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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE *

LV.

LONDON, ONTARIO, JULY 15, 1920.

No. 1451

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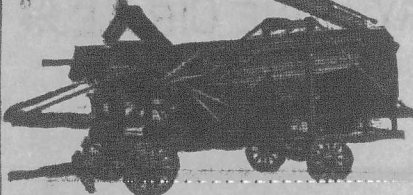
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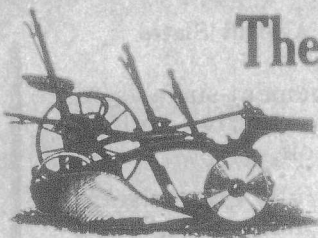
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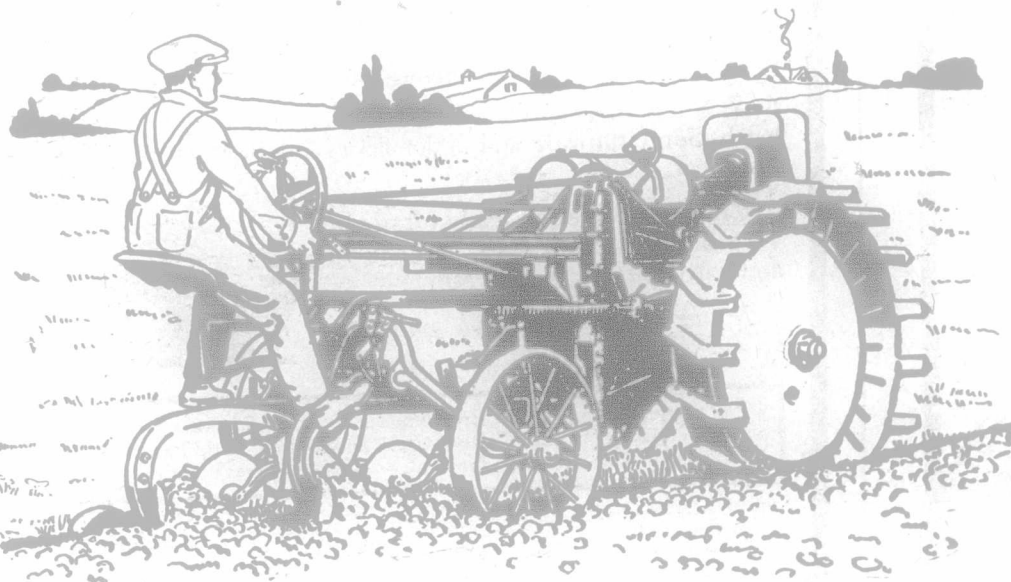
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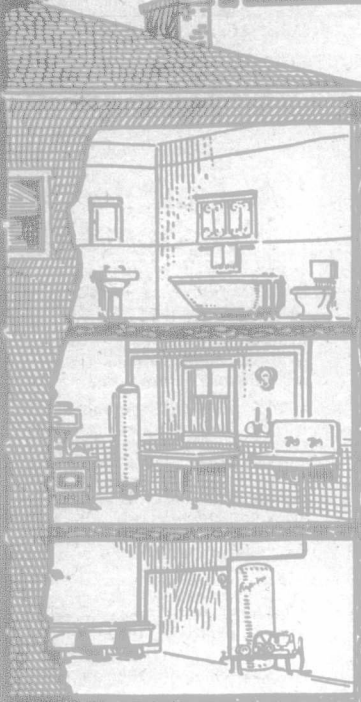
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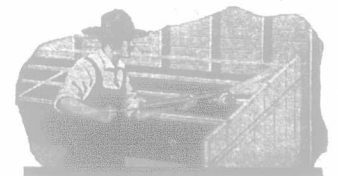
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The Farmer's Advocate and Home Magazine

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LV.

LONDON, ONTARIO, JULY 15, 1920

1451

EDITORIAL.

The present political situation in Canada will never constitute a glorious part of Canadian political history.

Plenty of moisture in the soil will not make a corn crop. The soil must be stirred and the weeds kept down.

Unless a third party arises to upset the applecart, the United States will have a newspaper man for the next President.

Hay will be scarce and high in price in Eastern Canada next winter. Save all the roughage and take good care of the straw.

The Board of Commerce still lives, but its chances of growing up into a virile, useful adult are slim indeed. It had too much sickness during childhood.

It's an economical policy to rear calves cheaply, but the dominant aim should be to rear them well. A stunted calf never develops into a first-class cow.

The Toronto market has been fed up these last few weeks with light, unfinished cattle. Better finishing is imperative. Cold, washy stuff is usually sold at a sacrifice.

Potato production nowadays means a steady conflict with "worm and beetle, blight and tempest," and no one can expect to succeed without making proper use of the spraying outfit.

Many soils in Eastern Canada require lime, but lime is not a panacea. A simple experiment would reveal to every farmer the requirements of his soil, and he could then set about to rectify any unfavorable condition.

Save for seed any second-growth clover that looks promising. More clover seed should be sown each spring, and there is no better way of working this improvement than by producing seed in moderate quantities on the home farm. There is a good market also for home-grown seed.

The basis of good agriculture is first-class seed. It is the same with farm crops as with live stock; if we do not take advantage of the inherent possibilities wrapped up in the kernel of grain, we cannot expect the best results. We must work in co-operation with Nature, and not leave it all to the partner.

Whenever there is a large crop, especially of basket and small fruits, a good marketing policy is to get the product moving rapidly into consumption. A good average price for the whole crop brings better returns in the end than a high price for a proportion of it to be followed by a serious slump. An effort should also be made at the beginning of the season to put only real good stuff on the market in order to whet the appetite for more. Immature fruit or poor quality shocks consumers, and they do not recover from it throughout that marketing season.

The Maritime Provinces are forging ahead in dairying, with special emphasis on the manufacture of butter. The market for this is good, and only the finished product of the farm is disposed of. Creameries are doing a great deal to build up certain districts in the East, but many more communities could well take advantage of the centralized creameries already in existence. The effect of a creamery on a community is very marked. It is the forerunner of prosperity, more comforts and higher standards of living.

The Need of Lime in Agriculture.

There are certain portions of Ontario soils that are badly in need of lime, but nowhere is the need of it so manifest as in the Maritime Provinces. Crops in the East could be increased tremendously were the soil neutralized by proper and sufficient applications of lime. Why the soils of the Maritime Provinces happen to be so deficient in this one ingredient is difficult to say, but some are inclined to think that it is due to the heavy annual precipitation. However, the need of lime is obvious, and farmers in the Maritime Provinces would do well to study, by experiment, the actual needs of their own farms, and set about to rectify the acid condition of the land they till. Nova Scotia farmers have been in a position to obtain ground limestone, as well as lime in other forms, and a great many have taken advantage of the opportunity. Nevertheless, what lime has been applied has not begun to cover even in a small way the soils which are badly in need of it.

The same need of lime is apparent in Prince Edward Island. Farmers there in the neighborhood of bays have long been applying quantities of shell-mud, which contains a liberal percentage of lime. Some bays have now become exhausted, and it will be necessary to transport this mud for some considerable distance, in many cases. The Island Government has been investigating a certain limestone deposit, and their intention is to exploit this quarry for the good of the Island soils.

The greater part of New Brunswick is also in need of lime. A recent survey showed that from two to two-and-a-half tons of ground limestone per acre would be required to rectify the acid condition of the soil, and the Provincial Government has been interested in the matter. The New Brunswick Department of Agriculture has entered into contract to develop one quarry near the city of St. John, and farmers everywhere in New Brunswick will be able to obtain lime at a fixed price.

Where lime is badly needed, one does not obtain the direct benefit from barnyard manure, green manure, or commercial fertilizers that should accrue. While lime is not a direct fertilizer in itself, it is necessary to assist in making plant food available and farmers cannot get the best crops where the soil is lacking in lime. It should be understood, however, that lime is not a panacea. Too many think they have performed their full duties when they apply lime to the soil. Lime is a curse rather than a benefit when all the plant food is forced out of the soil by the application of lime, and no effort is made to replenish, with plant food and humus, the depleted fields. It is an old saying that, "Lime enriches the father and impoverishes the son," and this is quite true where one depends upon lime alone as a soil builder and replenisher.

What the Market Reports Tell Us.

Market reports are a guide to market conditions and ruling prices, but they can never tell us what values of live stock or other produce will be two, three or six months in advance. Events occur so quickly and unexpectedly in these abnormal times that it is hazardous indeed to risk any great investment on market prophecies. One thing market reports do tell us, however, and it is that the offering of poor, light, unfinished live stock bring very little reward to the man who rears them. It is not the big, heavy-finished bullock that always commands the premium but the medium-sized, tidy, breedy-looking, well-finished steer. The difference between good and common steers frequently amounts to three and four dollars per cwt., while five and six dollars is frequently noted as the difference in price between good and common heifers. There are differences, too, all down the line, and if stockmen will analyze market reports of cattle, sheep and hogs they will observe many places where they are annually losing hundreds of

dollars by not fitting their offerings properly. A considerable effort has been made by the Dominion and Provincial Governments to get farmers to dock and castrate their ram lambs, but the effect of this is not discernible on the markets. The great majority of farmers do not perform these easy and simple operations, with the result that those selling lambs on the Montreal market are losing approximately one dollar per hundred on all the stuff they sell. The annual influx of bulls to the Montreal market also reveals the fact that in the districts contributing there is a slipshod and haphazard method of caring for and rearing live stock. Male calves are left entire, and the result is that a lot of scrub cattle are bred annually, and the bulls themselves command the lowest possible price when sold. Another point worth noting in the Montreal market report is that sows sell, as a rule, four dollars less than the lot they are shipped in. If they are shipped in a carload of hogs selling for twenty-one dollars, their value is seventeen dollars per hundred. If the same sows were shipped in a lot of hogs selling for nineteen dollars, their value would be fifteen dollars per hundred. It seems to be a policy in Eastern Ontario and Quebec to take one litter of pigs from a young sow and then dispose of her in the early summer or autumn, when the pigs are weaned, and save a sow from the spring litter from which to raise another litter of pigs the following spring. This means an annual deluge of sows on the market, small litters in the country, many casualties with young pigs, and poor returns all round.

We have the foundation laid in Canada for a splendid and remunerative live stock industry, but the men engaged in it could adopt better methods with monetary benefits to themselves and to the country as a whole.

Better Fruit.

One who recognizes the value of the fruit industry to the agriculture of Eastern Canada cannot help but lament the comparatively poor quality of the crop that annually finds its way to market. While to some extent this is true of all fruit crops, it applies particularly to apples. Apples are by far the most important fruit crop we possess, and though apple growing is very extensively carried on in the East, the average quality of the crop in no way compares with the quality of the fruit that reaches our markets from British Columbia and the Northwestern States. The bulk of our apples are produced in farm orchards of small size, it is true, but even our larger commercial growers seemingly do not aspire to equal the product of their pacific coast competitors, and content themselves with fruit of only average quality. Whereas the barrel is unknown in the apple business of British Columbia, only a very little of our fruit finds its way into boxes. Consumers who would like Ontario boxed apples can rarely secure them.

The highest-priced fruit on our markets is not grown in the East. We are allowing our apple industry to merely drift along, and Eastern growers are apparently content to let their competitors take more and more of the cream of the market. Perhaps they have some advantages such as exist with regard to size and color, but on the other hand Ontario and the Annapolis Valley in Nova Scotia, for instance, possess advantages that should be better utilized. It is a fact that our Governments have not taken the lead as they should in this matter of fruit production, but growers cannot expect too much from Governments if they themselves are not keen to take advantage of opportunities. We need a campaign for better cultural methods. More study should be given to the questions of pruning, cultivation, fertilization and spraying so that the maximum results from our superior soil and climate for certain varieties could be secured. The farm orchard situation also deserves considerable attention, because one cannot help but feel that these thousands of farm orchards represent

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

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JOHN WELD, Manager.

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

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers of any publication in Canada.
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a great deal of revenue that could be profitably secured if interest were only aroused. Whether or not is it possible to arouse sufficient interest in them is a question, but if they are to be allowed to die out something should be done to arouse the existing commercial orchardists to the possibilities of their position and to encourage new ones to enter the industry. We have previously urged the adoption of some progressive policy for the fruit industry, and we still feel it to be the need of the hour.

Nature's Diary.

BY A. BROOKER KLUGH, M. A.

PIKE AND PICKEREL.

The Pike and two species of Pickerel are common fishes in many of our waters. The fishes of this family (Esocidae) the Pike, Maskinonge and Pickerels are frequently confused, and the names are often misapplied. They may be separated by the following characters:

- A. No scales on lower half of gill-cover.
- B. Cheek, as well as lower half of gill-cover without scales—Maskinonge.
- BB. Cheek entirely scaled—Pike.
- AA. Gill-cover and cheek both entirely scaled.
- C. Rays of dorsal fin 14, of anal fin 13—Eastern Pickerel.
- CC. Rays of dorsal fin 11 or 12, of anal fin 11 or 12—Little Pickerel.

The Pike, *Esox lucius*, has a very wide range, as it is found in Europe, Asia and America. In Canada it occurs from Labrador to the Yukon, but not in Nova Scotia or New Brunswick, and ranges north of the Arctic circle and south to the Great Lakes.

The young Pike is often termed a "jack," the mature fish is sometimes called "Jack-fish," or "Jack-pike," while in some parts of the country this species is the "Grass-pike."

While the color of the Pike may vary considerably in some details of shade or markings it is usually greenish-gray with yellow reflections, and with many white or yellow spots arranged in rows, the dorsal and caudal (tail) fins bearing round or oblong black spots. The young are more or less cross-banded.

