as entertaining. Can any one tell me how many pounds of wool would be required to make an ordinary two-piece wool mattress, and also give some suggestions as to how to go about making it, and the quantity of covering it would need? Thanking you in advance.
Carleton Co., Ont. E. W. B.

Query Re Blankets, Etc.

"J. B." kindly sends the following information: "If the enquirer in the "Advocate" will write to Mr. E. Eastwood, Baltimore, Ont., he will be able to tell her about the blankets and cloth, as they make both and buy wool."

Kindergarten Course.

For "Seventeen," Lambton Co., Ont. Yes, there is a training school for kindergarten teachers in Toronto. Write to the Department of Education, Parliament Buildings, Toronto, for all information. I think your Normal Entrance Certificate would be sufficient for entering. The salaries for kindergarten teachers run about the same as those for other public school teachers.

How to Hill Up Celery.

BY CRAIG S. THOMS.

MY success with celery last year was so complete, and so easily attained, that I must tell about it. The "hilling-up" process was kept in mind even when I planted the seeds in the hot-bed on March 16. Some say that celery grows most in September and October, and therefore need not be planted early. Early planting, however, and twice transplanting give a large, vigorous growth of strong roots, from which in September and October, after the hilling-up is done, new inner stalks shoot up quickly. These new stalks are the only really good part of celery. Stalks once green may be blanched, but cannot be reduced to that crisp, nutty quality which those stalks have which grow after hilling-up.

At the second transplanting, I set four rows ten inches apart in a wide trench, setting the plants ten inches apart in the row, and rowing the plants as carefully crosswise as lengthwise. On September 1, my trench was crowded with Giant Paschal celery over a foot high. Taking a piece of old floor matting, I cut it into strips as wide as the celery was high, and long enough to envelop one of the cross rows, comprising four hills. I made four of these strips, thus protecting four rows at a time. With the celery thus guarded so that no soil could get at the centre of the bunches, I shoveled dirt freely from either side until I had filled in between the rows to the top of the matting. After packing the dirt moderately with my foot I removed the matting, pulling it straight up, and repeated the process with other four rows, and so on until all was hilled up. This use of matting makes the hilling-up process easy and safe. There is no need to hold the plants while the dirt is placed around them. No dirt gets to the centre, and no stalks are broken. Care must be taken not to hill too high, as the tops should be left well above ground until frost.

Planting four rows in a broad trench makes it easy to cover some plants for the winter where they are grown, and celery always keeps best this way if protected from frost. To protect from the first gentle frosts, a light covering of chaffy straw or leaves is sufficient. When the frosts become severe, remove the straw and cover clear over with dirt. Upon the dirt place several inches of leaves. To this add six inches of chaffy straw, being careful to protect the sides of the mound as well as the top. Before the cold becomes severe, cover all over with a good depth of soil, and it will be a severe winter indeed if you do not have well-protected celery until March.—Suburban Life.

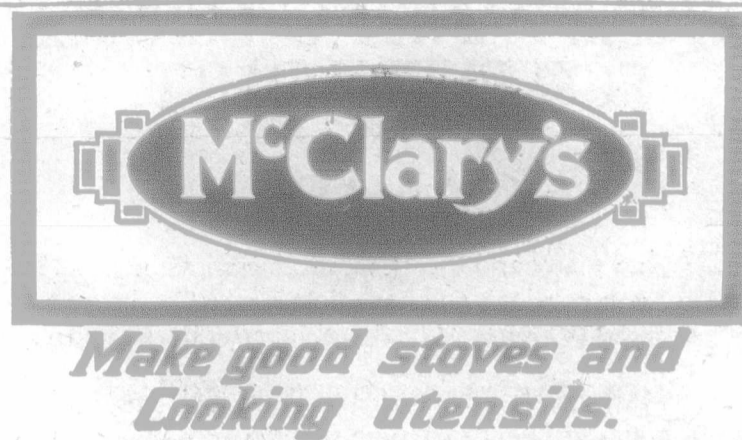
Hope's Quiet Hour.

Incorruptible Apparel.

Whose adorning let it not be the outward adorning of plaiting the hair, and of wearing jewels of gold, or of putting on apparel; but let it be the hidden man of the heart, in the incorruptible apparel of a meek and quiet spirit, which is in the sight of God of great price.—I St. Pet. III 3, 4. (R. V.)

I think it was Emerson who said: "Since we are sure of having what we wish, let us beware only to ask for high things." If we may judge by the bargain lists in the daily papers, it would seem as if women's desires were centred on dress—on costly apparel that soon gets shabby or old-fashioned, and must be replaced as cheaply as possible. I think the craze for adornment (which is not always the "modest apparel" admired by St. Paul—and others) has a good deal to do with the high cost of living. Woman's natural desire to be beautiful leads her to adorn herself with "gold, or pearls, or costly array;" forgetting that real beauty is of the soul, not put on and off with perishable finery. The white robes which adorn a real king's daughter do not grow shabby or old-fashioned. They are supplied out of the King's wardrobe, for His bride, and even in the sight of the Maker of all earth's riches they are of priceless value.

Our Lord was constantly turning men's attention away from things which appeared beautiful on the outside, but were within—where only God could see—unclean and ugly. In one of George



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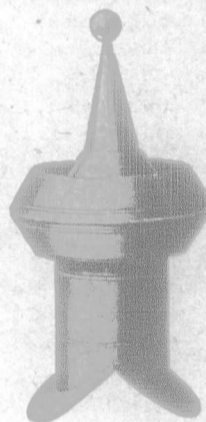
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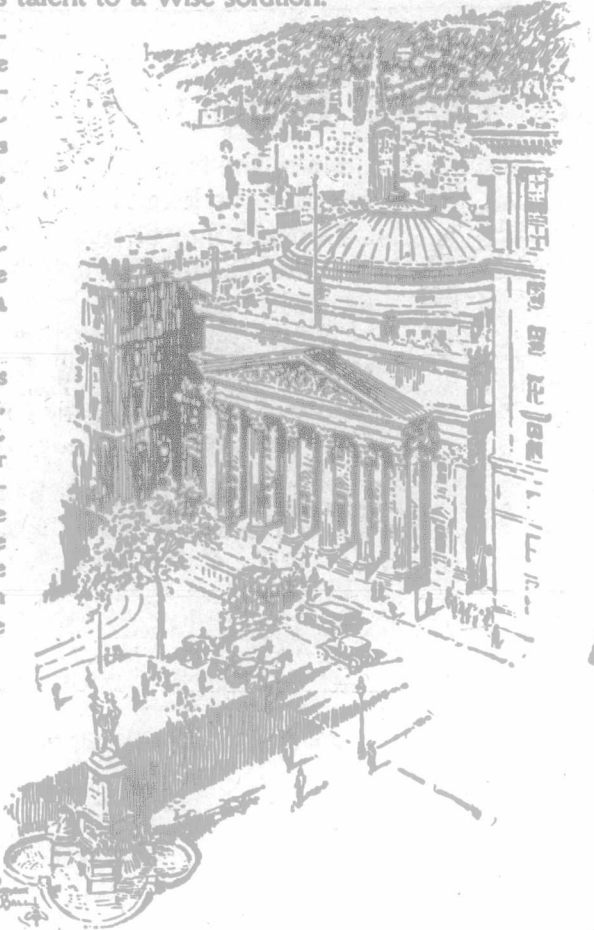
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But, having a bank account with us, he can do all this by mail.

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THE DOMINION BANK

796

Macdonald's books for children he describes a boy who was given the power of feeling the inner hand of each person he touched. Some hands, which looked shapely enough in the outside, felt like the paws of wild beasts; the hoofs of pigs, or were horrible as the slippery bodies of snakes.

One of the worst characters in history was the disloyal son of David—Absalom. Yet "in all Israel there was none to be so much praised as Absalom for his beauty: from the sole of his foot even to the crown of his head there was no blemish in him." No, his ugliness was of the soul. Only God could see it at first, though it worked its way through the skin until it was plainly visible to man.

I have just been reading the story of Ruth, which is like the moving picture of a lovely woman, clothed in the incorruptible apparel of a meek and quiet spirit. That lasting beauty was so priceless in God's eyes that He caused it to be set like a jewel in the shining setting of the deathless story, which is neither faded nor old-fashioned after thousands of years. Ruth is one of the four women mentioned in "the book of the generation of Jesus Christ."

She turned her back on the heathen gods of her own people and put her trust in the Lord God of Israel, and her trust was fully justified.

The story is told very simply, yet it stands out in our sight as clearly as if it had happened recently. We see a broken-hearted, widowed mother-in-law cheered and cherished by a loving daughter-in-law who was "better to her than seven sons." Naomi left her home with a husband and two sons, and came back ten years later with no companion but Ruth. She said bitterly: "I went out full, and the Lord hath brought me home again empty"—which was hard for Ruth to hear, for she had left her home, her gods and her own mother, fully determined to love Naomi and care for her until death parted them.

I like to think that the story of Ruth is a message from our Father, telling us how dear to Him is simple, unaffected beauty of spirit. We always think of Ruth as beautiful; but there is not a word in the story of outward comeliness. Her beauty was not so much beauty of face—that would have faded long centuries ago—but it was the kind of beauty that lasts, which all who earnestly desire may ask for and receive.

Let us look at some of the incorruptible graces which adorned that young widow from the country of Moab.

She had found the One God and turned wholeheartedly towards His people, where she might find the joy of spiritual fellowship. The religion of her mother-in-law had drawn her near to Jehovah. In spite of the unkind jokes about mothers-in-law, many young women may have been won for Christ through the beauty of such women's lives.

We see those two widows entering Bethlehem at the beginning of barley harvest. In a day or two Ruth was rested and eager to work. She had not come to be a burden to Naomi, but to earn an honest living by hard and common work. She wasted no time in looking for a pleasant and profitable job, asked for permission to go out with other women and glean in the fields. By steady industry, under the hot sun, and by modest and courteous behavior she won the favor of the steward of Boaz and the master himself. Boaz lived in a village, and he had already heard all the kindly gossip about this stranger. He knew how devoted she was to Naomi, and how her presence was already making their little house a real home. He knew that Ruth "followed not young men, whether poor or rich." He spoke to her with fatherly kindness, telling her that all the neighbors knew her to be a virtuous woman.

We see the progress of that courtship. If Boaz was a true gentleman, certainly Ruth was worthy to be his mate. First of all, Boaz tells her to glean among his maidens all through the harvest. Then he sees that she has water and food provided, and gives orders to his young men, to treat her with respect and to let fall handfuls of grain on purpose for her.

Ruth could give up her own young life in whole-hearted service, but she was amazed to find that others were thoughtful for her—just a poor "stranger."

The story teaches us many valuable lessons. One is that a life is trusted to God's direction. He will lead it tenderly. The fields were not divided by fences, only marked by a few stones, yet at once

Ruth "happened" (as we say) to "light on a part of the field belonging unto Boaz."

How little she dreamed of the great result of that day's work, as she went shyly out to join the laborers in God's harvest field. She "happened" to start in the field of a mighty man of wealth, and before long she was his wife. Her son was not only the grandfather of David, but also the ancestor of David's greater Son.

Of course, I know that the genealogy in St. Matt. I is that of Joseph; but, as it is called "the book of the generation of Jesus Christ," the mother of our Lord must have been closely related to His foster-father Joseph.

The Eternal God does not change during thousands of years. As He loved and led Ruth the Moabitess, long ago, so He loves each trustful and obedient soul today. When Ruth went out to work for Naomi, her hand was clasped by the Father of Naomi, who was her Father, too.

Life is a bigger thing than we know, and little every-day "happenings" lead God's children into new and wonderful paths. Every day we go out, like Abraham, not knowing what land of promise our Father will bestow upon us. Ruth thought she was only a gleaner, but she was really reaping a rich harvest. She had sown many seeds of kindness, and God is pledged to give bountiful return. She did not spoil the present and the future by mournful brooding over her loneliness and poverty, but lived in peace under the wings of the Lord God of Israel.

"Brothers, hush! the Lord Christ's hands Ev'n now are stretched in blessing o'er the sea and o'er the lands. Sit not like a mourner, brother! by the grave of that dear past."