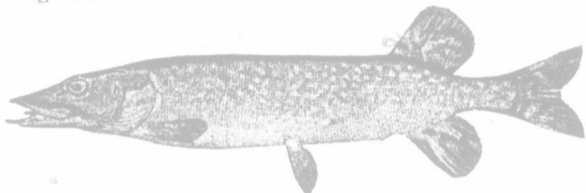
In European waters the Pike sometimes attains an immense size, and one is recorded from Scotland which was seven feet in length and weighed seventy-two pounds. The largest Pike taken in Canada weighed forty-nine pounds, and the average weight is from four to twelve pounds.

In spring and summer the Pike is found in shallow inlets with weedy bottoms and shores overgrown with reeds and rushes. Towards autumn it moves to pre-

cipitous, stony shores. As winter comes on the smaller Pike return to their summer haunts, but the larger individuals go out to deeper water, where they feed on other fishes which frequent deep water at that season.

The Pike is undoubtedly the most voracious of all the fresh-water fishes. It devours indiscriminately other fishes, young water-fowl and frogs, crayfish, reptiles and small mammals. From the dense bed of water-plants or rushes, where it usually spends the day in stationary watch, it darts with the speed of an arrow on its unsuspecting victim. It nearly always seizes its prey crosswise and maintains its hold until the latter is dead or so exhausted as to cease struggling. Then the Pike turns the prey in its jaws till the head points down its throat and commences its meal. This operation is a protracted one if the victim is large, for the end first received into the stomach must digest to make room for the remainder. A case is recorded in which a Pike seized a Salmon as large as itself, which struggled violently for two hours, when the Pike began to swallow it. The meal lasted for three days before the whole body had disappeared, and for several days the Pike had a very swollen appearance.

In the spring, before there is open water in the lakes, the Pike begin to approach the shores, and a little later when the low-lying marshy meadows are under water they begin to spawn. The eggs are about an eighth of an inch in diameter, and the number deposited depends on the age and size of the fish, ranging from 80,000 to 600,000. The young fry hatch out in about fourteen days, and at first lie close to the surface of the water beside water-plants and floating straws, or else at the bottom in water less than an inch deep. In about ten days the yolk-sac is absorbed, the head elongated and the mouth large. Soon they begin to



The Pike.

swim about, and to watch for prey, darting out and seizing small fish and other aquatic animals of considerable size as compared with themselves. At two months old the young Pike is about an inch long, and the subsequent rate of growth depends upon the abundance of food. Usually at a year old it is from 8 to 12 inches long, at two years from 14 to 19 inches, at three years from 20 to 25 inches, at six years about 40 inches, and at twelve years about 4½ feet long. The Pike lives to a great age, perhaps considerably over a hundred years, but just how long is not definitely known.

The Pike is a game-fish of considerable fighting ability, and its flesh is excellent, being white, firm, well-flavored and comparatively free from bones.

The Eastern Pickerel, which occurs in Canada, in some of the waters of New Brunswick and in the St. Lawrence, has a green and golden hue and black or brown reticulated markings on the sides. It usually weighs two or three pounds, though specimens of eight pounds have been taken.

The Little Pickerel, which occurs in the streams flowing into the Great Lakes, never attains a length of over a foot.

Both species of Pickerel resemble the Pike quite closely in their habits, being predacious, but on account of their smaller size they naturally prey on smaller species than their large cousin.

In Search of Happiness.

BY ALLAN MCDIARMID.

A short time ago, in delivering an address at one of our big American Universities, Sir Auckland Geddes made a rather peculiar and striking statement. He said that there was an idea taking hold of the minds of millions of people at the present time which, if expressed, would be something like this: "what are we living in this world for, anyway? By hard work we can prevent ourselves from dying of starvation, only to meet death, finally in some other form. And what have we accomplished? Nothing more than the bringing into the world of children who must go through the same treadmill existence and come to the same end."

Sir Auckland went on to prescribe the remedy for this condition of mind, which was the cultivation of an ideal of beauty, purity and truth, which same sounds rather vague, I think, to the average mind.

There is one object which almost every human being is in search of, and that is Happiness. This is the real reason that lies back of all action, it is safe to say. Even when our work is what is called unselfish, sacrificing personal interests for the sake of others, perhaps our families, perhaps humanity in general, the real spring of our action is the fact that it gives us happiness. A differently made person would expect to get happiness by looking after his own wants, first, last and perhaps, all the time. But, look where you like, you will find that the hope of happiness is what keeps the individual going from day to day, and the race from generation to generation.

A pretty large percentage of humanity is engaged in chasing the dollar. They either want money for the pleasure of having it, or for the pleasure they can buy with it, or possibly the pleasure of giving it away. One man gives up his work in the city and buys a farm because he thinks he will be happier on the land. Another man sells his farm and moves to town for the pleasure

of its advantages and the comparative leisure he will enjoy. It is the search for happiness that makes one man move heaven and earth to get into our halls of Parliament, while the same idea is in the mind of the tired politician who resigns his seat to go back to his work in the office. Why do people choose different trades and professions? It's because they like one line of work better than another. Why does one individual get married and another remain single? It's the working out of this search for happiness. (Provided, of course, that the parties have free choice in the matter.)

This tendency of man to cater to his own whims and tastes is the remnant of some old instinct that has come down to him from his animal ancestors, probably. With the development of reason he should be beginning to see that it isn't absolutely necessary to be very happy in order to be successful. Some of our greatest men have had a "hard row to hoe" all the way from the cradle to the grave. Pain and sickness do not tend to make a person happy, but these things have been life-long companions of any number of great and useful men and women.

It's quite possible that the average person will do better work when he is feeling well and happy. But "feeling good" is only one of several helps to the accomplishment of a successful career.

But in spite of all the philosophy and reason we may bring to bear on this point it still remains true, and will continue to be true, that mankind will strive for happiness as long as there is a single individual left in this "vale of tears." So the only practical thing to do is to write out a prescription for it.

This might not seem like a very easy task, but almost any kind of a doctor will prescribe for a patient provided he is not asked to first take some of the medicine himself. Or that he is not compelled to see that the other party takes it. It's one thing to tell a man what to do but it's another kind of a proposition to make him do it.

But the cure for the misery and discontent that has been the daily companion, and nightly bed-fellow, of man from his earliest history to the twentieth year of this twentieth century, is simply—unselfishness. One word takes it all in.

If we want proof of this statement it isn't likely that any of us will have to travel very far to find it. I recall one case that shows what thinking only for self will do for a person.

A young man whom I knew first as a farmer, came to the conclusion that it would be easier to sell his property and live on the interest of his money than to continue to milk cows and to hoe corn. He carried out the idea and went to town, where he found a house that suited him as to rent, and settled down to live by himself—and for himself. One of his relatives who knew him well said about him: "there are only three things that Jim takes any interest in and they are self, self, self."

And the result that the student of human nature would have expected wasn't long in following. First the money went, through bad investments, mostly. The next thing our friend lost was his self-respect. If he had any decent clothes he felt too uncomfortable in them to ever wear them. And, finally, he lost his health. Trying to keep everything that came his way resulted in his losing all that he had at first been endowed with. He saw life from the wrong standpoint and it left him with nothing. He was a good picture of misery, the last glimpse I had of him several years ago.

Probably our point won't be considered proved unless we bring positive evidence to bear, as well as negative.

I was talking to a mechanic in town, a couple of weeks ago. He told me something of what it was costing him to live and keep his family. "Every day," he said, "it costs me nearly a dollar for meat. We use two pounds of sugar every day, and six loaves of bread. A pound of cheese only lasts one meal. There's half-a-dozen other things used in the same proportion. And when I go to buy shoes for the children I just take a flour sack with me."

"However," he went on, "I'm not worrying any. My wages aren't any bigger than they ought to be, but none of us have ever had to go very hungry to bed, up to the present. I tell you I wouldn't be without my family of eight boys and girls even if it meant working half the night for them, as well as all day. When a fellow's happy he don't mind a little extra work."

Practically nine tenths of what this man made went to keep others in food and clothing. He hadn't time to think of himself at all. And he was happy. He probably couldn't have told how it came about. He was just thinking and working for others and the result was satisfactory.

I don't know that I can explain this working of one of Nature's laws myself, but perhaps it isn't necessary. If our unhappy, dissatisfied world could just be got to experiment with it a little they'd soon have on hand all the proof of its value they needed.

The Hessian fly has been working havoc in the winter wheat fields of Western Ontario. Farmers should acquaint themselves with the proper cultural methods to combat this scourge, and all should follow the best policy to a man. There is need of co-operation among neighbors in this line, for one man can undo, by improper methods, much that the neighborhood has accomplished in the way of eradication.

Take a little time and cut the suckers from around the base of the tree-trunks in the orchard. They do no good and harbor many insects and disease, besides giving the orchard an unsightly appearance.

THE HORSE.

Feeding and Watering Horses in Hot Weather.

While it is wise at all times to exercise care and regularity in feeding horses that are used for either fast or slow work, it is especially so in very warm weather. The feed should be of the best quality and given in limited quantities. The quantity of bulky feed should be limited in all cases when time is limited, and the horses are expected to go to work or drive shortly after eating. The stomach of the horse being a comparatively small organ, the majority of horses will, if allowed, eat until it becomes distended. If an animal under such conditions be put to work on a hot day he will perspire freely, digestion is very liable to become partially arrested, and a case of acute indigestion may result. It is good practice to allow a horse to rest an hour or longer after eating a hearty meal, in order that digestion may be advanced before exercise be given, but this is not practicable in many cases, especially on the farm. The only safe method, therefore, of avoiding danger of sickness, or, if not an attack of illness, at least discomfort to the animal for an hour or two, is to limit the quantity of bulky feed given. The morning's feed should be from 4 to 6 quarts of oats, according to the size of the animal and the nature of the work to be performed, and a small ration of hay; at noon the same. In the evening it is good practice to give a little hay first, then the grain ration, and then more hay. As he will have several hours of idleness now, it is safe to allow him all the hay he will eat with a relish, but in no case should he be allowed more than he will consume. It is not only wasteful but injurious to the animal to keep feed before him all the time. In many cases farm horses are turned out on grass at night, but it is seldom that they will refuse a reasonable grain ration in the morning, even after coming off good pasture. Where this method is followed, it is good practice to allow them to stand an hour or longer in the stable after eating their grain ration in the evening. (Of course, under such conditions no hay should be fed.) This allows the digestive juices of the stomach to at least partially perform their functions, and at least a portion of the contents of the stomach will have passed into the small intestine, where digestion will be completed; while, if the animals be turned on grass immediately after eating grain they may eat so greedily as to force the grain out of the stomach before the said juices have acted properly upon it. And, while it is not probable that this will cause any noticeable trouble or uneasiness to the animals, digestion will not be as complete as it should be, hence the animals will not receive as much benefit as otherwise.

There is no doubt that crushed or rolled oats are more beneficial, pound for pound, than whole oats. It is seldom, even in hot weather, that a horse is so warm that it is unsafe to feed him grain. In cases where he has been subjected to long-continued, severe exercise, and has become excessively hot, it is wise to allow him to stand for a few minutes, and to rub him down before feeding, but such conditions seldom occur. When the time that he will be allowed to stand in the stable is limited to from one to one and a half hours, as is the case at noon, even though the weather be hot and he is perspiring freely, it is better to give him his grain and allow him a few minutes after eating, than to allow him to cool off, then feed him, and put him to work immediately after eating. Horses that are kept in the stable should be given a feed of bran, at least twice weekly, in addition to the grain ration, if at regular work. This aids digestion and tends to keep the bowels in a normal condition; but those that go to grass at night do not require this, as the grass is all that is needed.

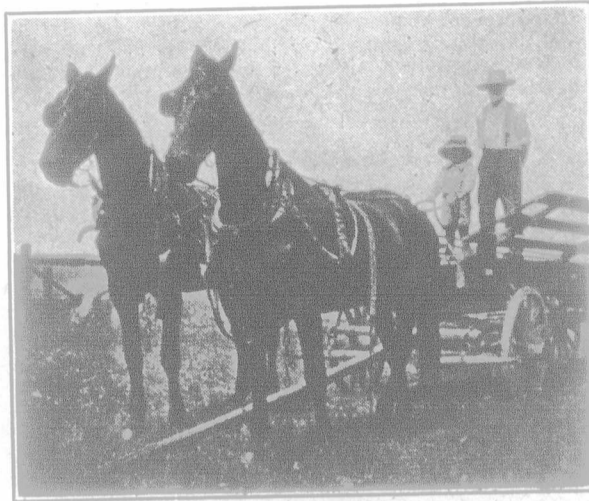
In hot weather horses probably suffer more from an injudicious system of watering. It would be well if horses could have free access to clear, cold water at will, but of course this is impracticable. Still, the popular idea that it is unsafe to allow a horse to drink when he is perspiring freely, even in hot weather, is unfounded. Of course, as in feeding grain, there may be times when it would be hurtful to allow him all the cold water he would drink, such as cases where he has been subjected to long continued, severe exercise and long abstinence from water. In such cases he should be allowed a few mouthfuls, and after a few minutes a little more, and a few minutes afterwards, all he desires. When a horse is excessively warm the introduction into the stomach of large quantities of cold water may cause such violent reaction as to excite gastritis, indigestion or founder. It seldom occurs that a horse used for either ordinary farm or road work is so warm that it is not safe to allow him all the water he will drink, unless a long period has elapsed since he had a drink.

Many people act upon the theory that a horse should be allowed water only before meals, on the assumption that if allowed to drink soon after a meal the water will force the inješta out of the stomach before it has been acted upon by the digestive fluids. We doubt the force of this theory. We are of the opinion that fluids cannot force solids through a constricted orifice through which the inješta must pass to reach the intestine, but rather that it percolates through the solid particles and itself passes to the small intestine. In practice we find that horses want water after a meal, especially in hot weather, and that, with few exceptions, it is wise to allow them to quench their thirst. There are some horses so predisposed to colic that it is unsafe to allow water shortly after a meal; such should be

treated accordingly, but fortunately such animals are few.

It is probable that the sense of thirst is as acute in a horse as in the teamster. When he is thirsty "he wants a drink," and usually manages to get one. The horse also "wants a drink" when he is thirsty, and the careful, thoughtful teamster will endeavor to see that he is gratified. It would be well if horses could be given at least one drink between meals in hot weather.

WHIP.



Tom and Jean.

These horses are 29 and 30 years old respectively. They are the property of J. R. Alexander & Son, Brant Co., Ont.

LIVE STOCK.

Give the boys a few animals to fit for the fair. It may interest them and will certainly do the stock no harm.

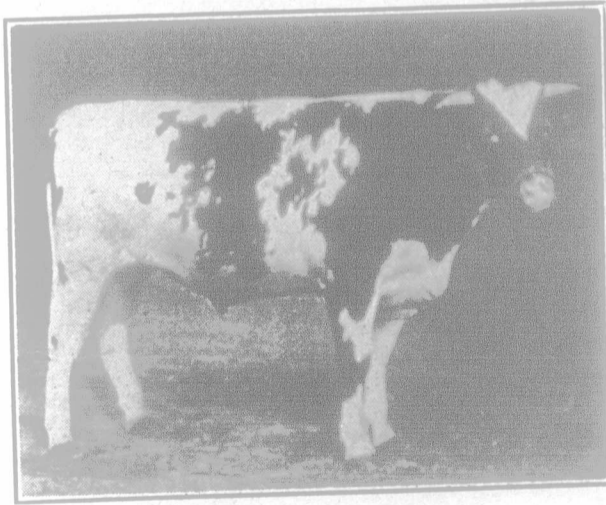
We have not yet heard of any county in Ontario boasting about having gotten rid of the last scrub bull within its boundaries.

If you are not in a position to show your stock at the large fairs, patronize the local fairs, thus assisting in making the show of greater value.

Sweet clover is proving to be a valuable pasture crop. It appears capable of carrying more stock per acre than the other clovers and grasses.

There are many fine herds of steers and heifers on Middlesex County pastures that are getting in marketable condition. The past few weeks have been favorable to making maximum gains.

Calf, pig and sheep clubs are responsible for getting many a young lad interested in better stock. Have you a calf club in your vicinity? If not, why wait for anyone else to start it? Get busy.



A Dual Purpose Bred Steer.

Raised on the Dominion Experimental Farm, Fredericton, N. B.

Unless the weather is showery, many of the pastures will be rather short for the next five or six weeks. Where possible, change the stock from one field to another occasionally so as to give the grass a chance to pick up.

While cleaning up tuberculosis in pure-bred herds, some scheme should be inaugurated to lessen the disease in commercial herds. The industry is suffering a heavy loss each year as a result of tuberculosis having made inroads into the herds.

The accredited herd system is away to a good start in Canada, and a large number of herds have been put under the test. In the United States the work has progressed rapidly. Approximately 30,000 herds are now under federal supervision. Minnesota leads with 413 accredited herds.

How can we expect to have a large number of stockers and feeders in the country when so many calves are being sent to the markets. In many cases it would not pay to raise the calves to maturity, but there are

hundreds of calves being slaughtered which would develop into right good feeders if given a chance.

The cattle's feet should be examined occasionally. If the toes are too long they should be cut back so as to prevent breaking. When they break it is often too close to the quick, and as a result the animal goes lame for a considerable time. A pair of nippers will remove the toes, or an old hand saw can be used to advantage.

Don't forget that cattle and sheep require a considerable amount of salt, and that they want it at regular intervals. In some dairy herds the flow of milk is materially decreased when salt is neglected. In the case of beef animals it is reasonable to expect that they will not make as good gains where the amount of salt is limited as where it is fed regularly.

The bottom has apparently dropped out of the hide market. A drop of 15 to 20 cents per pound in the price of hides makes quite a difference in the value of an animal. If the price of leather goods would drop accordingly, neither producer or consumer would have much complaint, but when buying a pair of shoes or a set of harness, one is not aware of any drop in price.

Do not leave it until you are actually in need of a herd or flock header before purchasing. Take plenty of time and purchase the best individual available. Remember that he stamps his qualities and many of those of his ancestors upon his progeny. The larger the herd or flock, the more important it is from a financial standpoint that the sire be a good one.

Have you visited some good stockmen and farmers in your neighboring county, or taken a trip to the Agricultural College or Experimental Farm this summer? A couple of days spent motoring through the country and having a look over some good herds not only rests a person from his every-day duties, but gives an inspiration to do better work on the home place.

According to information furnished by the Industrial and Development Council of the Canadian Meat Packers, 864,000 head of farm stock were handled at the six main stock yards of the Dominion up to June 30 of this year. They comprised 283,765 cattle, 135,387 calves, 91,957 sheep, and 254,784 hogs. Almost half this number of cattle and hogs were handled at Toronto, with Calgary leading in sheep.

Producing Steers From Dual-Purpose Cows.

There are many good stockmen who are very skeptical about the possibilities of producing both milk and beef from the one breed of cattle, and they can always advance the argument, and it is a good one, that as the milking proclivities develop the desirable beef conformation recedes into the dairy form. It is not the object of this article to discuss this problem, but rather to describe what a representative of "The Farmer's Advocate" saw relevant to the question at the Dominion Experimental Farm, at Fredericton, New Brunswick. While inspecting the herd at this farm, the writer's attention was directed to a particularly good steer about seventeen months old. The animal was straight in his lines, fairly low-set, well covered with flesh of good quality, and on the whole presented a breedy appearance. The interesting thing about the young bullock, however, was his ancestry. His grandam was just an ordinary cow showing some Holstein breeding, and was picked up in a back settlement. She was developed into a good milker, giving eight thousand pounds of milk. This cow was mated with a dual-purpose Shorthorn bull and produced a heifer calf, which in due course was bred back to a bull of similar breeding. The steer illustrated herewith was the result of this mating, and the heifer herself gave 7,000 pounds of milk in her first lactation period. When questioned regarding the economy of feeding steers of this breeding, the Superintendent, W. W. Hubbard, stated that two steers similarly bred had been sold March 18, returning a profit of \$35 each. At time of sale, they were in the neighborhood of fourteen months of age. One steer weighed 850 pounds and dressed out 497 pounds; the other steer weighed 895 pounds and dressed out 493 pounds. They sold for \$96 each and cost approximately \$61 to rear, leaving a profit of \$35.

As calves they were never with their mothers; they were fed new milk until three weeks of age, and then gradually changed to skim-milk. The first real mixture was composed of the following ingredients: oil cake, cornmeal and crushed oats. This was mixed in the proportion of 100 pounds oil cake, 400 pounds of cornmeal and 200 pounds of oats. The steers were calved in January, and the meal mixture during the following winter was made up of wheat bran, 300 lbs.; screenings, 300 lbs.; oats, 200 lbs.; and oil cake, 200 lbs. Besides other roughage they received roots and silage. The steer illustrated on this page was fed similarly and weighed 985 lbs. on June 2, 1920.

The history of these steers shows conclusively that a herd can be moulded, to a large degree, in two or three generations. If one desired to breed for milk, there is plenty of evidence pointing to the fact that the milk flow can be increased and the butter-fat content of the milk influenced considerably. So it is with beef. Ordinary grade herds can be bred up to a point of excellence through the use of proper sires. The milk-and-beef combination is a little more difficult to attain, but through keen observation and close attention to matings it is evident that a compromise can be accomplished. Good sires, if properly selected, will give the desired results.

Feed Well But do Not Breed the Sow too Young.

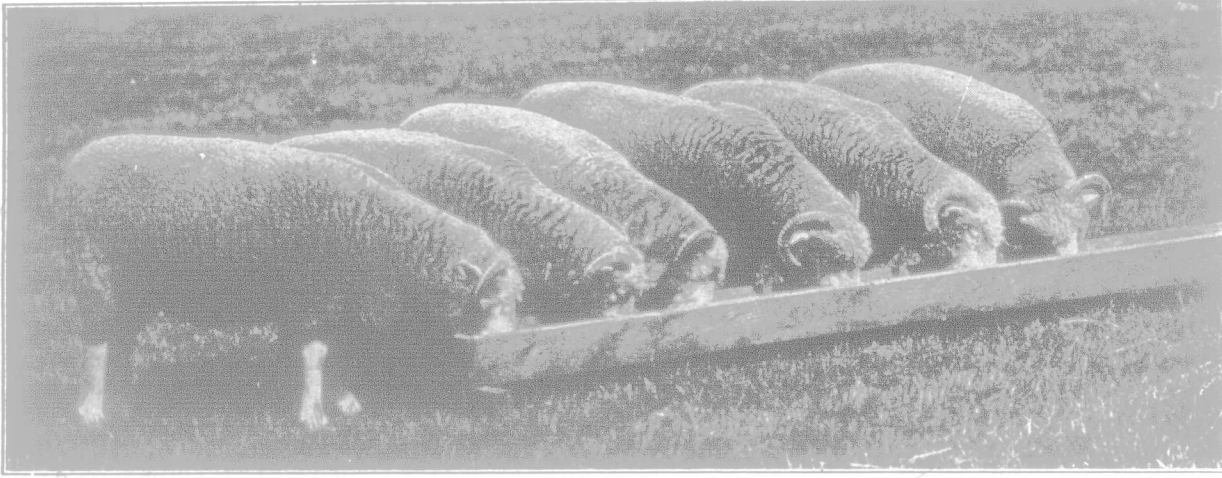
Many farmers are not particularly enthusiastic about hog raising at the present time. While the market is treble what it was a few years ago, it is not commensurate with the price of feed and labor. Many brood sows have been marketed during the past six months, but, on the other hand, many have kept young sows and bred them for fall farrowing. Others are planning on breeding their sows to farrow early in the spring, so that the pigs will summer on grass and be fattened with next year's crop. The success in pig raising depends a good deal upon the feeder. One man may bring a litter along and have the pigs at 200 pounds or over when six months old, while his neighbor with the same breed and the same kind of feed requires from seven to eight months to get his hogs to the same weight. Wherein lies the difference, if not in the feeder? A good deal of the trouble is in failure to pay attention to details. Giving the pigs a liberal quantity of feed

not available, finely-ground oats, shorts, oil cake or a little tankage can be made into a thin slop with water and will materially aid the pigs in developing size. Care must be taken to keep within the appetite of the pigs. This requires that the feeder pay strict attention to his work. It seems as if the producer is not in a position to dictate the price of hogs, so the next best thing is to raise the hogs as cheaply as possible. The size and thriftiness of the litter is one thing which materially influences the cost. Where possible, pasture or green feed should be used, as this will reduce the grain allowance considerably and is good for the pigs. A half-starved litter will not make 200-lb. hogs at six months, and an over-fed litter is liable to die of thumps, apoplexy, etc. It is necessary to steer an even course and satisfy the pig's appetite without overdoing it.

The Ultimate Market.

The ultimate market for all pure-bred live stock is the farm trade. There is a limitless market for pure-

week to week. Particularly in cattle is the results of poor breeding prominent at the stock yards. The stock yards are the ultimate market for our live stock, and the appraisal placed upon it there varies with the quality as well as with supply and demand. The breeder of market cattle needs to use better sires and also to grade up his breeding females. The breeder of pure-bred stock who supplies these sires also needs to pay attention to the kind of sire he places at the head of his herd, and to do more culling and castrating among his male calves. The top-notch herds are necessary, but the demand is not so great; comparatively few can pay the price asked for herd headers or foundation females from these herds. Were it not for the men who invest, breed, feed, cull and select in order to produce top-notchers, our live stock industry would not advance. Seed stock of the very best is needed, and much of this has been imported from Great Britain at great expense, until some Canadian herds are reaching a point where the individual members compare favorably with those of any herd in any country. This was not accomplished in a day, but in many instances a life time has been spent in perfecting the herd, and then the sons have followed in their father's footsteps. The market for their animals is to pure-bred breeders who have already acquired a herd of good females, and they in turn supply stock for the small breeders who cater to the commercial trade. Canada requires more good pure-breds of all classes of stock and more good commercial stock to meet the requirements of the meat trade. The scrub sire has been a veritable millstone to the live-stock industry, and the sooner stockmen free themselves from this menace the better it will be for all concerned. The block should ever be kept in mind when appraising an animal's worth as a stock getter. While his pedigree may be outstanding, his value is limited if his progeny are not thrifty and of the type and quality that develop a good frame and then finish well in pasture or feed-lot.



Getting a Little Grain to Condition Them for the Fair.

is not enough. A person must be careful to neither over-feed nor under-feed. The ration must be studied and the kind and quantity of feed given that the pigs will do best on. Feeds containing plenty of protein and ash are essential during the first four or five months of the pig's life; after that feeds rich in carbohydrates and fat may be fed in abundance. Skim-milk is one of the best feeds for young pigs, but it is not available on many farms. Finely-ground oats, a little oil cake, a few shorts and milk make an ideal ration. Many pigs do well without the milk, but they should not be weaned quite so early.

Anxious to get returns quickly, there is a tendency to breed the young sows before they have acquired their growth. This is a big mistake, and the sow seldom turns out as well as when she attains her growth before farrowing. The best young sows should be saved from the litter and given every chance for development before they are bred. It is not a good plan to have a sow farrow before she is a year old, and some breeders like to have them older. This gives the breeding stock a chance to attain good size, and the offspring are usually stronger and more uniform in size than those from an undeveloped sow.

If the litter is large, few sows will give sufficient milk to satisfy the young pigs; consequently it is a good plan to encourage the pigs to take milk from the trough when they are a couple of weeks old. When milk is

bred sires and female foundation stock that can be sold at a price which the farmer can afford to pay, and yet a price enough higher than market stock to justify the breeder for his extra investment and care. There is also a market for the fancier strain of live stock that should supply the local breeder with the stock for breed improvement. Such stock may be too high priced to go into the grade herd, but should be within reach of the breeder's purse. Last of all, there is room for top-notch herds in each of the breeds, herds that produce a quality of stock upon which it is difficult to set a price.