He, who was the hard-working Carpenter of Nazareth, is still the Comrade of working people. The adornment of such jewels as willing service, modesty of behavior and purity of spirit, constancy and trustful obedience can never lose power and value in the sight of God and man.

Ruth did not dream, when she adorned herself with such shining jewels, that her incorruptible apparel would help other women thousands of years later.

Did you fancy that your daily life was too obscure to be of interest to the Master, or of lasting use to the world? The Savior of the world was not wasting precious time when He worked for daily wages in Nazareth.

"The man most man, with tenderest human hands Works best for man, . . . as God in Nazareth."

DORA FARNCOMB.

The Windrow

The World's Sunday School Convention will be held this year at Tokyo, Japan. The Japanese are making great preparations for the event. Three steamers are already chartered for the delegation from America.

The St. Paul, Minn., Public Library has been giving gramophone service since 1914. The library now has over 600 choice records, which are loaned to schools and clubs, a week being the limit of time during which they may be retained.

Princess Mele Barese, founder and President of the Naples, Italy, Society for the Prevention of Cruelty to Animals, died recently at the age of eighty. Few in the humane world were more widely known.

Surely the world is becoming kinder. A few weeks ago the United States celebrated a "Be Kind to Animals Week," which give rise to more notice in the newspapers than any of the five preceding annual celebrations of the kind. The idea originated with Mr. H. F. Lewith, of South Carolina. During the week various devices were used to attract people's attention, one feature being the placing of hand-made posters, for which prizes were given, everywhere. A children's poster competition was a notable feature, one of the prize posters, for instance, bearing a design of a large frog and three "baby" ones, with the

Important Auction Sale of WORLD'S RECORD STOCK

TO BE HELD AT
Waterville, Quebec, July 17th, 1920

I purchased the herd, 40 head of cattle, that produced Plain Mary, World's Champion Jersey cow, from Kelley & Cossar, Bangor, Me.; 16 of these, close up to the Champion cow, will be sold. Also in a car from the herd that produced Successful Queen, a number of three-quarter sisters and their sons will be sold. A number of fine bulls, cows and heifers of Sophie Tormentor stock and other strains will be sold. A total of 58.

All enquiries will be answered and catalogues will be promptly sent to anyone interested.

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inscription "Don't stone us, boys. We prevent disease." All such demonstrations help to make people think, and many of them need to think so far as animals are concerned. A similar competition might do equal good in Canada.

Current Events

Premier Drury opened the Soldiers' Memorial Park at Dundalk, Ont.

The medical profession is deeply interested in a serum discovered by Dr. Thos. J. Glover, of Toronto, who believes it to be a specific cure for cancer.

The streets about St. James Cathedral, Toronto, were thronged all last week by sufferers crowding to be cured by the

Anglican Faith Healer, James Moore Hickson. Mr. Hickson does not claim that the cures will be instantaneous.

A deadly war against grasshoppers is being waged by the Saskatchewan Government in co-operation with the municipalities. Bran mixed with a little molasses and arsenic or other poison is being used as bait.

Sir Hubert Ames, of Montreal, Financial Director of the League of Nations, with headquarters at Geneva Switz., declared in the Commons at Ottawa last week that the League is now a working reality. As far as it is concerned, he said, secret treaties are at an end; also much has been done toward securing general reduction of armaments, and next year that will probably be the chief matter under consideration.

James Murdock, Labor representative on the Commission of the Board of Commerce, resigned his position in protest, against the Government's failure to appoint a Chief Commissioner and other members in place of those who resigned, thus nullifying the opportunities of the Commission to accomplish results against combines, etc. He accuses the Cabinet at Ottawa with interfering with the work of the Board and favoring the big interests.

Miss Laura Durand, with the approval of the Provincial Government of Ontario, has distributed posters and literature on the protection of birds to every school in Halton and Wentworth Counties; also she has addressed the schools. A Junior Birdlovers' Club is to be instituted in Dundas.

Premier Lloyd-George stated that the Government intends to undertake reform of the House of Lords during the present Parliament.

After a week of civil warfare in Londonderry, peace now reigns and, at time of going to press, a peace conference is in session. There are indications, however, that the whole Irish railway system may be paralyzed by a strike.

Japan has asked to be permitted to participate in the economic conferences now going on in London with Krassin, the Bolshevik envoy from the Soviet Government of Russia.

Passing a swimming pool in a small city one day two women read this sign at the entrance: "25,000 Gals. In and Out Every Hour." "That's all nonsense," said one of the women. "There ain't that many women in this whole country."

The Dryden - Miller Sale of Imported Shorthorns

120 CANADA'S PREMIER SALE OF ALL TIME **120**
120 Lots—To be Sold in Four Hours
LOTS 65 COWS WITH CALVES AT FOOT (From 12 o'clock noon to 4 P. M.) 65 COWS WITH CALVES AT FOOT **LOTS**

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A special G.T.R. train will leave the Union Station, Toronto, about 9 a.m., immediately after the arrival of all important morning trains from West and Southern points, and will proceed by way of Whitby Jct. to Mapleshade Farm Crossing, returning to Toronto after the close of sale.

FOR this sale of imported Scotch cattle, Messrs. Dryden & Miller have selected in the Old Land, not only choice cattle of popular strains, but have also chosen cattle that, in every case, showed evidence of being females that would prove profitable from a purely breeding standpoint. Individually, the offering may be said to be of exceptional merit throughout, and in their guarantee they have gone just one step further than that given in any other public sale so far held in Canada—in that every animal, regardless of age, is guaranteed a breeder. All, too, have successfully passed the Federal test for tuberculosis, and the buyer will be given the privilege of a sixty-day retest in every case. These are the guarantees on which the offering will be sold, and purchasers on July 21st may well feel that the protection afforded them is more liberal than they have so far experienced in any Canadian sale ring.

Further particulars regarding individuality and breeding of the offering will be presented in these columns in the issues of July 8th and 15th.

July Twenty-first Will Be a Day of Profit if Spent at Mapleshade

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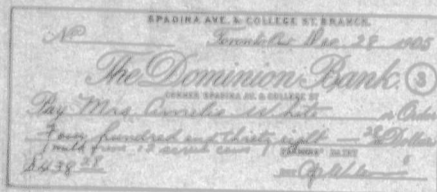
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Better Bull Bulletin

No. 5
Ontario Cattle Breeders' Association
Toronto, Ontario

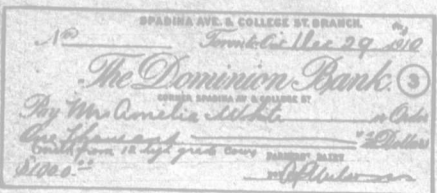
What a Good Bull Did For One Herd

This herd was owned by a woman. In 1905 the herd consisted of 12 cows of nondescript breeding with no improved blood. That year she received the following cheque (\$438.28) for the sale of milk for the year:



In 1905 she bought a Pure Bred Bull. In 1910 the herd consisted of 12 grades (5 cows and seven heifers) all descendants of cows owned in 1905 and sired by a Pure Bred Bull.

In 1910 when milk and butter values were the same as in 1905 she received the following cheque (\$1,000.00) for increased production of milk from the same number of cows for the same length of time:



Which cheque do you receive?

Use Better Bulls Tractor for Sale

One twelve-twenty-four kerosene tractor and one three-bottom Cockshutt plow. Cheap for quick sale.
Box 35, Farmer's Advocate, London, Ontario

Such Men Still Live.

This delightful little story we take from the *Animals' Guardian*, London, England:

In a Kensington by-way yesterday was a very ordinary hawker of rugs. His cart was commonplace, his horse work-a-day and possessing only one sound eye. The morning was cold, the little street deserted, and, to the seller of rugs, super-tax seemed a long way off. Not at all a good setting for a fairy act.

From a turning came an old man who asked to be shown "something nice and warm." The goods were spread out for his inspection but he was difficult to please. "I want something better," he said. "Why, there's the very thing—a thick, white fleece rug—quite the best you've got. How much?" And he pointed to the superior article, which was draped over the loins of the horse.

"Nothing doing!" was the reply. "Come, I'll give you £5 for it," declared the old man.

"Can't be done, mister."

"Why not?"
"That rug's the special property of old 'wall-eye Jim,' the horse. Had it long before the war, he did. Keeps him warm on cold days. It's just been cleaned for him to wear this winter. He's been a good pal, and he'd never forgive me if I sold that—would you, mate?"

The aged horse swung his head round until his sound eye came into play, and, with it, tried to express assent.

"Look here," the hawker went on, "you have this one, mister. It's the next best. Seventeen and six."

The old man took the rug, pressed a £5 note into the seller's hand, and not waiting for the change, vanished.

To the empty street the hawker said "Blimy!" four times. Then he buried the note in a pocket of his third waistcoat from the top, adjusted the winter garment of "wall-eye Jim," seized the horse and started for home. "Come on, mate," he said. "You come and lie down in your stable and think it over. Blimy!"

A Plucky Robin Redbreast

As I happened to glance from the window one day, My attention was duly arrested; For there was a rollicking robin so gay, So plump, and so jolly, red breasted.

A-tugging and pulling with might and with main At a string that was tangled and twisted;

Stuck fast in the ground; not an inch did he gain, Yet 'twas wonderful how he persisted.

I could not but laugh at the brave little chap

So determined, and so sure of winning; Ah! he heard me! then up went his wings in a flap And away through the air he went spinning.

No doubt he returned to tackle and test That tough proposition before him; Since the high cost of building his wee wife's nest Shows true courage, I really adore him.

Moral: If your objective is good and worthy, do not give up although laughed at; rather let the laugh prove an incentive to greater endeavor.

JEAN KNOX.

The Children's Poem.

The Zebra.

"Now what is this? Who here can tell?" The teacher asked her youthful class, And at the picture held to view, Each puzzled little lad and lass

Seemed much perplexed. Was it a horse? No, never horse was striped like that. A colt? A mule? Up went a hand From one small chap who always sat

The lowest down along the row— Her dullest boy, the teacher said. "Well, Johnny, can you tell us, dear?" Then Johnny smiled, and scratched his head.

"Oh, yes, I know; you can't fool me." He said as he eyed the curious brute With stripes galore, like a barber's pole— "It's a horse in a bathing suit!"

—Our Dumb Animals.

They Saw Results

In previous advertisements we made a special offer to interested farmers who would be open to purchase in carlots provided they could first be satisfied it would pay them to use:

SYDNEY BASIC SLAG

We offered to pay all their travelling expenses to go and view fields of wheat now growing, talk with these growers and then decide for themselves. Certain Ontario farmers took advantage of this offer, and in each case were so thoroughly satisfied with what they saw that they ordered carlots to be shipped them immediately. In some cases the entire fields had been given an application of BASIC SLAG, others had portions of the fields without it, and in some cases BASIC SLAG was used on a portion of the field, and right alongside there was used other fertilizers costing three times the money. Could anything be more convincing?

Don't be misled by certain (salesmen?) who would have you believe that BASIC SLAG is "no good." They may offer you a substitute, but there is no such thing. Insist on getting

SYDNEY BASIC SLAG FERTILIZER

The Cross Fertilizer Co., Ltd., Sydney, N.S.

Address enquiries to our General Sales Agent:

A. L. SMITH, 220 Alfred Street, KINGSTON, ONT.

(Please mention this paper)



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted and Pet Stock. TERMS—Five cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 75 cents.

AGRICULTURE STUDENT, THIRD YEAR, desires position on first-class live stock farm during the summer. Has had seven years experience. Philip Ross-Ross, Lancaster, Ont.

FOR SALE—BELGIAN HARES, HIMALAYANS Rabbits, White Angora Rabbits, English Spotted Rabbits, Black Siberians. Robert W. Nicholson, Strathroy, Ontario.

FIRST-CLASS GRAIN AND DAIRY FARM, 160 acres, 10 acres bush, balance under cultivation, situated on County road, three miles from C.F.R. station, three miles from City Dairy, two miles from Cheese Factory, three miles from Canadian Milk Powder Co., Public School on the farm, telephone and rural mail, two miles from Church. Buildings consist of good story and half frame house, with hard and soft water and furnace, large frame barn on stone foundation with good stabling, underneath water supplied to stables, with windmill, silo, large new driving barn, new hen house, farm well fenced with woven wire. This is counted one of the best farms in the township of West Zorra. Apply to Box 24, Embro, Ont.

GOATS—STOCK BREEDERS' CHEAP INSURANCE. No abortion. No distemper. Where buck runs with herd. Prices ten and fifteen dollars. Also milking does. Glenarden Goat Farm, 108 Forward Ave., London.

I HAVE A FEW CHOICE FARMS FOR SALE from 18 to 200 acres, inclusive, in the best stock-raising section in Ontario. Details gladly given. Colhart's Real Estate Office, Fergus, Ont.

PURE-BRED SCOTCH COLLIE PUPPIES intelligent and good companion. Eight dollars each, females only. Apply: Urias Creesman, New Hamburg, Ont.

WANTED—PROBATIONERS FOR TRAINING School, Niagara Falls General Hospital. Three years course. Apply to Superintendent.

WANT TO HEAR FROM PARTY HAVING farm for sale. Give particulars and lowest price. John J. Black, Advocate St., Chippewa Falls, Wisconsin.

WANTED—FARM TEAMSTERS TO WORK on our fruit farms; must be able to plough and have good knowledge of horses. Single, or married if have family who will work in our fruit preserving factory. Wages paid and other particulars on application. E. D. Smith & Son, Limited, Winona, Ont.



Condensed advertisements will be inserted under this heading at five cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 75 cents.

BABY CHICKS, HATCHING EGGS—BARRED Rocks, White Rocks, White Wyandottes, Silver Wyandottes, White Leghorns, Rhode Island Reds. Incubator capacity 9,000. Satisfaction guaranteed. Write for price-list. Tay Poultry Farm, Perth, Ont., Box 244.

Poultry Wanted—We have a special demand for LIVE POULTRY of GOOD QUALITY at this season of the year, which enables us to pay very top prices for any quantity. Get the best market in Western Ontario by selling to C. A. MANN & CO., 78 King Street, London, Ont. Phone 1577.

I WILL PAY YOU 25 CENTS

a pound for live hens, any kind, any size. No deduction for shrinkage. I pay the express within 300 miles of Toronto. Ship in boxes any size up to 24 by 44 feet, ventilated top. Make boxes out of any rough boards. Crates loaned free.

ALBERT LEWIS

666 Dundas, West Toronto, Ontario

FOR SALE

Case 9-18 Tractor with two-bottom plow, used very little and in perfect order. M. Swelton Farm, - Baie d'Urfe, Que.

Markets

Continued from page 1222.

Chicago.

Cattle.—Compared with a week ago, beef steers mostly 25c. to 50c. higher medium to best fat cows and heifers, 25c. to 75c. higher; good Bologna and fat bulls strong and 25c. higher; canners, cutters and common light bulls and stockers mostly 25c. to 50c. lower; veal calves, 50c. to 75c. lower.

Hogs.—Bulk light and light butchers', \$15.80 to \$16.10; bulk, 250 lbs. and over, \$14.30 to \$15.80; pigs steady; bulk \$13 to \$14.

Sheep.—Top native lambs, \$17, compared with a week ago, lambs and yearlings mostly \$1 higher; wethers and ewes, 50c. to \$1 higher.

Cheese Markets.

St. Hyacinthe, Que., 28 1/2-16c.; London, 28 3/4c. offered, no sales; Belleville, 29 5-16c.; Montreal, finest easters, 29 3/4c. New York, State, whole milk flats, current make, white and colored, specials, 27c. to 28c.; average run, 25 1/2c. to 26 1/2c.; State, whole milk, twins, current make, specials, 26c. to 27c.; average run, 25 1/2c. State, whole milk, twins, held, white and colored, specials, 27 1/2c. to 29c.; average run, 26c. to 27c.

Victory Bonds.

Following were the values of Victory Bonds on the Toronto market, Saturday, June 26: Victory Bonds maturing 1922, 98 to 99; Victory Bonds maturing 1923, 98 to 99; Victory Bonds maturing 1927, 98 to 99 1/2; Victory Bonds maturing 1933, 98 1/2 to 99 1/2; Victory Bonds maturing 1937, 100 to 101.

In another column of this issue attention is drawn to the Miller-Dryden Short-horn sale to be held on July 21. The sale is to be held at Mr. Dryden's farm, Brooklin, instead of at Toronto as mentioned. The advertisement in this issue gives a few particulars regarding the sale. Watch these columns in the issues of July 8 and 15 for fuller particulars. Keep this date in mind, as there are over one hundred imported Shorthorns to be disposed of.

Results

Interested farmers
they could first be

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STON, ONT.

PAY YOU

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shrinkage. I pay the
300 miles of Toronto.
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p. Make boxes out of
a. Crates loaned free.

RT LEWIS

Toronto, Ontario

R SALE

th two-bottom plow, used
ect order.

Bain d'Urfe' Que.

rkets

om page 1222.

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fat cows and heifers,
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25c. higher; canners,
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c. to 50c. lower; veal
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pigs steady; bulk \$13

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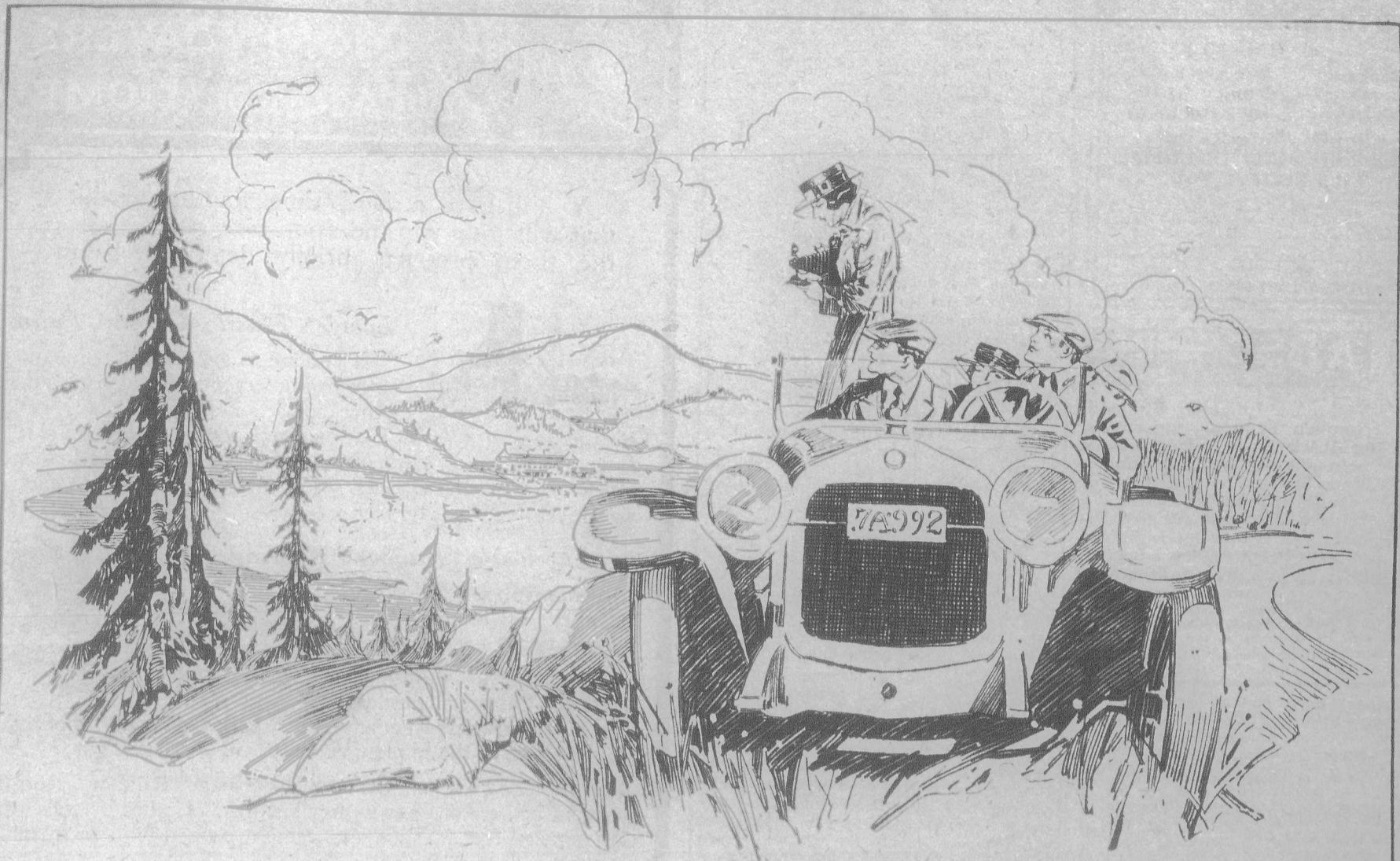
Markets.

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KODAK

as you go

If it isn't an Eastman, it isn't a Kodak

CANADIAN KODAK CO., Limited

TORONTO, CANADA

DANGEROUS

as well as painful

Backache Neuralgia
Lumbago Rheumatism
Stiff Joints Sprains

Gombault's Caustic Balsam

WILL RELIEVE YOU.

It is penetrating, soothing and healing and for all Sores or Wounds, Felons, Exterior Cancers, Burns, Boils, Carbuncles and all Swellings where an outward application is required. GOMBAULT'S BALSAM HAS NO EQUAL. Removes the soreness—strengthens the muscles. Price \$1.75 per bottle. Sold by druggists or sent by us express prepaid. Write for Booklet L.

The LAWRENCE WILLIAMS COMPANY, TORONTO



ABSORBINE

TRADE MARK, REG. U.S. PAT. OFF.

Will reduce Inflamed, Strained, Swollen Tendons, Ligaments, or Muscles. Stops the lameness and pain from a Splint, Side Bone or Bone Spavin. No blister, no hair gone and horse can be used. \$2.50 a bottle at druggists or delivered. Describe your case for special instructions and interesting horse Book 2 R Free.

ABSORBINE, JR., the antiseptic liniment for mankind, reduces Strained, Torn Ligaments, Swollen Glands, Veins or Muscles; Heals Cuts, Sores, Ulcers. Always pain. Price \$1.25 a bottle at dealers or delivered. Book "Evidence" free. W. F. YOUNG, Inc., 258 Lyman Bldg., Montreal, Can.

NATIONAL DAIRY COUNCIL OF CANADA

This Council has saved the milk producers of Canada hundreds of thousands of dollars in preventing shipping rates on milk and cream from being increased.

It wants to educate the consuming public to appreciate the food and the economic value of milk and its products so that they will use more of them and increase the home market.

The Council asks every dairy farmer in Canada to help it by giving 50 cents towards its funds.

With the patron's consent this 50 cents will be deducted from his June or July payments by the Concern to which he ships his milk or cream, and will be sent by that Concern to the Council.

All dairymen should help to protect and promote the great dairy interests of Canada.

E. H. STONEHOUSE, D'ARCY SCOTT,
President, Sec.-Treas.
Windsor, Ontario Ottawa, Ontario

Homes Are Desired

for a number of

BRITISH ORPHAN CHILDREN

5 years old and upwards. For further particulars apply giving references to

BRIGADIER J. SOUTHALL

The Salvation Army

16 Albert St. - - Toronto

Lump Jaw

The only reliable treatment for Lump Jaw in Cattle.

Fleming's Lump Jaw Cure

Price \$2.50 a bottle. Sold under a positive guarantee since 1896. Your money back if it fails. Write for

Fleming's Vest-Pocket Veterinary Adviser

96 pages and illustrated. It is Free.

Fleming's Chemical Horn Stop.

A small quantity applied when calves are young will prevent growth of Horns. A 50c tube sent postpaid is enough for 25 calves.

FLEMING BROS., Chemists,

75 Church St., Toronto, Ont.

Messrs. A. J. Hickman & Co.

Halse Grange - Brackley, England

Exporters of all Breeds of Pedigree Live Stock.