The country needs well-bred, nice-quality, typey male animals of all the breeds that are priced within reach of the average breeder. The price has frightened many and been responsible for grades being used in numerous herds. There are grade sires that appear quite as good as pedigreed animals in conformation, growthiness and thriftiness, consequently the man with the grade herd is apt to forget the value of ancestry in comparing the individuality of the grade and pure-bred sire. It must be remembered that the bad as well as the good qualities of ancestors for several generations back are liable to crop out in the progeny. It is important that the pedigree be studied, but in doing so the individuality and quality of the animal should not be lost sight of. Far too many inferior sires have been and are being used to produce a uniform, high-quality lot of cattle, sheep and hogs going on our markets from

THE FARM.

Alberta School Consolidation.

EDITOR "THE FARMER'S ADVOCATE":

A study of rural school consolidation in the Province of Alberta like that of Manitoba and Saskatchewan, reviewed in previous issues, teaches some useful lessons. The initial consolidation was in 1913, in the electoral district of Lethbridge with Warner as a centre. A special report issued this year under the authority of the Minister of Education, Hon. Geo. P. Smith, shows that there are now sixty-three consolidated school districts in operation, eleven of which were established in 1919. These consolidations include on an average 3.3 each of the former small school districts as sections. The deductions drawn from experience in other provinces is confirmed in Alberta, viz., that the most effective consolidations are of compact nature, including three or four of the former districts at the most. The Supervisor of Consolidated Schools, J. E. Hodgson, states that while exceptional progress has been made, the majority of consolidations have not been in operation sufficiently long to form a final judgment as to the success of this method of school organization. Among important results secured, however, have been that in fifty-two cases school buildings have been or are being erected, with from two to eight class rooms providing for the usual public school grades, and also from two to four years of high school work. With two exceptions the consolidations include village and rural districts, so that many who could not otherwise have secured them now obtain convenient high school advantages. Incidentally this tends to develop a class of teachers conversant with rural conditions and needs. One of the initial difficulties was securing experienced teachers with the necessary qualifications. However, this type of school naturally attracts a higher grade of teachers. With regard to salaries in consolidated schools, the last report to hand, issued in 1919, showed that the range was from \$720 for permit female teachers to \$1,500; first male or averages for various grades of teachers ranging from \$844 to \$1,180. The range in rural schools was from \$550 for permit female up to \$1,900 for first male, or to range of averages for different grades of teachers from \$850 to \$929. By the Alberta School Act of 1918 the minimum yearly salary for a teacher in an ungraded school was fixed at \$840, which it was expected would tend to promote permanency of engagement in the profession. Another result of consolidation is that more schools were enabled to operate throughout the year. Compared with ordinary rural schools adjacent they operated on the average one month longer each year. There was also a decided increase in the percentage of attendance, due in part to the regular conveyance and in part to the increased attractiveness of the graded school under experienced teachers. The most marked result in case of consolidated schools in operation for two years or more was an increase of 50 per cent. in enrolment compared with five per cent. in the surrounding rural districts. In one case the increased enrolment reached as high as 125 per cent. Village growth may, in part, account for this, but it is noted that a good consolidated district attracts people as residents because of the better educational facilities for the education of their children. They have also been the means of promoting community features, literary, social and economic. It is pointed out that apart from the salaries of the staff the two heavy items of expenditures are for meeting debenture payments and providing conveyance for pupils attending the school. The cost of tuition proper is said to be less than in ordinary rural



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schools, as two or three teachers can take charge of the pupils of four or five schools where the attendance was small. Boards are urged, in view of the high cost of building materials and labor, to use existing buildings where possible and bring them to a central site. Conveyance costs now are exceptionally high because of the cost of labor and fodder. It is pointed out that the tax rates in rural parts of consolidation have increased from 25 to 100 per cent. It should be remembered, that in parts of the West where people live long distances from the rural schools they are at the expense of conveying the children individually to school. And if they were at the expense of providing for high school courses in some distant town or city, the total cost of education would not be less than in the consolidated district. The object in Alberta is to combine public and high school education, thus avoiding the necessity of pupils leaving home. The Provincial Legislature makes very liberal grants towards the cost of conveyance and for conducting the high school classes.

An important feature in the "New Canadian" (foreign-born) sections has been the establishment of two-room schools, owing to increases in school population. During one-half year ten of these were erected and others started. The enlightened Legislature of Alberta also provides generous grants to districts what erect comfortable homes for teachers in rural districts. Several have already been established. The residence consists of three or four rooms and is located on a five-acre lot for the teacher's use, where school garden work can also be carried on.

It is admitted that some errors were made through lack of experience, resulting in some consolidations being disorganized and re-arrangements necessitated in order to shorten van routes. In many parts of Ontario for example, the presence of high schools and excellent continuation schools doing high school work in villages and small towns within easy daily access of rural pupils of the locality, lessens the need for consolidation as compared with conditions in the West. It has been found in the Western Provinces that the management of a consolidated school becomes a business proposition of very important dimensions, requiring the services not only of experienced teachers but of school boards and executive officers of the highest type available. It would seem wise on the part of communities in Eastern Canada now considering this subject to profit by Western experience, and allow a few trials of consolidation to be worked out under representative rural conditions prior to attempting a general introduction of the system when building operations return to a normal state. Progress will depend upon demonstrated success and the liberality of provincial aid authorized.

Middlesex Co., Ont. ALPHA.

A Northern Ontario Resident's Reply to Sandy Fraser.

EDITOR "THE FARMER'S ADVOCATE":

What happened to our good friend Sandy Fraser that he got so utterly homesick when he turned his back on Old Ontario? True, the North Shore presents a very raw backbone to the travelling public, and there are not many oases in sight from the car window, but that has doubtless been a matter of the easiest grades for the railroad companies to negotiate, and gives no indication of the glorious hinterland hidden by the rugged features of the north shore of Lake Superior.

I would invite him to cut his stay in the Prairie Provinces a few days shorter and have a look in at the wonderful valleys back of those forbidding frontiers and see the world-famed alsike clover-seed industry near Dryden, the field root seed of the White Fish Valley, the potatoes, clover seed, and honey of Slate River Valley, the peas without a weevil, and the strawberries of Dorion. But why multiply agricultural possibilities? Let him see the mineral wealth or the pulp industries, or the fisheries and shipping, and all the other indications of the year round work, and I think he would be deserting good old Glengarry and putting his weight with a land that puts vim and energy into its inhabitants—a land that has a long winter to do big execution in winter industries, and enough added sunshine in summer to rush the crops to maturity with amazing speed.

We have been in New Ontario for over twenty years, and believe that no one willing to work need spend an unprofitable day. Our roads are good, building timber is plentiful, water excellent, and markets good.

Lest the impression may be given that the dollar is the highest ambition of the residents, I might add that our educational facilities are keeping pace with the times, and the neighboring collegiate institutes of the Twin Cities have not lacked rural representation of whom all are making good in positions of trust and responsibility in various callings. Religious privileges too are of a high order.

I can sympathize with any stranger not becoming enthusiastic over Thunder Bay and vicinity from the glimpses obtained between box cars on the one side and the rather shack-like buildings of the coal dock and other industrial sections. The name Thunder Bay is itself a misnomer, as we are unusually sheltered from the elements by our wooded hills. Mr. Fraser voices a somewhat general but decidedly mistaken impression of Northern Ontario—an impression not based on facts but upon appearance. The golden wheat fields of the West may hold out more of the get-rich-quick inducements to the man of fair capital. But to the man with a growing family who must combine outside earning

with making a farm home, exceptional facilities are found in this country that affords profitable winter employment. Building material is plentiful and in most cases costs only for the sawing. There is not the temptation of forming the habit of idleness during the winter as the sale of timber in the form of pulp wood, cordwood, piles, telephone and telegraph poles, ties, lumber, shingles and lath gives the poor man a chance to earn cash in winter and improve his farm, and cultivate and garner his crops in summer.

If easterners who turn longingly to the land in these days of H. C. of L. realized that here at the head of the lakes dozens of those making a good living off the farms had scarcely any farming experience to begin with, they would be surprised at the results. We have doctors, school teachers, blacksmiths, carpenters, store clerks, brick-layers, painters, plasterers, tin-smiths, commercial travellers, as well as B. S. A's, and a very few practical farmers. The wonder is they do not appear like the proverbial fish out of water, but actually their lack of farming experience throws them more fully into an attitude of mind that prepares them to make use of the instructive bulletins issued by the Departments of Agriculture; and I might say "book farming" often slightly referred to by thoughtless people, is not a bad standby for anyone who has not been brought up on the farm.

Personally it would afford me pleasure to show Mr. Fraser our farming districts on his return journey, and I am sure our courteous District Representatives, at the head of the lakes, Messrs. G. W. Collins, of Fort William, and L. M. Davis, of Port Arthur, would take pleasure in showing him over the district.

Of late articles belittling the possibilities of Northern Ontario have occasionally been noticed in the farm papers of Ontario. I feel these articles should not go unchallenged by those who have proved the actual conditions and possibilities of this country, and I trust this statement of facts will be given prominence.

Thunder Bay District. JAMES M. MUNRO.

Combatting the Hessian Fly in Western Ontario.

EDITOR "THE FARMER'S ADVOCATE":

I was much interested in your recent article on crop conditions in Middlesex County, particularly as regards the Hessian fly. I think perhaps that a wrong impression has been left by the writer of that report, when he states that one of the worst fields examined



The Cowichan Creamery in British Columbia is Very Successful as Told in the Accompanying Article.

was one sown in October. This leads one to believe that late fall sowing is practically useless, whereas it is the only safe precedent to follow. What possibly occurred was this, that the infested field was close to an early-sown field and was consequently infested by the spring brood. This has been quite a common occurrence, and, as previously reported, an early-sown field is not only likely to be ruined but it also endangers other fields that are late sown. For instance we have records of spring-sown wheat badly infested this year in Essex County. If there had been no fall brood there could not have been a spring brood. Daily observations in the field last year show that there were very few flies on the wing in October, and that as far as Middlesex County was concerned if there had been no wheat sown before October we should have had very little or no fly, provided, of course, that all stubble was plowed deep and early and all volunteer wheat promptly destroyed. I do not in the least underestimate the seriousness of the present situation. For three years I have been preaching the advisability of late sowing and better cultural methods. In 1918 I warned farmers not to keep growing wheat after wheat on the same land; such a course coupled with early sowing had only one alternative—the abundant increase of the Hessian fly. No parasites were obtained this spring, although hundreds of flies were bred out. Unless late sowing and the early plowing under of infested stubble is followed this fall and the ground firmly rolled directly after plowing, the coming wheat crop is extremely likely to be a complete failure.

H. F. HUDSON.

Dominion Entomological Laboratory, Strathroy, Ont.

THE DAIRY.

Cowichan Creamery Association.

EDITOR "THE FARMER'S ADVOCATE":

It has just been my privilege to see one of the finest examples of co-operation among farmers that can be found in Canada, and I was so impressed with it that I thought it would be an excellent thing if other people heard of it and could perhaps take it as an example.

On December 23, 1895, the farmers of Cowichan district, Vancouver Island, B. C., decided they would get more money for their cream if they all shipped to one creamery, and that they would get better results if the farmers who shipped cream owned the creamery. The late W. C. Duncan very kindly gave them about two acres of land, in the Town of Duncan, for the nominal sum of \$100. It was decided that the creamery should go under the name of "The Cowichan Creamery Association," and, although since then it has grown tremendously, the same name is kept.

It is necessary for all farmers shipping cream or eggs to have two shares of \$100 each—no more and no less—irrespective of the man, whether he is the biggest or the smallest farmer. This rule prevents any one man from having too much power. Of these shares, only \$20 per share is called for in cash and the remaining \$80 is held by the farmers at the call of the directors (of whom there are seven) but has not been called for. Six per cent. interest per annum is paid on the share capital.

In 1909 an egg collecting station was started in connection with the Association, also facilities for the disposal of poultry. For the year ending October 31, 1919, 62,779 dozen eggs were handled, the average selling price for the whole year was 60.6 cents per dozen. Handling costs, which include freight, crates, office salaries, etc., work out at only 3.6 cents per dozen. There was \$8,815.59 worth of poultry handled.

In 1912 an elevator was built with a capacity of ten carloads of grain, hay, etc. It has since been equipped with ordinary mills, separators and full general equipment. The advantage of this is that farmers can have their grain crushed or ground at the price of the labor, also by buying in car loads they can sell at a much lower figure. In fact, for 1919, the farmers of the Cowichan district saved about \$4 per ton on all feed purchased, and in these times of high prices for everything one has to buy this is a considerable item. Astonishing though it may seem, feed can be bought cheaper in Duncan than in either Victoria or Vancouver. For 1919, \$115,236.04 worth of feed was handled, showing what a big business is being done in that line.

We now come to the most important part of the Association, namely, the creamery, and I may say here that the success of the creamery—in fact, of the whole Association—is due to a very large extent to the efforts of W. Paterson, who has been General Manager since 1911. For the year ending October 31, 1919, 114,392 lbs. of butter were manufactured as a total expense of 5.7 cents per pound. The amount of butter manufactured was a little less than the previous year, but that is accounted for by the fact that so many men in the district had enlisted. Last year, after paying an average of 66.1 cents per pound butter-fat, each shipper received an extra 4 cents per pound on all butter-fat. This 4 cents is obtained by dividing among the patrons the profits from all branches, viz., grain, feed, eggs, poultry, milk and cream, minus running expenses.

For April, 1920, 78 cents per pound was paid for butter-fat. The reason they are able to pay such a high price is not only because of the excellent quality of the butter (which has been improved by very strict grading of cream) but also because of the good way they have of handling it. As soon as the cream is received it is made into butter and shipped immediately to Victoria, where it is met by members of their staff, who at once deliver it to the retail stores. It is delivered to these stores in proportion to the amount which they are able to dispose of speedily, and if the storekeeper has not sold all his last supply his amount is cut down the next time in proportion; therefore the consumer is protected from receiving any of that very objectionable article, namely, stale butter. It is, therefore, no wonder that Cowichan Creamery butter obtains a little higher price, and that the Association practically controls the Victoria market.