Send for an illustrated catalogue and see what we can do for you. Whether you want show or breeding stock, buy direct from England and save money.

FOR SALE—REGISTERED PERCHERON STALLION

—out of first prize, imported from France stock, two years old. Black with white marking. Price most reasonable.

MAXWELTON FARM, Baie d'Urfe', Quebec

Farmer Jinks.—"I can't find any old clothes for the scarecrow."

His Wife.—"Use some of the fancy things the girls brought home from London."

Farmer Jinks.—"I'm trying to scare crows—not make 'em laugh themselves to death."

Questions and Answers.

1st—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.

2nd—Questions should be clearly stated and plainly written on one side of the paper only, and must be accompanied by the full name and address of the writer.

3rd—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

Miscellaneous.

Hiring by the Year.

I am hired on a farm for a year. I have put in about six months, and was to collect my pay every month. Could I quit on one month's notice? Is my boss compelled to pay me all my money when I leave?

J. P.

Ans.—A man may quit on a month's notice, but the boss could not be compelled to pay in full until the year was up. A man hired by the year who quits at this season puts his employer at a disadvantage, as undoubtedly higher wages would have to be paid during haying and harvest than at other seasons.

Veterinary.

Fatality in Horse.

Horse had swollen tongue, could not eat, drink or swallow, and he died in a few days. Is this contagious? F. I. C.

Ans.—The tongue became injured in some way, either by an accident or some irritant in food or medicine. It is not contagious. If the tongue hung out of the mouth it should have been returned and the mouth kept shut by strapping the anterior part of jaws together. The strap should have been removed 3 or 4 times daily to allow him to drink, and eat if he would, and the tongue dressed with a cooling astringent lotion, as a solution of alum ½ oz. to a pint of water, or vinegar. In such cases, if the tongue be allowed to hang, it soon becomes paralyzed, and then the animal cannot swallow, hence can neither eat or drink. V.

Gossip.

The Ontario Duroc Jersey Breeders' Association of Essex are planning on holding a sale of Durocs at Essex, on Saturday, July 31. For particulars regarding the sale see advertisement in an early issue of "The Farmer's Advocate" and write the Secretary of the Duroc Jersey Breeders' Association, Essex, for a catalogue.

The Central Canada Exhibition Association are enlarging their buildings and making preparation for their annual fall show. The Machinery Hall is especially being enlarged. There should be ample floor space for showing to advantage the numerous kinds of machines, whether stationary or in motion. This is the largest exhibition in Eastern Canada, and the directors are endeavoring to make the 1920 show the best ever held.

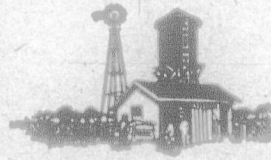
Miller-Dryden Shorthorns.

Attention is drawn to the Miller-Dryden sale of imported Shorthorns, to be held at Toronto on July 21. There are 120 head to be disposed of to the highest bidder. The sale held by these two breeders in February was a splendid success, and, considering the quality of the present offering, the sale on the 21st will reach even a higher average. Plan on being in Toronto on this date, as there will be a splendid opportunity of securing herd sires and foundation stock with quality and that are richly bred. For fuller particulars regarding the sale, see the advertisement in an early issue of "The Farmer's Advocate," and write Mr. Dryden, Brooklin, for a catalogue.

A few years ago King George presented to Canada, for the improvement of Thoroughbred stock, that noted sire Anmer. This horse has won on different occasions in England, and his sire, Florizel 2nd, was a winner of the Ascot Gold Vase, the Jockey Club Cup and the Manchester Cup. His dam is also the winner of many prizes. For several seasons Anmer has been in the vicinity of Oakville and Toronto, where he has left an exceptional lot of fine colts. For this season he is stationed at Jas. McFarlane's farm, Ailsa Craig. This will give breeders of Thoroughbreds throughout Western Ontario a splendid opportunity to breed to this high-quality horse.

Barrett MONEY SAVERS for FARM and HOME

You'll have a hard time finding products that will give you the same sure satisfaction as the three products briefly described below.



Everjet Elastic Carbon Paint

If you are to get the full value out of farm implements, metal roofs and other exposed metal, keep them from rusting away. Everjet Carbon Paint positively prevents rust. It gives a lustrous, black, durable finish that is proof against moisture, acids and alkalis. Put up in 1, 5 and 10 gallon cans, ½ barrels and barrels.

Everlastic "Rubber" Roofing

When you use Everlastic "Rubber" Roofing you are sure of years of roof service.

More of this roofing is used by Canadian farmers and factory owners than any other brand of ready roofing, because it gives the biggest value for the money.

Why take chances? Insist on Everlastic "Rubber" Roofing and be sure of your money's worth. Comes in rolls of 108 square feet. Nails and cement packed with each roll.



Everlastic Liquid Roofing Cement

The greatest roof-repair material ever made. It adds years of extra service to worn-out "rubber" and prepared roofings.

It is easy to apply, stops up all the small leaks and dries quickly into a smooth, lustrous surface that is waterproof, weatherproof and wonderfully durable.

Everlastic Liquid Roofing Cement comes all ready for use in packages ranging from 1 pint tins to barrels of about 600 lbs.

If your hardware dealer or general store cannot supply you with these Barrett Products, write us and we will.

ST. JOHN, N. B.
HALIFAX, N. S.
SYDNEY, N. S.

The Barrett Company LIMITED

MONTREAL
TORONTO
WINNIPEG
VANCOUVER



IMPERIAL HARNESS

IMPERIAL BRAND HARNESS is guaranteed free from all defects in workmanship and materials. You are certain of satisfaction when you buy a set of harness made by Trees & Company.

No. 640, Team Harness, is especially designed for farm work such as ploughing, seeding and general hauling. Exceptionally good value at a very low price. Blind Bridles with side check; lines one inch; high top hames; traces, steel chain, leather covered; pads with hook and terrets; backstrap with trace carriers riveted on top. White metal or japanned mounts, less collars. Price \$57.00

Sold by the Harness Trade throughout the Dominion. If your dealer will not get Imperial Harness for you, write direct to us for Catalogue and prices.

SAMUEL TREES & CO., LIMITED. Established 1866.

Manufacturers of Harness and Dealers in Automobile Accessories.
42 WELLINGTON ST. EAST, TORONTO

NORTHERN ONTARIO

A vast new and of promise land freedom now open for settlement to returned soldiers and sailors FREE; to others, 18 years and over, 50 cents per acre. Thousands of farmers have responded to the call of this fertile country, and are being made comfortable and rich. Here, right at the door of Old Ontario, a home awaits you. For full particulars as to terms, regulations, and settlers' rates, write

H. A. MADONNELL,
Director of Colonization,

HON. MANNING DOHERTY,
Minister of Agriculture,

PARLIAMENT BUILDINGS, TORONTO

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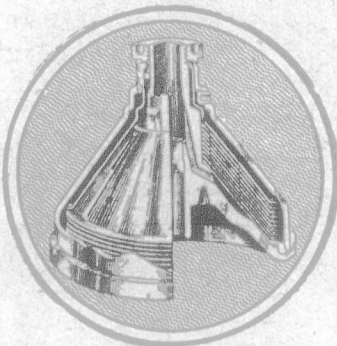
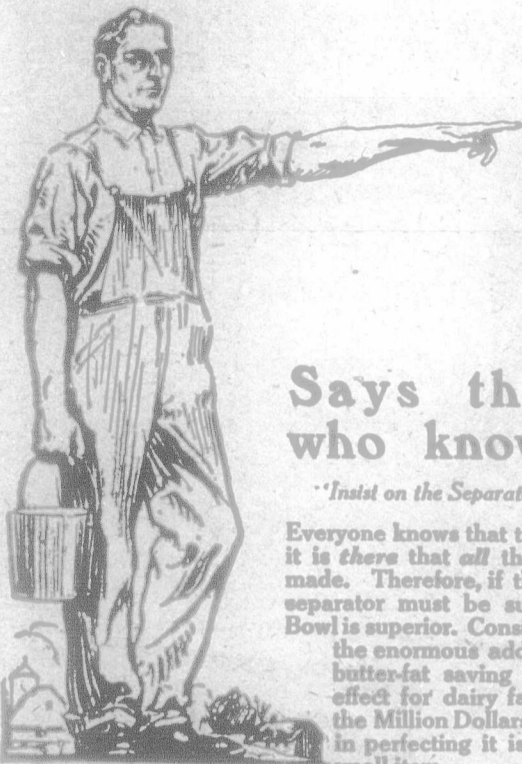
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ARIO

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60 cents per acre.
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or of Old Ontario a
settlers' rates, write

NG DOHERTY,
Agriculture,



Says the dairyman
who knows separators

"Insist on the Separator with the Million Dollar Bowl"

Everyone knows that the Bowl is the whole separator—it is there that all the work is done—the profits all made. Therefore, if the Empire Bowl is superior, the separator must be superior. And our Million Dollar Bowl is superior. Considering the enormous additional butter-fat saving it will effect for dairy farmers, the Million Dollars spent in perfecting it is but a small item.

The trade mark below is the family "coat-of-arms" of the leading line of dairy machinery — EMPIRE. You will find it on the EMPIRE-BALTIC dealer's store.

Why does this Million Dollar Bowl save more butter-fat? BECAUSE—it is self-centering, self-balancing and free from vibration and you, as a dairyman know that vibration wastes butter-fat since it shakes the cream back into the milk after separation. This same freedom from vibration means greater endurance—that fact is obvious.

With the EMPIRE BALTIC on your farm you would have a better chance of making extra dairy profits than you could possibly have otherwise. Write for our catalogue 13

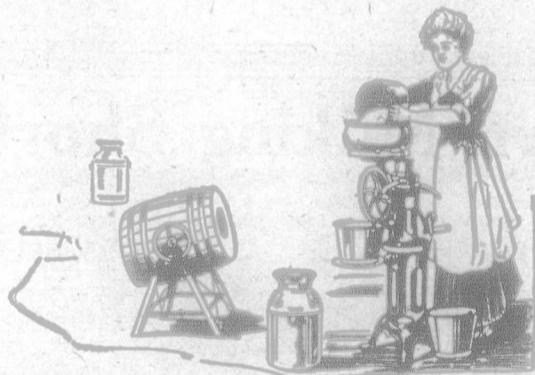
The Empire Cream Separator Co. of Canada, Limited
TORONTO and MONTREAL

Manufacturers of EMPIRE MILKERS and GASOLINE ENGINES.



EMPIRE-BALTIC
The Separator with the MILLION DOLLAR BOWL

Massey-Harris



The Features that Give Superiority to
the Massey-Harris Cream Separator

THE Superiority of the Massey-Harris Cream Separator consists in getting more of the cream at all temperatures than is usually the case, and in getting a better cream, for it gets the very fine globules which are so rich in butter fat, and which produce butter with a better flavor and keeping qualities.