An incidental advantage of the Association is that all the farmers bring their cream in on the same days, and are able to exchange ideas, and in the exchange of ideas something is always learned. They are also able to keep in close touch with the market. In looking over the past records of the Association, and comparing them with their present position, I noticed that every year their efforts for the good of the producer are producing more apparent and beneficial results.

On one of their buildings I noticed a painting of two hands clasped, round which is written "Hand in hand". "From producer to consumer," which struck me as

most appropriate, as by following this motto they are able to sell cheaper, to take some of the profits which the middleman makes and altogether to make a big step in the reduction of the high cost of living.

In conclusion, I may say that I do not think anybody who has read the foregoing description can fail to be impressed by the remarkable success that has been achieved by the Cowichan Creamery Association during the last twenty-five years, but the point which I would particularly like to emphasize is this: "What are you doing in your district?" It is not going to do any good saying "the whole thing is very creditable but we could never do it in our district" and I feel sure a lot of you will think, that, but let me ask "Why not?" The man who started Cowichan Creamery at first had no idea they would end up by running the Association on such a large scale. Of course, if you like to say that the Town of Duncan and Cowichan District is a lot better than your own well and good, but I do not think any Canadian would care to admit that fact, so get busy. Call a meeting of the local co-operative society and see what can be done to control the middleman and put the farmer in a position to have a say in regard to the prices of the products which he buys and sells.

E. C. C.

Fitting Dairy Cattle for the Show.

The breeder of pure-bred dairy cattle who has at heart the interests of his breed and who aspires, ultimately, to the success enjoyed by the large breeders, must sooner or later enter the show ring. Every breeder ought to exhibit some place, if it is only at the local fall fair. The show ring is the best possible school for the breeder since it is here one may expect to find such characteristics and factors in breeding as size, type, strength, constitution, udder development, veining, breed standards, etc., applied by the judge in such a manner that all who desire to do so may benefit from his decisions. Just in passing it may be noted that if the dairy cattle judge functions at our exhibitions and shows as an arbiter of dairy cattle standards, it is necessary that he should be selected with the greatest of care. Sometimes, it must be admitted, our shows fall short of accomplishing their true purpose in as much as the judges in successive years have different ideals as regards type and the breeder whose cattle may please one judge will be disappointed the following year. Judges should be chosen—and their selection insisted upon by breeders—whose combined work in the ring will tend toward a standardization of type in the herds of all exhibitions. Not only is this advisable, but, because there are many exhibitions including several large ones, all of which may be visited by a number of breeders, the standards of type for all should be in close conformity.

In addition to the value of a show or exhibition as a school for breed type and conformation there is the fact that events of this kind are reliable indicators of the kind of live stock kept in the surrounding territory. Shows reveal the character and progressiveness of the live stock breeders and are, in fact, splendid advertising mediums. The breeder owes it to his business to exhibit. Few successful exhibitors wait until they can "clean up" a show before entering the ring. There are tricks in every trade, and experience is necessary in exhibiting as in breeding or feeding. At the same time it can only be secured by trying, and the wide-awake breeder who has definite ideals toward which he is working need not be afraid to enter the lists. In some respects the best way to achieve ultimate success in the show ring is to fail at first.

GETTING READY FOR THE SHOW.

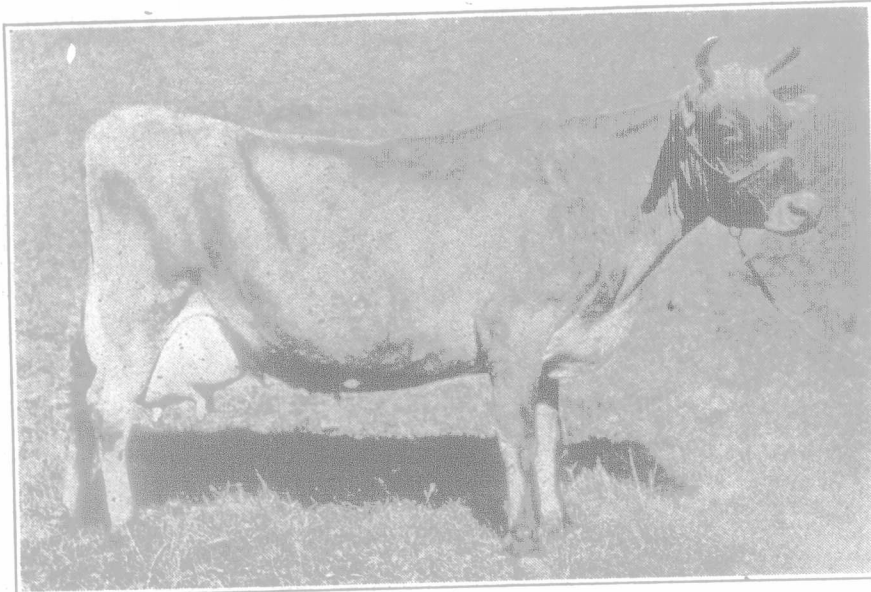
As soon as one show is over it is never too early to begin getting ready for the next one. Successful exhibiting in stiff competition means plenty of work. This in itself is often the reason why so many breeders do not exhibit, but it should be remembered that it must be considered worth while by other breeders if they will exhibit in spite of the necessary work. If a considerable number of animals can be shown, an effort should be made to show in as many classes and groups as possible. It is doubtful policy, however, to show in all classes merely because one has animals of the correct age or breeding. A good animal is the only advertisement worth while, and while all cannot get in the prize money, it is no disgrace to be left out of the prize money except in a poor class. One occasionally sees classes where the first prize winner is none too deserving, although the best in the class, while in other classes the competition may be so keen that those outside of the money are splendid examples of the breed. It is therefore up to the breeder to use his very best judgment in selecting members of the show herd and a second choice is advisable for every class in case something happens to the first choice. It is wisdom also to select the show herd with an eye to the "progeny of dam" and "get of sire" classes, since the same animal may do for two or

more entries. Some breeders with large herds show two or more animals in the same class. This may be because there are several likely animals in the herd or because two animals may represent different types, and if the judge does not like one he may choose another. We prefer, however, to see a breeder stake all his chances in the ring on one type—that which he considers most desirable. Generally speaking, a five-year-old cow in milk, a three-year-old in milk, a dry cow three years old or over, a two-year-old heifer in milk, a senior and junior yearling heifer and two senior and two junior heifer calves will constitute a complete female herd. The male part of the herd contains the same age classification except that aged bulls are three years old or over and not four or five as in the case of cows. The bulls should be of such type, age and relationship that they can head the various herd and group classes, and if no three-year-old bull is available a two-year-old will do to head the senior herd. Thus thirteen animals, not counting substitutes, would provide an entry in every class provided by most shows, if the relationship of the animals were right.

FEEDING THE SHOW HERD.

Once the individuals of the show herd are selected it is a good idea to stand them together, as such an arrangement will enable the breeder to see how they are coming along in relation to each other, and it will be more easy to care for them. The reason for picking out substitutes early is so that they may be given the same care as the others, and they too should be separated along with the show herd. This separation should be made at least six or eight weeks previous to the first show. The first thing to do is to get the animals accustomed to the halter and lead rope. This can be done by leading them to water, by frequent exercise individually, and to some extent by keeping them haltered in the stable instead of standing in stanchions. Nothing is so disastrous to success in the show ring as an untrained animal that cannot be made to show off to the best advantage.

Feeding and conditioning are next in importance, and experienced showmen have pronounced a ration of bran, corn, oats, oil meal and salt to be the most practicable, because these are common feeding stuffs, comparatively easy to procure at the fairs. One ration recommended for cattle not badly run down is composed of three parts bran, three parts corn, three parts oats,



Financial King's Interest.

Jersey, mother of nineteen calves, that finished a test with 400 pounds fat after passing her twentieth birthday.

one part oil meal and fifteen pounds salt to every one thousand pounds of grain. If the animals are badly run down the bran may be omitted and the corn and oats each increased to five parts. From four to six weeks of this ration should put the animals in good flesh. Those who recommend this ration advise feeding three times daily and as much grain as the animals will clean up well. Coarse ground corn and rolled oats should be used so as to add bulk to the ration and aid digestion. Some also advise wet feeding of grain and feeding separately from other feeds so as to get the most rapid results. Silage may be fed and is very beneficial, but since silage is not available at most fairs it is wise to gradually cut off the silage for a week prior to the first fair. If the hide of certain animals is not in good condition, some additional oil cake in the ration will help. Some breeders rely on bran and oat chop to condition the hide.

CONDITIONING THE HIDE.

The condition of the animal's hide in the show-ring is important as indicating "quality" and "condition." Hence considerable attention should be paid to this aspect of fitting. The first step in treating the hide is a thorough washing, using plenty of soap and water. If necessary, washing should be repeated in order to get each animal clean and all stains removed, but too frequent washings tend to make the hair grow long and rob it of the oil necessary to make it lie straight and sleek. After washing, rinse all the soap out thoroughly and blanket as soon as possible. Blankets should cover the shoulders and hook bones of the animal, and should be fastened so as to stay on. This may be accomplished by a strap to pass around the throat and

by tape lines from the back end around the hind legs so that it will not slip from side to side. For best results flannel blankets are used next to the hide and underneath the outside one—which may be of old bran sacks washed clean, so long as the herd remains at home. When at the show light cotton blankets of any attractive and pleasing color, with perhaps the name of the herd printed on the side, are very effective. Animals with heavy, dry hides will require heavier blankets if the hide is to be well conditioned, and some showmen seem able to condition any hide for the ring. Frequent, if not daily, grooming is necessary, but severe curry combing should not be given. Sometimes coarse sand paper tacked on a block of wood is used instead, taking care not to affect the hide and working the way the hair lies. Use a soft brush for brushing and after the animal has been gone over, a flannel cloth dampened with olive oil will remove any remaining dust. Sometimes a hide is stiff and when felt in the usual way seems tight and almost likely to crack. This means work ahead and probably some extra oil meal in the ration. After brushing such an animal it is a good thing to rub well with the hair, using the palms of the hands so as to cause friction and warmth, which will bring out the oil. Working the hide with the hands will induce pliability, and perhaps a good coat of olive oil under an extra blanket will make the animal sweat. This oil may be rubbed in at the next grooming, and the condition of the hide improved by painstaking treatment in this way. Care should be taken not to use colored oils on white animals. Any stain can be pretty well removed from the tail by frequent washing with soap and water, with perhaps a few drops of bluing in the rinse water to help bleach it out. Brushing the tail is likely to remove some long hairs from the switch, which looks better in the ring if it is nice and bushy.

THE HORNS AND FEET.

Some exhibitors pay considerable attention to the horns of an animal, training and polishing them so that they make the head look more stylish. The horns may be turned in the desired direction while the animal is young, and there are several devices for doing so. The tips may be turned backward where desired by tying the animals to a manger and fitting metal caps to the tips from which wires or light ropes can be carried to pulleys at the rear wall of the stall, and these ropes weighted sufficiently to turn the horns. Other devices can be secured to keep the horns from spreading unduly. To some extent at least the shape of the horn can be made to conform to the ideal by trimming. The horn should appear neither rough nor too fine, and a coarse and fine rasp along with emery cloth of varying degrees of fineness can often be used to good advantage. After using a rough rasp to remove the rough surface, the fine rasp will help to shape the horn and remove the marks of the coarse rasp. A steel scraper or a piece of glass used lengthwise can follow next and then the emery paper, using the finer grades last and lengthwise of the horn. Polishing is not necessary until arrival at the show grounds, because the horns are likely to get scarred in transit.

The feet of show animals must be in good condition. If an animal's feet hurt, it cannot do well on its feet, and if it does not stand squarely it will not show to best advantage in the ring. A hack saw, chisel and mallet are sufficient for this work, and the hoof should be trimmed so that the halves will not pinch together, and so that the foot will present a neat appearance. Toes that are too long can be sawn shorter, and any hard horn on the bottom of the hoof that prevents the animal from standing squarely can be loosened with the chisel. Sometimes an unruly bull will require to be thrown before this work can be done, but if it is necessary to do this he may learn all the more quickly who is "boss."

CLIPPING AND TRAINING.

Clipping is advantageous in most instances, as it can be used to bring out the individuality of the animal and accentuate its dairy qualities. Just as the hair on a beef animal is curled or crimped so as to make it stand out and emphasize breadth and fleshing, so the clipping of dairy animals can be made to impart that angularity and wedge shape so much sought after. Skilful clipping of the under part of the body will also bring out any appearance of veining and milkiness connected with the udder. The tail is usually clipped from about six inches from the end of the tail bone, and the greatest of care is necessary in any clipping that is done to see that the clipped portion is made to blend well with the unclipped. It is not advisable to clip the hocks unless the hair is rough, and some do not like to clip the head either, but if it is done the animal should not be allowed to go into the ring with the hair standing out straight from the face, as it will do until it gets long enough to part. The neck is usually clipped and sometimes the line behind runs from in front of the shoulders below to behind the withers on top, but if this is done it is difficult, unless the clipper is an expert, to hide the clipping line. The body of the animal is not clipped unless for some special reason, known only to the owner.

Training animals for the ring is very important, and quietness and kindness are essentials. If time will permit, lead each animal around for a few minutes daily and get it accustomed to stand for some time in the position in which it shows off to the best advantage. Some cows, especially high-producing animals, are quite nervous; bulls are usually so. These should be gradually accustomed to handling so that when they are led into a crowded ring or when the judge approaches them they will be on their best behavior. Animals that have been poorly trained will start suddenly when touched and probably lower the back so as to detract 50 per cent.

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ract 50 per cent.

from their appearance. Both front feet should be together, and one of the hind feet slightly ahead of the other, with the back straight and head held so that the neck carries out the line of the top. Bulls look well with the head very slightly elevated, as it accentuates that masculinity which all bulls should show. One reason for having cows in milk stand with one hind foot slightly ahead of the other is that the udder is shown to better advantage. Care must be taken that the animal does not stretch out or hump up. The feet should assume a natural supporting position directly

under the body. Posture means a great deal in the show ring, and training will avoid many unfortunate missteps at the wrong moment.

Never trust a bull. Use a strong ring—because rings break easily when a bull begins to tear around—and a stout staff, preferably one with which pressure can be brought to bear on the bull's nose by twisting the staff. Handle the bull as gently as possible, but teach him that respect for the person handling him is his most important commandment. Get him accustomed to being handled and to standing in the correct position.

HORTICULTURE.

The Second Fruit Crop Report, issued by the Dominion Fruit Commissioner, says that the consensus of opinion in British Columbia is that the apple crop will not exceed 65 per cent. of last year's harvest. The present indications in Nova Scotia, says the report, would lead one to estimate the forthcoming crop at around one million barrels, or 60 per cent of last year's crop.

Spraying Methods and Mixtures in the Annapolis Valley.

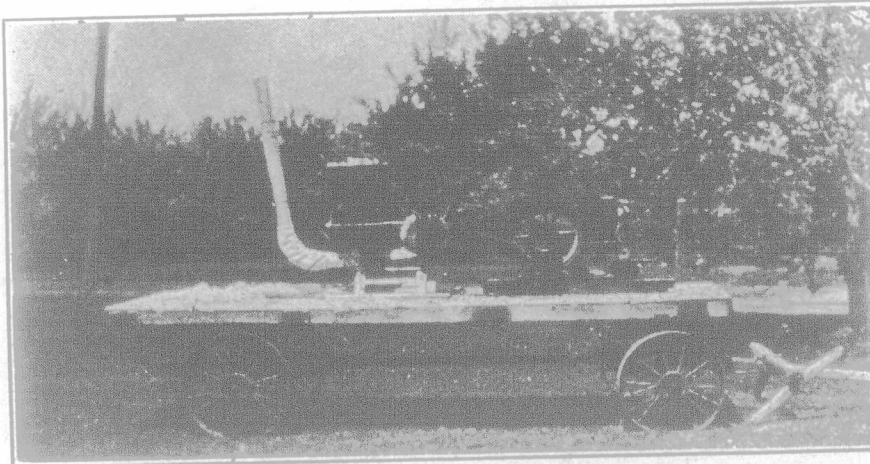
LIME-SULPHUR ABANDONED—BORDEAUX RETURNED TO FAVOR—DUSTING BECOMING POPULAR.

Approximately one thousand tons of dust and spray materials will this year be applied to the apple orchards of the Annapolis Valley, Nova Scotia, in an effort to control the insect pests and fungous diseases that lie in wait to attack the fruit. Last year in the neighborhood of 240 tons only were employed, so it is easy to comprehend the spirit of the people in regard to this one operation connected with the apple-growing business. The Valley is now one huge experimental orchard, where numerous formulas are being investigated and divers methods are under experimentation. Growers are adopting methods that appeal most to them under their own peculiar circumstances. They are giving some thought to efficiency, but expediency is receiving due consideration. There are so many factors to be considered that one is not safe in jumping at conclusions based on one grower's experience, or the experience of a dozen, but the grouping of one hundred or five hundred orchards gives pretty valuable information—in fact, quite as reliable information as a single experiment conducted with unerring accuracy, but under peculiar seasonal and soil conditions. There are sprayed orchards and dusted orchards; orchards sprayed with lime-sulphur, and orchards sprayed with Bordeaux mixture. There are orchards sprayed with varying strengths of the materia's mentioned, but the sentiment among growers seems to be in favor of dusting. In a few hours one can visit growers who advance arguments in favor of all the methods and mixtures we have mentioned, but throughout the Valley the consensus of opinion is that Bordeaux mixture in a modified form, perhaps, is superior to lime-sulphur as a fungicide, and that dusting is, at least, preferable to spraying. Growers in the Annapolis Valley are massed, so to speak. They see each other frequently, and they take time to talk things over. Under such circumstances the dusting practice naturally made converts very rapidly. Growers were anxious to find something a little more pleasant to apply than Bordeaux, or the still more objectionable lime-sulphur, and when the dust was found to be, at least, fairly efficient it was adopted just as speedily as dusters could be obtained. Throughout the month of June, when a representative of "The Farmer's Advocate" visited the Annapolis Valley, engines could be heard throbbing in the orchards before the cock crew in the morning, and in the calm of the evening thin clouds of dust hanging over numerous orchards revealed the fact that dusters were again at work. Dusting is more contagious than any other method of scab or insect control yet devised. This, coupled with the fact that large orchards can be treated speedily and at the proper time, has resulted in a great many dusters being brought into the Valley, and a large demand that cannot be satisfied.

THE EVOLUTION OF SPRAYING.

The first material to be used in the Annapolis Valley was the old 4-4-40 Bordeaux, with Paris green added as an insecticide. This gave good results in the control of scab, but as its use increased the apple crop showed considerable injury in the form of "russeting" or "netting." Bordeaux was adopted slowly at first because

growers were not sufficiently convinced that it paid to spray. Old prejudices had to be broken down; new methods had to be established. After the missionary work had been done lime-sulphur was introduced. It was not a pleasant mixture to apply, but it gave very good results as a fungicide, and a clean finish to the fruit which has not yet been surpassed by any other material. Then came power sprayers and the spray gun. In order to do a thorough job, growers drenched their trees with materials put on under great pressure, and the opinion gained ground that the apple crop of the Valley was being sprayed off with lime-sulphur. This induced a swing back to Bordeaux mixture, and almost concurrently with this came the duster. By 1918, the Thompson-Bordeaux, which was a modified mixture used for several years by Mr. Thompson and Mr.



One Type of Duster in Use in the Annapolis Valley.

Buchanan, near Berwick, came into favor. It was composed of 2 or 3 pounds blue stone to 10 pounds of lime and 40 gallons of water. It could be used on any variety, in all weather conditions, and at any time without fear of crop reduction. By this time orchards had grown in size with many growers handling all the way from twenty-five to fifty or seventy-five acres of orchard. Even if the duster was not so efficient as the power spraying outfit, it was believed that far better results could be obtained from the use of dust, because the orchards could be covered at the proper time and the work speedily executed. Probably one-half of the apples produced in the Valley this year will be on dusted trees. Growers have been co-operating in the use of dusters for two reasons; one was to save or keep down initial cost, and the other was that sufficient dusters could not be obtained to go around. One duster would do four or five properties, but this system has not been found satisfactory. Many who had an interest in a duster have purchased outright for themselves, and there are many growers now spraying who will obtain dusters as soon as they can get delivery. The nature and amount of material brought in and distributed

general use, and by 1919 the pendulum had swung back in the direction of Bordeaux. He furthermore declares that lime-sulphur injury usually carries over and injures one or more succeeding crops. Experiments conducted by Mr. Sanders lead him to believe that the lime-sulphur injury is not so much a direct damage to the apple as to the proper functioning of the leaves. Experiments have shown him that when lime-sulphur is applied to the leaf that chlorophyll is precipitated, and ability of the leaf to function properly is impaired. The information Mr. Sanders gets from New York State also leads him to believe that lime-sulphur will eventually go out of use in that extensive apple-growing district.

Professor W. S. Blair, Superintendent of the Dominion Experimental Farm at Kentville, has not found in his experiments that the crops sprayed or subsequent crops are influenced as to yield by the application of lime-sulphur when it is properly applied. He does concede, however, that a danger exists of spraying apples off with almost any material when the trees are drenched under heavy pressure. Lime-sulphur must be used with a reasonable amount of care, and while

THE LIME-SULPHUR CONTROVERSY.

As previously mentioned, growers have entertained the opinion that they were spraying their apples off with lime-sulphur. This is not the unanimous opinion, however, for it is claimed by some that the pressure under which the lime-sulphur was applied was responsible. George E. Sanders, in charge of the Dominion Entomological Laboratory at Annapolis Royal, stands ready to condemn lime-sulphur unequivocally. He argues that lime-sulphur has at least been partially responsible for the short crops between the years 1911 and 1919. Prior to 1919 the Bordeaux mixture was in



An Annapolis Valley Apple Orchard in Bloom.

Professor Blair is not advocating that growers persist in the use of lime-sulphur, he is not convinced that apples are sprayed off with it when the work is properly executed.

J. Howe Cox, one of the vice-presidents of the Nova Scotia Fruit Growers' Association, is still loyal to lime-sulphur as a spray. He is careful to see that the nozzle or spray gun is not held too close to the tree, and that a mist rather than a stream of the spray material reaches the foliage and the twigs. He is of the opinion that apples have been sprayed off by high-power sprayers, and that the drop would have resulted even had pure water been used as a spray material. Other growers, interviewed by the writer, are still clinging to the lime-sulphur, but are using it in a very much diluted form. Some have even been using, for a summer spray, one gallon of lime-sulphur to ninety of water, but they are increasing the arsenate of lead because it, too, has a high fungicidal value.

THE SPRAY CALENDAR.

The Spray Calendar prepared for Nova Scotia by George E. Sanders and W. H. Brittain, Provincial Entomologist, recommends the following mixture:

First Spray.—When leaves are about one-quarter of an inch in diameter, use 3-10-40 Bordeaux, and one pound of arsenate of lime to forty gallons.

Second Spray.—When the blossom buds are showing pink at the tip, use 2-10-40 Bordeaux and one pound arsenate of lime to forty gallons.

Third Spray.—When blossom petals have fallen, use one pound soluble sulphur, five pounds hydrated lime, and one-half pound arsenate of lime to forty gallons of water.

Fourth Spray.—Two weeks after the third spray, use 2-10-40 Bordeaux and one pound arsenate of lime to forty gallons of water.

It will be noticed from these recommendations and from the list of materials distributed by the United Fruit Companies that arsenate of lime is rapidly taking the place of arsenate of lead. It is somewhat cheaper and gives good results. Some burning has resulted from arsenate of lime in the past, but not enough to curb the increasing use of it.

MATERIALS USED AS DUST.

The dust in most common use this spring was the copper-lime-arsenate dust, which is a mechanical mixture composed of 10 lbs. dehydrated copper sulphate, 85 lbs. hydrated lime, and 5 lbs. arsenate of lime. When this material strikes the leaf it turns to Bordeaux mixture and assumes the characteristic color of Bordeaux, which it does not have prior to contact with moisture. In this case the Bordeaux is made on the tree, rather than in the tank or in the mixer. It was recommended by Mr. Sanders, who originated and has patented the mixture, that it be applied at the rate of about 50 lbs. per acre each application, for 25-foot trees. Like other dust material, it should be put on in the morning or evening when the air is still and the foliage of the trees is damp.

Good results are also obtained from the sulphur-lead-arsenate dust, or 90-10, as it is usually called. A great deal of this came into the Valley already mixed last year, but the United Fruit Companies are obtaining their sulphur in the States this year and the lead powder in Canada, and mixing in their own plant. The cleanest orchard in the Annapolis Valley last year was dusted according to the following program: Second dust, 90-10 sulphur-lead-arsenate; third dust, 85-15 sulphur-lead-arsenate; fourth dust, 90-10 sulphur-lead-arsenate. The dusted Gravensteins in this orchard showed only 9.64 per cent. of scab, while the untreated showed 97.5 per cent. Many growers used the Sanders dust this season for all except the application just after the petals had fallen. For this they used the 90-10 or sulphur dust to prevent russeting. The sulphur dust is not so pleasant to handle as the other, and growers are gradually eliminating it on that account.

DUSTING VS. SPRAYING.

The one big advantage the dusting method has over spraying is that as much orchard can be dusted in one hour as can be sprayed in a day. The dusting is done in the morning and evening when the air is still and the foliage damp. This leaves the best part of the day for other work, such as cultivation or ordinary farm work. Many are dusting because their orchards are so large that they cannot spray them properly and at the right time. In regard to expense, an orchard can be treated with the copper-lime-arsenate dust more cheaply than the four applications recommended in the Spray Calendar can be put on. The sulphur dust will cost five or six dollars more than the liquid spray. This, of course, takes time and labor into consideration, for the dust itself costs more than the spray materials. The great saving is in labor.

Special emphasis in this article has been placed on dusting, for the reason that it appears to be the coming practice in the Annapolis Valley. One-half or more of the growers are still spraying, and many will, no doubt, continue to spray for years. The size of the orchards will compel more growers, from time to time, to adopt the dust even if they still believe that spraying materials properly applied are more effective.

FARM BULLETIN.

The Premier of Quebec Resigns.

Sir Lomer Gouin, for fifteen years Premier of Quebec, tendered his resignation on July 8, and Honorable L. A. Tachereau, for many years a member of Sir Lomer Gouin's Cabinet, succeeded him.

The New Prime Minister.

On Saturday morning, July 10, Rt. Hon. Sir Robert Borden tendered his resignation to the Governor-General, and Hon. Arthur Meighen was sworn into office as Canada's Prime Minister. When a Premier resigns the whole Cabinet automatically goes out of office, and it will be necessary for Hon. Mr. Meighen to select a new ministry or re-establish the old one under his leadership. It is expected that the number of portfolios in the new administration will be considerably reduced, and that the new Cabinet will be chosen largely from the old one. It is altogether likely that Hon. N. W. Rowell will resign, and it is said that Hon. Martin Burrell has been comfortably placed. At time of going to press the Prime Minister has not announced the personnel of his Cabinet, but it is thought that an announcement will be made on Tuesday.