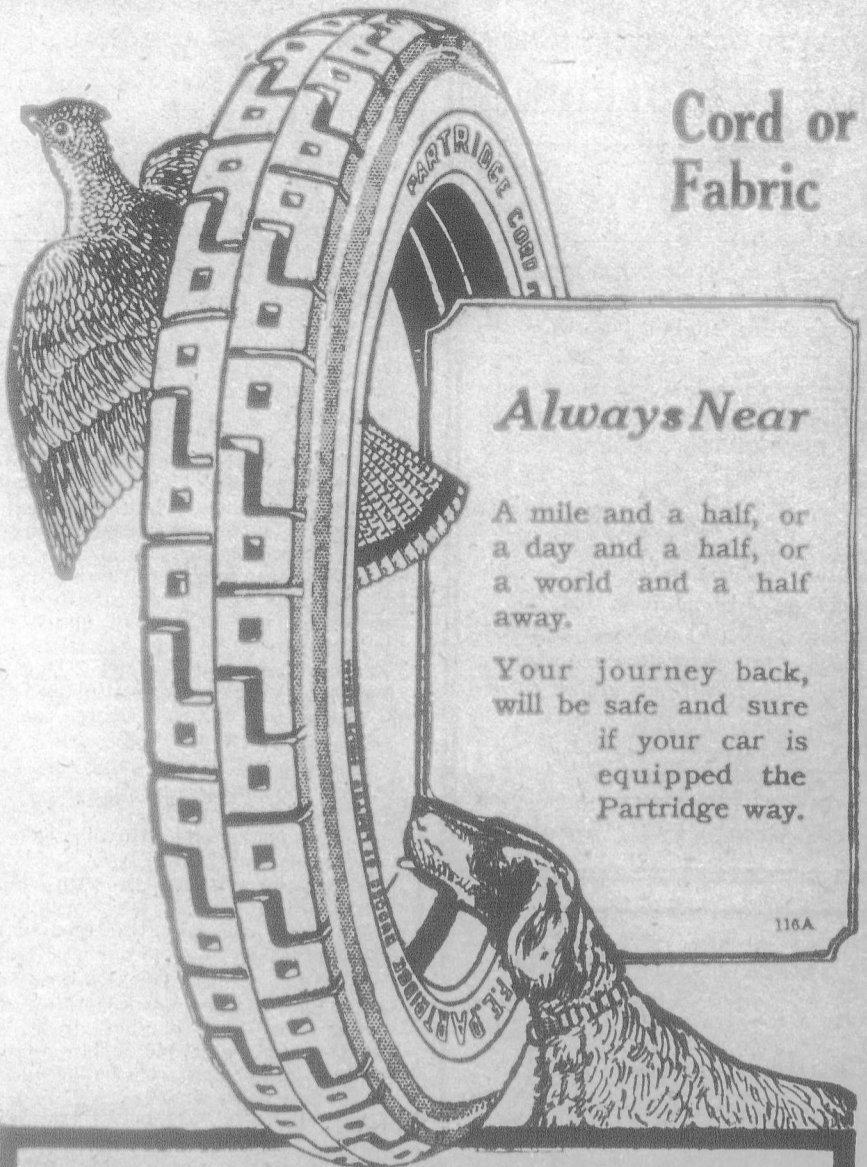
The features which make this possible are the improved Split Wing with its Six V-shaped openings which spread the whole milk uniformly over each and every disc, thus utilizing the entire skimming area: the large skimming area, and the absence of conflicting currents of skim and cream once separated.

Send for our Special Cream Separator Folder.

MASSEY-HARRIS CO. Limited

Head Office: Toronto, Ont.

AGENCIES EVERYWHERE



Cord or
Fabric

Always Near

A mile and a half, or
a day and a half, or
a world and a half
away.

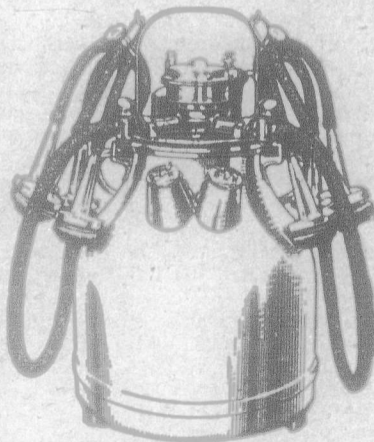
Your journey back,
will be safe and sure
if your car is
equipped the
Partridge way.

116A

PARTRIDGE
TIRES

Game as Their Name

Extra Hours of Daylight



BURRELL
B-L-K
MILKER

Good for the
herd

Think what you could do with another extra working hour each morning and evening. How you could make the whole farm jump.

With hand milking you have all hands at milking morning and evening.

With the Burrell Milkers you have one man doing the work of three men in the same time. That saving in labor means extra hours of daylight on your farm.

This saving in labor alone pays for the Burrell outfit in less than a year.

Many dairymen who found hand-milking unprofitable and intended selling the herd have used Burrell's and then increased the herd.

Send for free illustrated booklet explaining all the advantages and proving them by experience of dairymen big and little.

D. Derbyshire Co.
Limited
BROCKVILLE - ONTARIO

SHIRE BREEDING**Should Be Popular**

Shires excel all other breeds in size and conformation. Size has never been sacrificed to quality, but quality is always kept in view, and Shires embody the best combination of these two most important features among the heavy breeds.

Shires have the best possible conformation for heavy draft work, their shoulders being ideal for this purpose. In addition to conformation, they have the necessary weight to enable them to move heavy loads with minimum effort.

G. de W. GREEN

Sec.-Treasurer
Canadian Shire Horse Association
58 Grenville St., Toronto

Aberdeen - Angus

A few typey young bulls and females to offer, of choice breeding and individuality.

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Yearling Rams and Ewes for breeding purposes or fitted for the show ring.

Inspection invited, satisfaction assured.

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Present offering—A few young bulls ready for service.

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Nine extra good young bulls for sale. Also females all ages. Show-ring quality.
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English Dual Purpose Shorthorns

Begin the pasture season by the purchase of a sire which will add value to your calves. For milk and beef. From imported stock of choice breeding. We have a fine choice of bull calves and bulls.

Also English Large Black Pigs. A thrifty breed. Write or call.

LYNNORE STOCK FARM

F. W. Cockshutt, - Brantford, Ont.

Mardella Dual - Purpose Shorthorns

Two sappy, strong young bulls, now ready for service, for quick sale. Females all ages. Some bred to The Duke. Dam gave 13,599 lbs. milk, 474 lbs. butter-fat. All have size and quality. Great producers.

THOMAS GRAHAM, R. 3, Port Perry, Ont.

Scotch Shorthorns—Herd headed by Master Marquis =123326 =, by Gainford Marquis. Stock of either sex for sale. Also Oxford Down ewes.
GEO. D. FLETCHER, Erin, R.R. 1, Ont.

The Old Dog.

EDITOR "THE FARMER'S ADVOCATE":

Time was when Rover full of the pride of youth, stepped daintily along, head up, tail at a saucy angle, ever alert for some excuse to blow off his surplus energy. His flying form was here, there, and everywhere: cats under full sail prayed fervently that it wouldn't be long before they hit a tree; prize "roosters", with outstretched neck and wings, made records sprints for any old port in a storm, while low flying crows looked down wonderingly at the insane, leaping, yelping creature that kept pace with them as far as the fine fence; and the cows, morning and evening, at the first eager yelp, knew at once that it was a case of every cow for herself for they knew by sad experience what happened the hindmost. Time the relentless, however, is no respecter of dogs. Slowly, but surely, he pursues; and now that fine head is carried low weighted down by the sweets and bitters of many years; his steps are stiff and uncertain—young Rover has become the "Old Dog" and the pup his successor, takes full and unfair advantage of the fact that the once bright eyes are almost sightless.

As the old fellow lies basking in the the sun the pup comes stepping jauntily along, and, spying the peaceful sleeper, he pauses, cocks his head to one side with a knowing mischievous air, and then, pouncing, he fills the air with yelps of delight as he worries and torments his victim who can do little but snarl in helpless rage.

There's that pup again, Dad, exclaimed mother one day in the kitchen, as sounds of the one sided conflict arose. He's forever at it now. Its a shame, so 'tis, the way he torments that poor old dog! He needs a good whacking!

Can't keep the young beggar off him, replied dad. Guess we'll have to get rid of Rover; the pup's coming on an' two dogs is one too many to feed nowadays. —What d'ye think?

In a way I s'pose it would be a kindness to end his misery—but I hate the thought dad. He's been so faithful, an' it would seem kind of mean to—just kill him.

Oh shucks! mother, he's got to go sooner or later same as you an' me an' what odds if its a little sooner. A second or so in front of the gun'll do the trick, an' he'll never know what struck him. I've been thinkin' o' doin' it for quite a while—guess I'll do it right away, the 'sessor 'll be around soon.

Just as you like, Dad, said mother: if you have the heart to do it.

Have the heart to do it? Oh pshaw, mother! Where's the cartridges? Any left? One? Oh well that'll be enough.

It don't seem right, muttered mother as dad, gun in hand went out. An' the way he talks makes a body's blood run cold.

Meanwhile, full of his grim purpose, dad, at the woodshed door stopped for a peep through the gun barrel to see if "she was clean." Satisfied, he inserted the cartridge, closed the breech with a business like snap, and looked abroad questioningly for his intended victim.

Wonder where the old beggar is? grumbled dad. I'll bet if I didn't want him he'd be right—something cold from behind touched his hand, and he looked down, to find a pair of wistful eyes peering up at him. A tail wagged—gentle greeting, and the cold nose confidently muzzled his hand anew, seeking for a caress. A harsh voice—surely it couldn't be Dad's—grated out: You old fool you! Git out! and the old dog unaware of the sudden turmoil in Dad's bold heart, shrank cowering away.

In the house mother sat listening intently: Strange, she muttered, looking at the clock, what a time its taking him. maybe—light of hope shone in her eyes—when it comes to the actual shooting he'll—Bang!

Mother's heart skipped a beat or so and then she rushed to the window just in time to see a thin blue cloud of smoke drift idly past the far corner of the barn: He did do it after all! she cried, tearfully. I didn't think he—It was just real mean of you, dad! Even if he was useless and old he'd earned—

Well, Lan' sakes!

From behind the barn came a man, in front of whom an old dog padded slowly. From somewhere a pup rushed out, leaped, and bore the old dog down. A booted foot shot out, for once landing where it was intended, and a surprised

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Herd headed by Victor 3rd, Imp., Grand Champion at Erie Show and Congress. Herd average over 9,500 lbs. milk per cow. Choice cows, heifers and herd-heading sires for sale.

R. R. WHEATON :: **THORNDALE, ONTARIO**
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Herd headed by Dominator 106224, whose two nearest dams average 12,112 pounds of milk in a year. Bulls from 1 to 6 months old for sale, also a cow or two. Inspection of herd solicited.

WELWOOD FARM - Farmer's Advocate - **LONDON, ONT.**

MILKING SHORTHORNS Young stock from R. O. P. cows by imported sires.

BERKSHIRE PIGS Choicely bred sows and boars, all ages. Can supply pairs, not akin.

J. B. PEARSON, Manager - Credit Grange Farm - Meadowdale, Ont.

HILLVIEW DUAL-PURPOSE SHORTHORNS

I have in my herd seven officially tested cows, some with R.O.P. record of 7,900 lbs. as a two-year-old and 11,500 lbs. in 4-year class. Herd headed by Kitchener 104066 a heavy, thick grandson of Dairymaid 86086. Four young bulls for sale. Government test tells what their dams have done at the pail, and if you are interested, come and see the individuals. **D. Z. Gibson, Caledonia, Ont.**

SHORTHORNS—CLYDESDALES

Just one bull left, 9 months old; sire, Lochiel (imp.); dam on the R.O.P. Pure Scotch. Stallion colt, sired by Baron's Stamp. Fillies rising, 2, 3, 4 and 5-year-old. Come, see, and be satisfied. Brooklin G.T.R. and C.N.R. Myrtle C.P.R. **WM. D. DYER, COLUMBUS, ONTARIO**

Spring Valley Shorthorns—Herd headed by Sea Gem's Pride 96365. We have a number of good bulls for sale, including the Champion Ivanhoe 122760, and his full brother also, an extra well-bred Rosewood and others. Write for particulars. Telephone and telegraph by Ayr. **KYLE BROS., Drumbo, Ont.**

20 Bulls—SPRUCE LAWN—100 Females—Clydesdales, Shorthorns, Yorkshires. Herd headed by Imported Golden Challenger 122384, a Rubyhill, bred by Earl of Northbrook, by Ascott Challenger, bred by L. De Rothchild. Special bargains in farmer's bulls. Cows and heifers in calf, yearling and heifer calves. Yorkshires either sex. **J. L. and T. W. McCAMUS, Cavan, C.P.R.; Millbrook, G.T.R. and P.O., Ont.**

Scotch Shorthorn Bulls and Females—I have a nice offering of Scotch-bred females and one or two young bulls still on hand. The pedigrees are choice, the individuality is good—and the prices are right. If you want one Shorthorn female or a carload, come to Markdale. **THOS. MERCER, Markdale, Ont.**

Shorthorn Bulls and Females—Herd headed by Ruby Marquis, a son of the great Gainford Marquis (Imp.). Our calves now coming are all by this sire. We are also offering a few females in calf to him. Get our prices before buying elsewhere.

PRITCHARD BROS., R.R. No. 1, Elora, Ontario

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GIVE her this convenience which you would demand if you had the house work to handle.

Contrast the labour saving implements, tools and equipment you use daily around the barn and in the fields with the necessities she has been denied. This

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will modernize your home and give you city conveniences—running hot or cold water anywhere throughout the house, with a bath and toilet and water in the barn and paddock for the stock.

You need these conveniences to-day when help-in scarce and both your wife and yourself are overworked.

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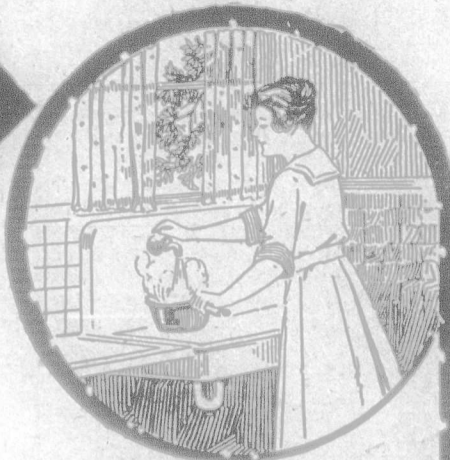
Our free booklet would interest you as it is well illustrated and describes our water systems fully. Write us to-day and we will enclose an Information Blank, for you to fill out. We in return will send you full particulars and the cost of a system suited to the needs of your farm.

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A dozen young bulls imported and my own breeding at moderate prices.

W. A. DRYDEN

Brooklin - - - Ontario

SHORTHORNS

Present offering: Six young bulls, Reds and Roans, also a number of females. They have size, quality and breeding from good milking dams. Prices moderate. Satisfaction guaranteed.

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Burnbrae Shorthorns

Eighty-three years without change, we have been breeding Scotch Shorthorns. The foundations of many of the best herds in America were laid from our farms.

I am in a position to furnish you with the best in either sex that can be found. High-class young bulls for the breeder and the farmer. Cows and heifers of the finest breeding to start you right, and you cannot afford to start wrong. Every animal that I have sold in two years has been satisfactory, the most of them sold by letter. I can satisfy you with the best in what you want at a price that will give you a chance, and I will pay the freight or express to your station. Augusta Sultan - 93092 - one of the greatest living sires at the head of my herd. Write and if possible come and see, it is worth while. Post Office, Telegraph, Telephone and Station is Stouffville, Ont. 30 miles from Toronto.

ROBERT MILLER :: Stouffville, Ont.

A NEW IMPORTATION OF 40 SCOTCH SHORTHORNS

arrived home Dec. 17th. From our herd of 125 head we can offer a large selection in choicely-bred bulls and females. Anyone in need of foundation stock may find it to their advantage to look over our offering before making any purchases.

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Burlington Jct., G.T.R., only half mile from farm.

SPRUCE GLEN SHORTHORNS

We have a few choice, well bred, thick, deep level, mellow young bulls of breeding age for sale; also heifers in calf to a right good sire. Write for particulars.

JAMES McPHERSON & SONS Dundalk, Ontario

Imported Scotch Shorthorns For Sale—Three imported bulls, one yearling, one two-year-old and our three-year-old herd sire; also a choice two-year-old Orange Blossom of our own breeding, and three well-bred bull calves about a year old. Would consider exchanging an imported bull for Scotch females.
R. M. MITCHELL, R.R. No. 1, Freeman, Ont.

PUSLINCH PLAINS SHORTHORNS

Five bulls for sale by Burnbrae Sultan - 80325 -

A. G. AULD, - - - R. R. 2, - - - GUELPH, ONT.

BLAIRGOWRIE SHORTHORNS

3 Imported bulls. 10 Imported females in calf or calf by side. 2 Scotch bred bulls.

JNO. MILLER :: ASHBURN, ONT.
(Myrtle C.P.R. and G.T.R.)

Pear Lawn Shorthorns, Hackneys and Yorkshires—One imported in dam Miss Ramsden bull, 14 months; one Secret bull, 12 months, imp. sire and dam; one Golden Rose bull, 6 months, imp. sire and dam; one bull, a Flattery, 12 months, imp. sire. A few young cows with calves at foot. One imported Hackney stallion, A 1; two Hackney stallions rising one year; one registered Clyde mare; also Yorkshires at weaning time. HERBERT J. MILLER, Keene P.O., Ont. Stations—Keene G.T.R., Indian River C.P.R. Peterborough County

Newcastle Herd of Shorthorns and Tamworths for Sale—Three nice bulls, 11 to 13 months old, and several yearling heifers and cows with calves at foot, both sexes, all splendid milking strain. Several Tamworth sows due to farrow in May, June, July. Young stock, both sexes, at weaning up to six months old. All from prize-winning stock.
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Write us about the set of Gainford Marquis. They have won more at Toronto and other large exhibitions than those of any other sire. We still have a few sons to offer, as well as females bred to Canada's greatest sire.

J. A. WATT, :: Elora, Ontario

Braeburn Scotch Shorthorns

150 Head :: 100 Breeding Females

Herd Headed by Nero of Cluny (Imp.)
I have at present twelve young bulls that are now nearing serviceable age. The majority are sired by my present imported herd sire, and we guarantee them as good individually as the get of any other one sire in Canada. They are nearly all roans, and are priced to sell. Can also spare some breeding cows in calf to Nero of Cluny (Imp.).

CHARLES McINTYRE, Scotland, Ontario
L.E.N. Electric R.R. Cars every hour.

WILLOW BANK STOCK FARM ESTABLISHED 1855

Shorthorn Cattle and Leicester Sheep. Bulls in service: Browndale - 80112, by Avondale, and Browndale Banner, Junior Champion at Toronto, 1919. A special good lot of young bulls and females to offer. Write for information or come and see.

JAMES DOUGLAS, :: CALEDONIA, ONT.

WALNUT GROVE SCOTCH SHORTHORNS

We are offering choice young males and females from the best Scotch families and sired by Gainford Eclipse and Trout Creek Wonder Ind. If wanting something real good, write, or come and see us.

DUNCAN BROWN & SONS, Sheddun, Ont., P.M., M.C.R.

Cedar Dale Scotch Shorthorns—Pleasing Cattle and Pleasing Pedigree—Senior Sire, Excel-sior, by Gainford Marquis (Imp.). Junior sire, Matchless Duke, by Gainford Matchless, the \$12,000 son of Gainford Marquis (Imp.). I have a number of choice bred heifers, and must sell a few to make room. Also have a couple of Scotch-bred bulls. Prices right at all times.
FRED. J. CURRY, Markdale, Ont.

BRAMPTON JERSEYS

THE LARGEST JERSEY HERD IN THE BRITISH EMPIRE

At Toronto Exhibition, 1919, we won twenty-five of twenty-seven first prizes. We now have for sale first-prize young bulls from R. O. P. dams, as well as females of all ages.

B. H. BULL & SONS :: Brampton, Ontario

ALL BULLS OF SERVICEABLE AGE SOLD

A few young bulls sired by Financial Raleigh King, son of the \$6,000.00 Financial Beauty King, for sale, from R.O.P. dams.

JAS. BAGG & SONS, (Woodbridge, C.P.R., Concord, G.T.R.) EDGELEY, ONT.

Laurentian Producing Jerseys—The oldest bull we have at present is a year old youngster, sired by our herd sire, Broadview Bright Villa, No. 5630, and from Brampton Astoria, one of the best imported cows in the herd. We also have others younger of similar breeding, as well as a few bred heifers for sale.
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Canada's Most Beautiful Jersey Herd
The Woodview Farm Herd headed by Imported Champion Rower, winner of first prize with five of his daughters on the Island of Jersey, 1914, second in 1916, and again first in 1917. We are now offering for sale some very choice bull calves, ready for service, sired by imported bulls and from Record of Performance imported prize-winning cows. Also some cows and heifers. Prices right. We work our show cows and show our work cows.

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ALLOWAY LODGE STOCK FARM
Angus--Southdowns--Collies
Recent addition of Imp. Idealist of Maisemore as junior herd sire. Yearling rams and ewes, all of superior merit, priced to sell.
No Collies at present.
ROBT. McEWEN, R. R. 4, London, Ont.

20,000 lb.—Holstein Bulls—20,000 lb.
Write us for extended pedigrees and full particulars of 1920 bulls whose dam and sire's dam average over 20,000 lbs. milk and 850 lbs. butter in R.O.P. R. HONEY & SONS, Dartford, Ont.

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pup fled in yelping precipitation while the man stooped and with tender pats and caresses sought to make amends to helpless age.

A kindly smile of amusement lit up mother's face: "After all his brave words," she murmured.

In a little while dad strode in, stood the gun in a corner and sank into a chair. There came a scratching and a whine at the door and he looked up to meet mother's questioning eyes fixed upon him: Blame the luck, Mother! he blurted out, the old beggar wouldn't stand still an'—an' I missed.
York County, Ont. HIRED MAN.

Questions and Answers. Miscellaneous.

Sweet Clover.

Will sweet clover seed from the first crop?
J. J. R.

Ans.—Sweet clover will not seed the same season it is sown, but the following season seed will form on the first growth, or the first crop may be cut for hay and the second crop allowed to mature for seed.

Hens Dying.

A number of my hens are dying. On opening them I find the liver very soft. They are well fed and looked after. What is the trouble?
C. H.

Ans.—From the symptoms given it is rather difficult to diagnose the case. Quite a number of birds are lost from tuberculosis, the symptoms of which are: going light in weight, having an anaemic appearance, and usually lameness. On examining the liver of an affected bird, white, cheesy spots, varying in size, will be found. Nothing can be done for this trouble and every care should be taken to prevent healthy birds from becoming infected.

Learning to Be an Engineer.

Is it possible to become an engineer on a steam engine by studying at home? What books would be required? What length of time would be required before receiving a certificate?
D. Y.

Ans.—A person might take a correspondence course and acquire a good deal of information. The school which you took the work from would advise on the books needed. The length of time required to get a certificate would depend upon the adaptability of the student to the work. Along with the theoretical in engineering, a person required a good deal of the practical in order to become efficient.

Acreage in Grain.

According to figures issued by the Dominion Bureau of Statistics, the total area estimated to be sown to wheat in Canada for 1920 is 16,921,000 acres, or a decrease of 2,205,000 acres as compared with 1919. The area sown to oats shows an increase of 235,000 acres; barley, rye, peas, and mixed grains all show a slight decrease. Over a large portion of the Dominion the condition of the crops at the end of May was reported to be equal to or slightly better than the crops at the same time last year.

Ayrshire Herd Book.

The Canadian Ayrshire Breeders' Association, organized in 1870, have recently issued Volume 19 of their Herd Book. This contains pedigrees numbering from 61996 to 67020. Besides the pedigrees, it contains a good deal of information which should be of interest and value to all Ayrshire breeders. The constitution and by-laws are given, together with the report of the last annual meeting, printed in both English and French.

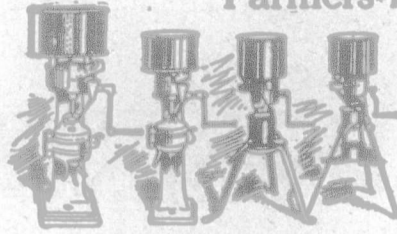
Volume Five of Angus Herd Book.

Volume 5 of the Canadian Aberdeen-Angus Herd Book is off the press. It is a neatly bound volume of 700 pages, containing pedigrees of bulls and cows from 13601 to 20869. A full list of members is given, the rules of entry, together with the constitution and by-laws. Every Angus breeder should have a copy of this Herd Book for reference.

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The Cream Separator with the Suspended Bowl

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Our young bulls of serviceable age have all been sold but we have a number of the best young calves we have ever bred. All are from dams with good combination records for both milk and butter. Several are up to 700 lbs. of milk and 31 lbs. of butter for 7 days. If you are interested in a good calf, write or see them now—they can be purchased at considerably less than we will be pricing them next winter.