Honorable Arthur Meighen was born at Anderson, in Perth County, Ontario, on June 16, 1874, and is thus in his forty-seventh year. He was educated at St. Mary's Collegiate Institute and Toronto University. As a young man he began the practice of law at Portage la Prairie, and it is that constituency which he now represents in the House of Commons. He was first elected to Parliament in 1908, and was returned at the general elections of 1911 and 1917. On June 26, 1913, he was appointed Solicitor-General; August 28, 1917, Secretary of State and Minister of Mines; and on October 2, 1917, changed to the Ministry of the Interior and Superintendent General of Indian Affairs. In religion he is a Presbyterian.



Hon. Arthur Meighen.

The new Prime Minister.

Tenth Conference of Agricultural Representatives.

The tenth conference of the Agricultural Representatives of the Ontario Department of Agriculture was held at the O. A. C., Guelph, during the whole week of July 5. These conferences serve a very useful purpose in bringing all the Agricultural Representatives together for a discussion of matters relative to the work carried on in the various Counties of the Province. Some fifty men convene at Guelph every year and discuss with various persons interested in the agricultural industry of Ontario, the outstanding problems of the time. On Tuesday the question of securing adequate supplies of commercial seed stocks was discussed, and in summing up the provincial situation the opinion of Professor W. J. Squirrell was that production of commercial grades in satisfactory quantities is the outstanding requirement of the seed situation in Ontario. Ontario can produce seed of excellent quality, but seed growers are at a disadvantage in marketing because the quantity is low. There was a fairly general opinion that some other avenue of sale than that now afforded by the commercial seed houses must be secured. At least an alternative market must be provided, and this in all probability would mean facilities such as storage houses and power cleaners for the use of farmers' clubs, etc. F. C. Hart, Director Co-operation and Markets Branch, Toronto, has recently inspected some warehouses in the State of Michigan, and he pointed out that under the terms of a recent Provincial enactment in Ontario, any co-operative society may borrow up to a total of \$3,000 for the erection or repair of storages or warehouses for farm products. Production is unprofitable unless provision can be made for safe storage. It was also suggested that the United Farmers' Co-operative Company provides assurance of a central selling agency for the farm products of the Province.

The scrub-bull campaign and other live stock matters occupied the forenoon session on Wednesday. It was pointed out by several speakers that the scrub sire is directly responsible for losses amounting to millions of dollars annually. Education, it was thought, would eliminate the majority of these undesirable sires, but eventually legislation may be necessary in order to compel the few who refuse to use the better sire to do

away with the inferior animals. In discussing the case for the good beef bull, Professor Wade Toole, O. A. C., said: "We used two steers in one of our experiments here for the purpose of finding out the superiority of the pure-bred sire. One animal was of scub character; the other was from a good grade cow, mated to a pure-bred bull. The scrub at three years old was valued at \$110 by a local butcher, while the same man offered us over \$225 for the grade steer when one and a half years of age." Professor Toole expressed himself strongly in opposition to the crossing of beef and dairy breeds for any purpose. H. S. Arkell, Federal Live Stock Commissioner, stated that the beef trade is rapidly going back to pre-war standards, and we must prepare for normal prices again. Feed prices prohibit beef production at low prices, but the Commissioner looked forward to an easier feed situation before long. In beef growing, Canadian live stock men must prepare for stiff competition with South America; and Argentina and neighboring countries are fast gaining control of the British beef market. The hog situation is much more encouraging for the reason that Holland and Denmark, which formerly supplied a large part of the bacon going to the United Kingdom, have a much lower hog population than formerly. The feed situation there is very severe and it seems quite probable, according to the Commissioner, that we can hold the bacon trade in Great Britain for many years because our product is very much appreciated there. The whole live stock situation, said Mr. Arkell, is in a state of confusion, and we must have faith in the future and hold the markets that we now have. S. E. Todd, Secretary of the Industrial and Development Council of Canadian Meat Packers, explained that the highest prices received for bacon for export last winter was about 35 cents, and that this allowed but little profit to the men supporting the packing industry. Mr. Todd said that although farmers were losing money on hogs, the packers were losing even more because of the state of the market.

On Thursday forenoon, F. S. Fulthorpe, of the Live Stock Commission Department of the United Farmers' Co-operative Company, Toronto, discussed the manner in which co-operative shipments of live stock are handled at the Union Stock Yards. He stated at the outset that figures indicate considerable merit in the system of co-operative marketing of live stock. About thirty per cent. of the live stock marketed at Detroit, thirty-three and a third per cent. of the live stock marketed at Chicago, and seventy per cent. of that marketed at South St. Paul, reaches the market on the same basis as the co-operative shipment of live stock in Ontario and Western Canada. It is believed, said Mr. Fulthorpe, that the man who produces good stock should benefit to the fullest extent and to the last cent of profit. The office of the U. F. O. at the Union Stock Yards, Toronto, was opened on February 17, 1919, and has since had a wonderful growth.

A. A. Powers, President of the United Farmers' Co-operative Association; J. M. McNaughton, Manager of the Orangeville Co-operative Marketing Company, Orangeville; R. H. Ashton, Manager the Egg and Poultry Department, United Farmers' Co-operative Company, Toronto; and W. A. Brown, Chief of the Poultry Division, Live Stock Branch, Ottawa, each contributed materially to the discussion at this session on the co-operative marketing of farm products.

On Friday morning an address was delivered by the Hon. Manning W. Doherty, Minister of Agriculture. The Minister was very emphatic in his statement that there is more hope in the work of the Agricultural Representative than from any other branch of the work carried on by the Ontario Department of Agriculture. He believed this work to be the most important point of articulation between the teaching staff of the College and the practical farmer. The Representative can provide proper and adequate distribution of the information secured by the investigator and teacher. The great work ahead of the Agricultural Representative is to bring the average farmer to the point where he will seek the information that is available for his benefit from the Agricultural College. The speaker believed that no greater opportunity for initiative existed in any part of the Departmental service than in Agricultural Representative work. He emphasized the necessity for more farm accounting, and urged the Representatives to encourage farmers to keep closer track of their business. He also thought it possible that more effective work could be done if some system of local control were adopted. He also greatly pleased the Representatives by stating that the increases in salary which have been announced carried no maximum. He did not care how much a man got, so long as he earned it by good and efficient public service.

Several resolutions were passed at the conference, one of which suggested that consideration be given to the appointment of advisory agricultural boards in the various counties to confer with the Agricultural Representative with reference to the work being carried on, or with reference to future work in that county. A standing committee of Representatives was appointed to give this matter consideration. At a suggestion that a public school inspector might be included in the membership of these boards, there was considerable objection in as much as many of these men were declared to be out of sympathy with agriculture. A second resolution referred to the advisability of a committee visiting the States of New York and Michigan, regarding farm bureau work as conducted in the United States. Another resolution asked for permanent assistants in a larger county, and that Representatives should have training as assistants before being appointed to a county. A fourth resolution was passed asking that legislation be passed at the earliest possible date to prevent the keeping of unregistered sires for public service.

Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending July 8.

Receipts and Market Tops.

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

	CATTLE						CALVES					
	Week Ending	Receipts Same Week	Week Ending	Top Price	Good Steers	Week Ending	Week Ending	Top Price	Good Calves	Week Ending	Week Ending	
	July 8	1919	July 1	July 8	1919	July 1	July 8	1919	July 1	July 8	1919	July 1
Toronto (U. S. Y.)	5,574	7,168	7,810	\$16.00	\$14.50	\$16.25	2,278	1,337	1,999	\$16.50	\$22.00	\$18.50
Montreal (Pt. St. Chas.)	424	837	801	14.75	14.00	16.00	1,219	1,694	1,355	13.50	16.50	15.50
Montreal (East End)	786	828	756	14.75	14.00	16.00	1,311	1,132	1,193	13.50	16.00	17.50
Winnipeg	3,118	2,252	1,481	12.50	12.50	15.50	500	287	250	15.00	16.00	13.00
Calgary	449	388	677		11.25	12.00	46		62	13.00	9.00	13.00
Edmonton	298	792	166	11.00	12.00	12.25	86	163	113	12.50	12.00	12.50

	HOGS						SHEEP					
	Week Ending	Receipts Same Week	Week Ending	Top Price	Selects	Week Ending	Week Ending	Top Price	Good Lambs	Week Ending	Week Ending	
	July 8	1919	July 1	July 8	1919	July 1	July 8	1919	July 1	July 8	1919	July 1
Toronto (U. S. Y.)	5,926	7,297	5,219	\$20.25	\$24.40	\$20.00	3,753	2,207	3,052	\$19.00	\$22.00	\$19.75
Montreal (Pt. St. Chas.)	2,344	2,626	1,110	21.00	23.75	21.00	1,020	934	922	16.00	20.00	18.00
Montreal (East End)	1,031	1,910	686	21.00	23.75	21.00	1,280	1,293	794	16.00	20.00	18.00
Winnipeg	5,406	7,667	2,037	18.50	22.50	18.50	1,061	594	365	14.00	16.25	16.50
Calgary	393	899	599	18.00	22.25	18.25	508	1,657		14.00	13.00	
Edmonton	504	895	435	18.00	21.75	17.75	7	1,227	67		13.50	

Market Comments.

Toronto (Union Stock Yards.)

Compared with the live stock offerings of the previous week; there were 1,300 fewer cattle, 200 more calves, 800 more sheep and lambs, and 700 more hogs on hand during the week. The marked falling off in the offerings of cattle was largely due to the recent price reduction. A large percentage of the cattle being offered are still unfinished and light, and, as a consequence, good quality butcher steers of respectable weights are readily bought by the local packers. The market opened on Monday with an offering of 1,500 cattle held over from the previous week, and in addition there were fresh arrivals. Bidding on butchers steers was slow and prices were eventually 50 cents below the opening of the market. Good bulls were scarce and those offered were 50 cents lower, while cows and all classes of light and unfinished cattle were weighed up at prices fully \$1.00 below the previous close. On Tuesday, trading was fairly active at Monday's decline. On the following day, the market opened slow but prices were steady on good butcher stock; late in the day grass cows and unfinished steers commenced to move, and drovers who had held cattle since the holiday were glad of the opportunity to turn them over since there were no indications of any marked recovery in prices. The market closed with about 1,000 cattle unsold, and these were offered on Thursday, on which day prices were steady, and unfinished stock fairly well cleaned up. About half of Thursday's offerings went back to the country to grass. A few sales were made during the week at \$16 per hundred. One load of twenty-two steers which averaged 1,160 pounds, moved at \$17. The majority of medium weight steers sold from \$13 to \$14. Light butcher steers sold mostly from \$13.50 to \$14.50 if of good grading; one load of twenty-one head which averaged 955 pounds sold at \$14.10, and one load of nineteen head sold at \$14.60. Medium to common kinds moved from \$10 to \$12. Good butcher heifers were in demand, and were weighed from \$13.50 to \$14.50, while the common kinds were lower from \$8.50 to \$10.50. Good cows were scarce and the majority which were of only fair grading sold at lower prices. Cannery and cutters were \$1 to \$1.50 below the previous week's close, being sold mostly from \$3.50 to \$5.50. A few bulls sold at \$12, the majority from \$10.75 to \$11.75. The market for calves was unsteady at prices from 50 cents to \$1 below the previous week's close; the market was, however, slightly stronger on Thursday.

The lamb market was active for choice kinds although the market was, on the whole, \$1 below that of the previous week. The cause of the decline was the large number of light lambs marketed. Ewes sold from \$6 to \$8, yearlings from \$11 to \$12.50, while a few choice lambs sold at \$19, and the majority from \$12 to \$16. The hog market opened with considerable strength and selects moved at \$20 per hundred, fed and watered. On Tuesday, a 25-cent advance occurred, and the market remained unchanged during the remainder of the week.

At the conference, a resolution be given to agricultural boards in the Agricultural Representative being carried on, in that county. A resolution was appointed. At a suggestion included in the resolution was considerable men were declared culture. A second of a committee Michigan, regarded for permanent Representatives before being ap- lution was passed the earliest possible registered sires for

TORONTO					MONTREAL (Both Yards)				
CLASSIFICATION	No.	Avg. Price	Price Range Bulk Sales	Top Price	No.	Avg. Price	Price Range Bulk Sales	Top Price	
STEERS									
heavy finished	47	\$13.75	\$13.00-\$14.25	\$15.50	3				
STEERS good	279	13.50	13.25-14.25	16.00	47	14.50	14.00-14.75	14.75	
1,000-1,200 common	27	11.50	11.00-12.00	13.00	91				
STEERS 700-1,000 good	1,152	14.00	13.50-14.50	15.00	56	13.75	13.00-14.50	14.75	
common	141	11.25	10.00-12.50	13.00	87	10.75	9.00-12.00	12.00	
HEIFERS good	594	14.00	13.50-14.50	15.50	21	12.50	12.00-14.00	14.00	
fair	699	12.00	11.00-13.00	13.00	56	10.75	10.00-11.00	12.00	
common	93	9.25	8.50-10.50	11.00	168	7.00	6.00-8.50	9.00	
COWS good	326	12.25	11.75-12.75	13.25	64	10.50	10.00-11.25	11.25	
common	1,112	9.50	9.00-10.00	10.50	407	7.00	6.00-8.00	9.00	
BULLS good	122	11.25	10.25-11.75	12.00	12				
common	87	9.00	8.50-9.50	10.00	112	6.50	5.00-8.50	9.00	
CANNERS & CUTTERS	311	4.50	3.50-5.50	6.00	86	4.75	3.50-5.50	5.50	
OXEN									
CALVES veal	2,278	15.00	14.00-15.50	16.50	2,429	9.00	6.00-12.00	13.50	
grass					101	7.00	6.00-8.00	8.00	
STOCKERS good	175	9.25	9.00-9.50	10.50					
450-800 fair	104	8.50	8.00-9.00	9.00					
FEEDERS good	283	10.50	10.00-11.00	11.50					
800-1,100 fair	22	9.50	9.00-10.00	10.00					
HOGS selects	5,399	20.25	20.00-20.25	20.25	1,983	20.80	20.50-21.00	21.00	
(fed and watered) heavies					624	19.25	18.00-20.00	20.00	
lights	228	18.25	18.00-18.25	18.25	266	18.80	18.50-19.00	19.00	
sows	294	16.00	15.00-17.00	17.00	726	16.80	16.50-17.00	17.00	
stags	5				25	13.80	13.50-14.00	14.00	
LAMBS good	2,047	15.50	15.00-16.00	19.00	436	14.50	14.00-15.00	16.00	
common	79	13.00	12.00-14.00	16.00	279	13.00	12.00-13.50	13.50	
SHEEP heavy									
light	1,044	11.50	11.00-12.00	12.50	123	8.50	8.00-9.00	9.00	
common	583	7.00	6.00-8.00	9.00	622	7.50	6.00-8.00	8.00	

Of the disposition from the Yards for the week ending July 1, Canadian packing houses purchased 461 calves, 4,185 butcher cattle, 426 feeders, 4,071 hogs and 1,527 sheep. Local butchers purchased 419 calves, 255 butcher cattle, 268 hogs, 294 sheep and 390 lambs. Canadian shipments were made up of 29 calves, 184 stockers, 406 feeders and 6 sheep. Shipments to United States points consisted of 1,402 calves, 64 heavy steers, 130 butcher and 57 sheep. The total receipts from January 1 to July 1, inclusive, were 147,017 cattle, 48,731 calves, 173,088 hogs and 28,570 sheep, compared with 150,412 cattle, 36,073 calves, 186,793 hogs and 13,707 sheep, received during the corresponding period of 1919.