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Senior sire is from one of the best sons of King Segis Alcartra Spofford. Junior is grandson of the noted May Echo Sylvia, by Champion Echo Sylvia Pontiac.

Write to the Superintendent for prices, etc.

Raymondale Holstein-Friesians

A herd sire of our breeding will improve your herd. We have sons of our present sire, Pontiac Korndyke of Het Loo (sire of \$12,750 Het Loo Pieterje), and also sons of our former sire, Avondale Pontiac Echo. Several of these are of serviceable age, and all are from good record dams. Quality considered, our prices are lower than anywhere else on the continent. Their youngsters should remain long. Write to-day.

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"Premier" Holstein Bulls Ready for Service—I have several young bulls from dams with 7-day records up to 32.86 lbs. of butter, 755.9 lbs. of milk, with 110 lbs. of milk in one day—over 3,000 lbs. in 30 days. All are sired by present herd sire, which is a brother to May Echo Sylvia. Step lively if you want these calves.

H. H. BAILEY, Oak Park Farm, PARIS, ONT.

Evergreen Stock Farm Registered Holsteins

Our motto: Choice individuals—the profitable producing kind. Nothing for sale now, but get in line early for your next herd sire.

A. E. HULET, Oxford Co., G.T.R. - **NORWICH, ONTARIO**

HOLSTEINS—For the next thirty days I am offering bull calves from 2 to 4 months old, at reasonable prices. Sons and grandsons of Mercena Calamity Posch, and sired by Hill-Crest Rauwerd Vale. Come and see them, or write.

W. FRED. FALLIS, R.R. 3, Millbrook, Ontario

High-Testing Holsteins—Present offering: Three young bulls, 10 months old; all splendid individuals. Our herd sire, Ormsby Jane Hengerveld King (by Ormsby Jane King), has been used on this herd for several seasons, and his get, both heifers and bulls, are exceptionally promising individuals. It will pay you to inspect these youngsters before buying.

L. C. SNOWDEN, R.R. 3, Bowmanville, Ont.

HOLSTEIN BULLS FROM 30-lb. DAMS

If you want 30-lb. bulls—good individuals—and priced right—you should see my present offering. I also have lower priced bulls, and am offering females bred to Ormsby Jane Burke. Correspondence solicited.

R. M. HOLTBY, Manchester G.T.R., Myrtle C.P.R., PORT FERRY, ONT.

Cloverlea Dairy Farms—Herd headed by King Pontiac Rauwerd, who combine the blood of Canada's greatest sires and dams. His offspring are a choice lot. We have stock for sale, both male and female, 75 head to choose from. Consult us before buying elsewhere. Could book a few more cows for service to "King."
GRIESBACH BROS., L.-D. Phone, Collingwood, Ont.

Two Young Holstein Herd Sires—I have only two young bulls of serviceable age left—both are sired by Lyons Hengerveld Champion, whose dam is the 25.83-lb. junior 3-year-old daughter of Baroness Madoline, 34.48 lbs. Both calves are 12-month youngsters, one from a full sister of a 29.95-lb. cow, and the other is from an untested daughter of Baron Colantha Fayne. They are priced to sell.

T. W. McQUEEN (Oxford Co.) Tillsonburg, Ont.

Glenhurst Ayrshires—headed by Mansfield Mains Sir Douglas Hague, No. 16163 Imp.—have been noted for their depth and size, good teats and smoothness of conformation. If you are looking for a combination of size, type and production—plus high butterfat—write me or visit the farm. Males and females of all ages for sale.

James Bepping, Summertown Sta., G.T.R. Williamstown, C.P.R. Bell Telephone 78-3 Cornwall

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By giving efficient service in heavy duty tractors, developing terrific heat and tremendous shock strain, Champions have earned the right to the name which has become another word for spark plug dependability. A special Champion plug

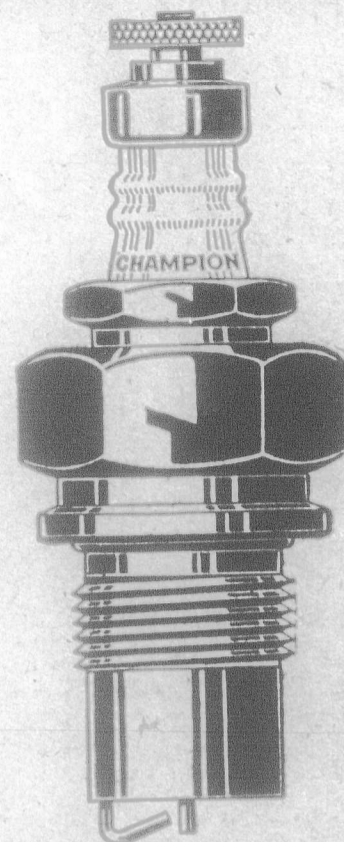
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Annual Ram Show and Sale—350 specially selected Rams at ASHFORD, Kent, on September 23rd and 24th, 1920; also sales at SITTINGBOURNE, Kent, on October 13th, 1920, and MAIDSTONE, Kent, on October 15th, 1920.

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Yearling rams for flock headers. Yearling ewes and breeding ewes in car lots.

Chas. J. Shore, - Glanworth, Ont.

Shropshire Yearling Ewes bred to Bibby's 84 (imp.) ram and ewe lambs sired by him. Two 4-horned bulls. Two Clydesdale stallions.

W. H. PUGH, Myrtle Station, Ont.

Cotswolds and Yorkshires Special Offering: Bacon type sows and boars for sale. Orders taken for fall delivery of Ram Lambs. Write us.

R. HONEY & SONS, - Dartford, Ontario

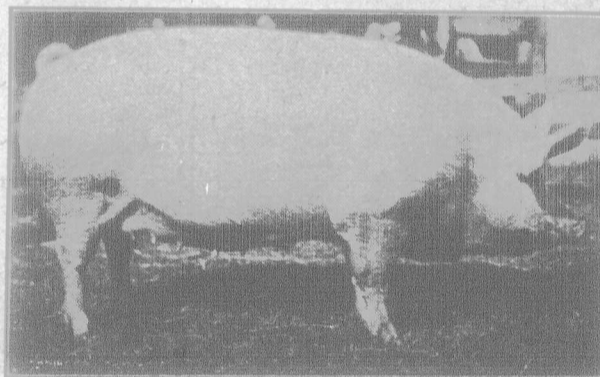
Sunnyside Chester Whites and Dorsets—In Chester Whites, both sexes, any age, bred from our champions. In Dorset ram and ewe lambs, by our Toronto and Ottawa champions, and out of Toronto, London and Guelph winners.

W. E. Wright & Son, Glanworth, Ont.

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Breeds these hogs on its own farm; and when you have complete list of 25 New, Yearly Subscriptions, will send you a young hog of weaning age, boar or sow, whichever you prefer.

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Oxford Down Sheep, Pioneer Flock

—We are offering this season a up-to-date lot of yearling and two-shear Rams, also imported two-shear Ram and a number of Yearling and two-shear Ewes, also Ram and Ewe Lambs.

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From our recent importation of sows, together with the stock boar, Fudden Torredor, we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed.

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Some extra choice improved

Yorkshire Pigs

A combination of the Experimental Farm and Dyne's breeding will be ready to ship early in June. Price \$30.00 a pair, F.O.B. Ottawa.

J. Vipond & Son, Cummings Bridge, Ont.

Chester Whites

Our sixth importation has just arrived. One litter farrowed in quarantine—sired by Champion boar Ohio State Fair—and a sow in pig to "Volunteer," Champion of Nebraska. Also ten litters sired by 1st and 2nd prize aged and champion boars at C. N. E. Unrelated pairs as a baby herd. Illustrated catalogue.

JOHN G. ANNESSER, Tilbury, Ont.

Berkshires—Boars ready for service and boar pigs, rich in the blood of Lord Premier's Successor, 161500. Grand Champion, 1914, Champion Sire of 1915, 1916, 1917. His descendants have won Grand Champion honors at the largest and strongest shows of 1919. The Champion Berkshire barrows of 1918 International were double grandsons of Lord Premier's Successor. We have shipped many Berkshires to Canada with satisfaction to customers. Prices on request.

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Pigs of different ages, both sexes, from large litters.

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Farmer's Advocate, London, Ontario

TAMWORTHS

Young sows, bred for June and July farrow, and boars for sale. Write or phone.

JOHN W. TODD - Corinth, Ontario

Meadow Brook Registered Yorkshires—Ten choice young boars fit service, from prizewinning stock. Prices reasonable for quick sale.

G. W. MINERS, R.R. No. 3, Exeter, Ontario

CHESTER WHITES

Choice young pigs, both sexes, sired by Cairwa Collaway Edd, Imported, No. 19831. Also a few gilts bred to same boar.

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Inverugie Tamworths

Young sows, bred for September and October farrow. Choice boars of all ages.

LESLIE HADDEN, Box 264, Sunderland, Ont.

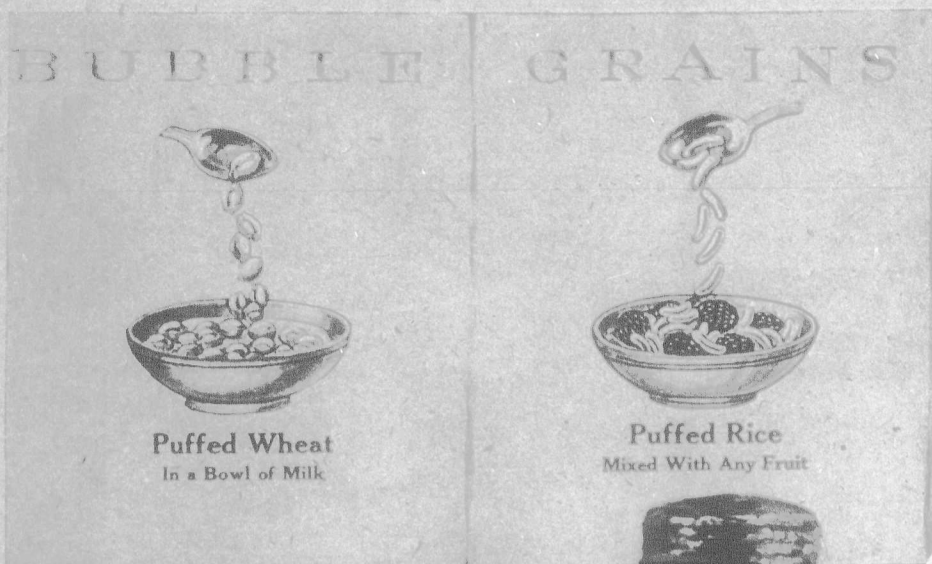
Chester Whites—Boars and sows of March and April farrow, sired by our big type imported boar, Ohio King—(20026)—(85812). He by Nagles Select and Tena Giant. They are right and priced right.

F. C. GOSNELL, Ridgetown, Ont.

DUROC JERSEYS

My herd has won more firsts and championships in four years showing at Toronto than all other herds of Durocs combined. Write for prices.

CULBERT MALOTT, R. R. 3, Wheatley, Ont.



Think what joys These Puffed Grains bring to millions

On this summer day millions of dishes of Puffed Grains have been served in a dozen ways.

Breakfast brought them with cream and sugar, luncheon in bowls of milk. They have been mixed in countless berry dishes—used as nut-like tid-bits on ice cream.

Girls have used them in candy-making, boys as nutty confections, doused with melted butter.

A grain-food revolution

Prof. Anderson, by this invention, brought about a grain-food revolution. Never were whole grains made so fascinating.

Here are airy, flimsy bubbles made by steam-exploding grain. They are fairy-like in texture, and they taste like nuts.

Yet one is whole wheat—the very utmost in grain food—with

every food cell blasted. One is whole rice.

Both are the best-cooked cereals in existence. Every granule is fitted to digest.

In these outdoor days keep Puffed Grains ever handy. Have both kinds on call. When whole grains are made so delightful let children eat all they will.



Summer suppers

Puffed Wheat in milk. It means whole wheat puffed to eight times normal size—made flavory and flimsy and crisp. And with every food cell broken every atom feeds. Digestion is made easy and complete.

Puffed Wheat

Puffed Rice

Whole Grains
Puffed to Bubbles
Steam-Exploded—
8 Times Normal Size

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Sole Makers

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Our School Department.

Teachers' Residence.

In some branches of the administration of public school education, the Prairie Provinces have shown themselves capable of giving a lead to Ontario. A special feature in the department of rural schools in Manitoba is that of providing teachers' residences, which are rapidly increasing in numbers and appearance. This arose partly because of the apparent impossibility of securing suitable boarding places for teachers, and also with a view to securing greater permanence in the teaching term of service. These homes are described in some divisions as "Teacherages," and the Special School Organizer reports 22 new ones added during the year. He also proposed the erection of a "Consolidated Teacherage," to be built near one school, and the teachers of two adjoining districts to drive from it to their schools. In Div. No. 9, (Gladstone) three schools teachers' residences were erected in the year. Glenboro provided a residence for the principal. Of six schools in Ruthinian District three have teachers' residences. The inspector of Div. No. 19 (Stonewall) reports 25 teachers' residences. The report of Div. 23 (Winnipeg) describes the teacher's cottage as the centre of attraction in nearly all the districts being especially helpful in developing a better social life in foreign-speaking communities. The ideal rural school is described as one with a school site comprising five to ten acres of land, a comfortable residence for the teacher and family, a neat stable for horse, cow and chickens, and a vegetable garden for family use as well as school purposes. In Winnipegosis (Div. 25) after losing a teacher for lack of a boarding house, the trustees opened a residence, employed a housekeeper and boarded their own teacher. In case of a consolidated school the presence of several teachers in one house makes a very home like affair of it. In a recent report of the Alberta Minister of Education, one of the inspectors states that the building of comfortable houses for teachers on the school grounds and the payment of sufficient salaries to induce good men to make teaching their life-work, would do a great deal towards retaining the services of desirable teachers in rural communities. The Deputy Minister of Education in Saskatchewan makes this observation: "There is a growing disposition to make the school plant complete from every point of view, and for school districts to erect a school building with a teachers' residence and other appointments which are a real reflection of the interest of the ratepayers in education."

W. T.

Garden Weeds.

A LESSON PLAN.

Aim.—To call attention to the presence in gardens of plants not wanted, and to teach the names and general characteristics of a few of those plants.

Materials.—Specimens of weeds from gardens, e. g., chickenweed, dandelion, thistles, couch-grass, lamb's quarters, and red-root pigweed.

Method.—1. Discuss the growth of the seeds planted in the garden. Name some seeds planted. Did they grow? How can you tell? Have you found any plants growing in the garden other than those from seeds you planted? Do you want these strange plants? What do we call plants not wanted? What are the names of some of the common garden weeds, and how can we distinguish them?

2. Look at specimens of different weeds. Study each kind in turn. Examine the root. Is it thick and fleshy, or made up of many thread-like parts?

What color is it? Taste it. Has it any juice? What is the color and taste of the juice? Do you think the plant grew from a seed this year? Of what use to the plant is the thick, fleshy root? Examine and describe the stem. What color is it? How high? Measure its length. Is it branched? Does the stem grow straight up? Can it stand alone? Does it grow above or below ground? Describe the leaves. What shape are they? What color? Are they smooth or covered with hairs or bristles? In particular notice the flowers. Describe their colors, shape, size, parts, perfume and arrangement. Look for seeds. Has each plant a name? Discuss the harm done by weeds.

3. Compare the different plants studied as to root, stem, leaves, flowers and fruit. Which has a thick, fleshy root? Which has an underground stem? Which has prickly leaves? Which has the largest and prettiest flowers?

4. Name some plants not wanted in the garden. What are weeds? Name some found in a garden. How did they get there? How could you tell them apart? Why don't we want weeds in the garden?

5. Look in your garden at home for weeds. How many kinds can you find? Pull or hoe them up. Keep your garden free from weeds all the time.

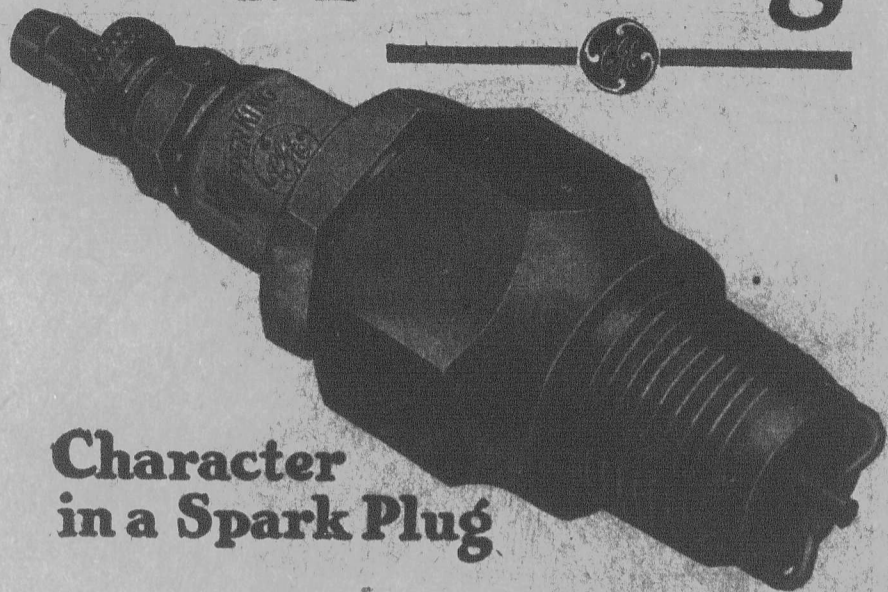
6. Try to draw a couch-grass plant.—From "Nature-Study Lessons," by Dr. D. W. Hamilton, Macdonald College.

Trustees and Parents Should be Interested.

Preparations are now being made in a great many places for rural school fairs, which will be held this fall by the schools of each township. The school fair has done much to interest the pupils in agriculture, and has provided a means whereby they can compete with each other in garden work, in the care of animals, in nature study, and, for the girls, in domestic science. This work, carried on for so many years by the Department of Agriculture in Ontario, requires a great deal of the time of the Agricultural Representative. If parents, teachers and pupils only thought so they could conduct their own school fair with little outside assistance and get a great deal of pleasure out of it, without calling upon the agricultural representative to do so much of the work which they, who are primarily interested, could do themselves.

Only a few days ago we attended a small meeting of the Trustees and Ratepayers' Association of Euphemia Township, in the County of Lambton. This Association was organized at the suggestion of the Agricultural Representative and its object is to decide practically all matters relating to the management of the school fair, and to make the annual school fair as successful as possible. We cannot see any reason why similar associations could not be organized in every township where a school fair is held. The teachers are always interested in a school fair, and, of course, the pupils are also, but if the school fair is worth while holding at all it should be time well spent for the parents to take some part in making it successful and lending encouragement to both the teacher and the pupils, who of course will have to do most of the work. Oftentimes parents or trustees can get special prizes for one thing or another that either teachers or pupils could not get. The trustees also should be interested enough in the school fair to see that their school is well represented and that prizes are given for classes in which their own schools are able to compete. The sports are an important part of the school fair, and if the trustees are willing to help a little this part of the program may be made very enjoyable, for the spectators as well as the children.

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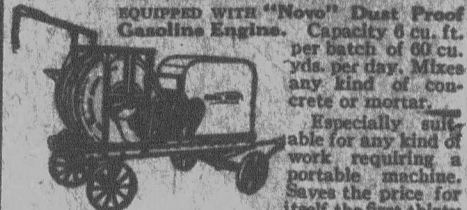
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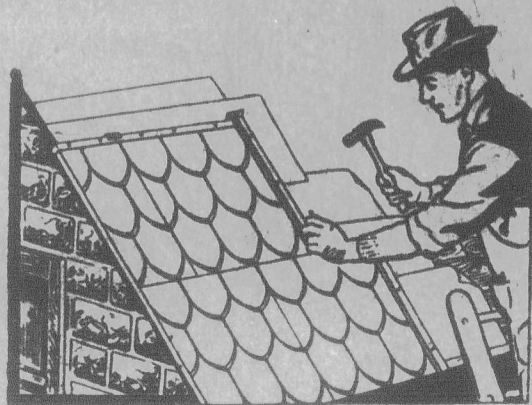


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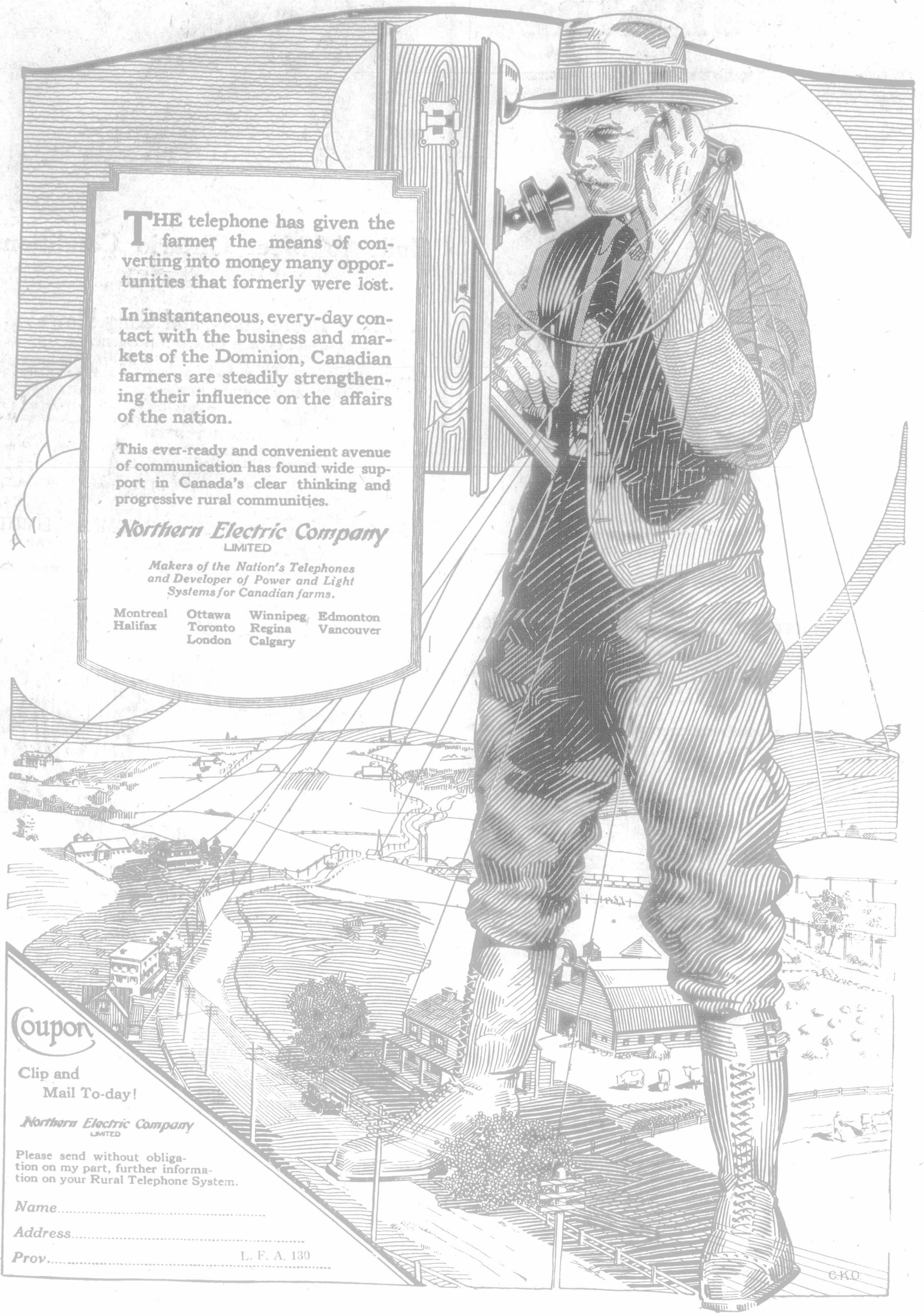
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