Montreal.

Owing to a very material decrease in shipments of cattle during the week, the market was well cleaned up. While there will be room for a fair amount of butcher cattle the poorer grades are not in demand except at lower prices. In this connection the most common price quoted as the one at which boner cattle could be handled in large numbers when the season arrives, is \$5 per hundred for bulls weighing in the neighborhood of seven hundred and fifty pounds to eight hundred pounds. The prices to be paid will depend largely on the price of hides.

Fairly good cattle that had been held over from the previous week were disposed of at prices much lower than they would have brought, when first offered. The top price for the week was \$14.75, paid for twelve steers averaging 1,000 pounds each. Nine cattle of fair quality averaging 800 pounds brought \$12, and at the close of the market some very thin steers were disposed of at \$9.00. Heifers were in nearly all cases weighed up with other grades of stock of equal values and ranged in price from \$5.50 upwards, for very thin yearlings. The top price for cows was \$11.25 and was paid on a draft of ten animals which averaged 1,190 pounds. Cows not good enough for the butcher trade were hard to dispose of and cannery went as low as \$3.00. There were no good bulls offered. Light and common bulls brought from \$5 to \$7.50, while the top price was \$9.00 paid for a pair of bulls averaging 915 pounds. Two small lots of calves brought \$13 to \$13.50 per hundred, good calves were sold for \$10 to \$12, while very thin pair-fed calves sold as low as \$6.00. There is a marked tendency towards lower prices for lambs. Two choice young lambs brought \$16 per hundred. A number of small lots sold from \$15 to \$15.50. Packers offered \$14 to \$14.50 for good lambs in large or small lots. Hogs were sold to local butchers at \$21 off car weights, for selects, on Mon

day and Tuesday. By Wednesday, under slightly increased receipts the price fell back to \$20.50 off cars. As prices are being maintained through the strength of immediate local needs, the market varies according to the volume of receipts. PT. ST. CHARLES.—Of the disposition from the Yards for the week ending July 1, Canadian packing houses and local butchers purchased 1,253 calves, 697 butcher cattle, 1,110 hogs, 462 sheep and 460 lambs. Shipments to United States points consisted of 10 calves, and 22 butcher cattle. The total receipts from January 1 to July 1, inclusive, were 15,504 cattle, 42,253 calves, 32,728 hogs and 9,819 sheep; compared with 15,402 cattle, 41,816 calves, 38,308 hogs and 8,516 sheep, received during the corresponding period of 1919. EAST END.—Of the disposition from the Yards for the week ending July 1, Canadian packing houses and local butchers purchased 862 calves, 625 butcher cattle, 387 sheep, and 191 lambs. Canadian shipments were made up of 105 sheep. Shipments to United States points consisted of 331 calves, 20 sheep and 91 lambs. The total receipts from January 1 to July 1, inclusive, were 16,960 cattle, 33,583 calves, 22,189 hogs and 8,799 sheep; compared with 17,555 cattle, 30,182

calves, 20,833 hogs and 8,909 sheep, received during the corresponding period of 1919.

Winnipeg.

The total offerings of live stock showed an increase of one hundred per cent. over those of the previous week; 3,171 cattle, 500 calves, 1,061 sheep, 5,406 hogs were weighed up during the week, while 20 cattle and 148 hogs were through billed. Owing to heavy offerings on the second of the month, bidding was extremely slow and the undertone of the market was considerably weaker, with nearly all classes and grades at \$1 to \$1.50 below the previous close. On Monday a further decline of 25 to 50 cents took place, while on Tuesday and Wednesday, sales were practically all made at Monday's prices, the close on Thursday saw a further reduction in stocker and feeders of 25 and 50 cents; butcher cattle, however, held fairly steady. Packers showed little inclination to purchase the steers offered, more attention being paid to fair and good quality females. Heavy steers weighing over twelve hundred pounds were few in number and sold under a limited demand within the range of \$10.50 to \$12. Butcher steers of good grading weighing from ten hundred to twelve hundred pounds sold in line with the heavier class at prices from \$10 to \$12, while the common and medium sold from \$7.50 to \$9.50. Good grades of light butchers were secured from \$10 to \$12 and common from \$7.00 to \$8.00. The best stocker steers and heifers sold from \$6.50 to \$7, and the common kind from \$5.50 to \$6. Most of the best kind passed over the scales within the range of \$8.50 to \$9.50 and the fair kinds from \$6 to \$8.

Dominion Wool Market Report.

There is nothing new to report in connection with the wool trade. Returns show that local country prices are the same as during the previous week, varying from 18 to 25 cents flat. No market has been established as yet in graded wool. It is generally expected that trade will be resumed under normal conditions, but it is likely that the reaction will be slow.

Grading of Association wools has been completed in Quebec Province, while in Ontario and the Maritime Provinces grading will continue for two or three weeks. Western wools are arriving at Weston, Ontario, in large shipments.

Buffalo.

Cattle.—Cattle market was very slow and weak at Buffalo last week. It was the only market open on July 4th, and with all of the eastern killing plants closed, demand was very light, as the result of which shipping cattle sold fully 75 cents to a dollar under the previous week, and this decline was noted on a fair to choice kind of butchering cattle, common butchering cow stuff bringing about steady prices. Bulls of all grades were slow sale at a half lower prices. Demand was weak for anything in the stocker and feeder line, and on fresh cows and springers only the very best kinds were wanted. Trade ruled very slow and sticky all week, closing up bad. Offerings for the week totaled 3,150 head, as against 5,025 for the previous week, and as compared with 4,150 head for the corresponding week a year ago. Quotations:

Shipping Steers, Native.—Very prime, \$16 to \$16.50; good to choice, \$15.50 to \$15.75; common to fair, \$12.50 to \$14.50; plain, \$11.50 to \$12.

Steers, Canadians. Best, \$14.25 to \$14.50, fair to good, \$13.50 to \$14; common and plain, \$11.50 to \$12.

Butchering Steers.—Yearlings, good to prime, \$15 to \$16; choice heavy, \$15 to \$15.50; best handy, \$13.50 to \$14; fair to good, \$12.50 to \$13; light and common, \$9 to \$10.

Cows and Heifers.—Heavy heifers, \$12 to \$13; best butchering heifers, \$11.50 to \$12.50; good butchering heifers, \$10.50 to \$11; fair butchering heifers, \$8 to \$9.50; light, common \$7 to \$8; very fancy fat cows, \$10 to \$10.50; best heavy fat cows, \$9 to \$9.50; medium to good, \$8 to \$8.50; cutters, \$7.50 to \$8; common, good, \$6 to \$8.

Stockers and Feeders.—Best heifers, \$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.

Bulls.—Best heavy, \$9.50 to \$10; good butchering, \$8.50 to \$9; sausage, \$7.50 to \$8; light bulls, \$6 to \$7.50.

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

Hogs.—Market was a little erratic last week. Monday's trade was steady to fifteen cents higher than the previous week's close, heavies selling at \$16 and \$16.50, light hogs landed mostly at \$16.75, with several decks \$16.85 and \$16.90, and general price for pigs was \$15.25. Tuesday's trade was steady to fifteen cents lower; Wednesday's market was steady to a dime higher than Tuesday; Thursday prices were still higher, top being \$17.15, with bulk selling at \$17, and Friday light hogs were stronger, while slow trade prevailed on heavies. Latter kinds ranged from \$16 to \$16.75, handier grades brought from \$17 to \$17.35, and pigs moved at \$15.50. Roughs brought around \$13 and stags \$8 to \$9.50. Receipts for the week were 16,500 head, being against 19,028 head for the week before, and 12,400 head for the same week a year ago.

Sheep and Lambs.—Receipts were very light again last week, grand total being 3,800 head, as compared with 4,891 head for the week previous, and 2,200 head for the same week a year ago. Prices the first four days were steady, best spring lambs selling at \$16, best yearlings \$12 to \$12.50, few fancy a little more, and top ewes, which made up most of the sheep receipts ranged from \$7 to \$7.50. Friday prices, both on sheep and lambs, were a half dollar higher, best springers selling from \$16 to \$16.50, with culls \$13.75 down, best yearlings were quoted from \$12.50 to \$13, top wether sheep were ranged from \$8.50 to \$9, ewes on the tippy order sold from \$7.50 to \$8, and cull sheep ranged from \$2 to \$5.

Calves.—Market last week showed improvement as the week advanced. Monday top veals sold at \$15.50, with culls \$13 down; Tuesday best lots brought \$16; Wednesday top was \$16.50; Thursday the bulk sold at \$17, and Friday best natives reached \$18, with culls ranging downward from \$14. Close to twenty decks of Canadian calves were here the past week, and as a rule they sold fifty cents to a dollar under the natives. The week's receipts were 5,900 head, being against 6,683 head for the week before, and 4,150 head for the same week a year ago.

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., \$1.27; No. 3 C. W., \$1.26; extra No. 1 feed, \$1.26; No. 1 feed, \$1.23; No. 2 feed, \$1.22.

Manitoba Barley (in store, Ft. William).—No. 3 C. W., \$1.73; No. 4 C. W., \$1.49.

American Corn (track, Toronto, prompt shipment).—No. 3 yellow, \$2.30, nominal.

Ontario Oats (according to freights outside).—No. 3 white, nominal.

Ontario Wheat (f. o. b. shipping points, according to freights).—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.

Peas (according to freights outside).—No. 2, nominal.

Barley (according to freights outside).—Malting, \$1.84 to \$1.86.

Buckwheat (according to freights outside).—No. 2, nominal.

Rye (according to freights outside).—No. 3, \$2.20 to \$2.25.

Manitoba Flour.—Government standard, \$14.85, Toronto.

Ontario Flour (in jute bags, prompt shipment).—Government standard, \$12.90, nominal, Montreal; nominal, Toronto.

Milled near lots, delivered Montreal freights, bags included.—Bran, per ton, \$5.2; shorts, per ton, \$6.1; good feed flour, per bag, \$3.75 to \$4.

Hay (track, Toronto).—No. 1, per ton, \$3.1; mixed, per ton, \$2.7.

Straw (track, Toronto).—Car lots, per ton, \$15 to \$16.

Hides and Wool.

Hides f. o. b. country points. Best 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, \$1.25 to \$2; yearling lambs, 75c. to \$1; house hair, farmers' stock, 35c.

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, 9c. to 10c.; country solids in barrels, No. 1, 8c. to 9c.; cakes No. 1, 13c. to 14c.

Wool.—Unwashed, coarse, 16c.; medium, 20c.; fine, 26c.

Farm Produce.

Dealers in provisions on the wholesale market report trade as being steady to firm on most lines. Butter being steady at 58c. to 61c. for fresh-made creamery pound prints, and 49c. to 50c. per lb. for best dairy.

Eggs were firm, No. 1's selling at 55c. to 56c., and selects at 57c. to 58c.

Cheese, pure lard and shortening were all steady at unchanged quotations, while smoked meats were slightly higher.

Poultry is an uneven trade with the best demand for fat hens and broilers.

Wholesale Quotations.

Butter.—Choice creamery, lb. prints, 58c. to 61c.; medium creamery, 57c.; best dairy, 49c. to 50c.; dairy, medium, 46c. to 48c.; dairy, bakers, 36c. to 38c.; oleomargarine, 34c. to 38c.

Eggs.—No. 1's, 55c. to 56c.; selects, 57c. to 58c.

Cheese.—New Large, 32c. to 33c.; twins, 32 $\frac{1}{2}$ c. to 33 $\frac{1}{2}$ c.; stilton, 34c. to 35c.; old large, 34c. to 35c.

Comb Honey.—Choice, 16 oz., \$6 to \$6.50 per dozen; 12 oz., \$4.50 to \$5 per dozen; seconds and dark comb, \$3 to \$3.25. Bulk, 5's, 27c. to 28c.; 10's, 26c. to 27c.; 20's, 25 $\frac{1}{2}$ c. to 26c. per lb.

New Maple Syrup.—Imperial gallons, \$3.25 to \$3.50.

Poultry Prices (per lb., alive).—Old hens, over 6 lbs. each, 32c.; old hens, over 5 lbs. each, 30c.; old hens, 3 $\frac{1}{2}$ to 5 lbs. each, 28c.; old roosters over 5 lbs. each, 22c.; broilers, 2 to 3 lbs. each, 40c.; choice ducklings, over 4 lbs., 40c.

Wholesale Fruits and Vegetables.

Canadian fruits and vegetables came in quite freely during the past week, and though prices on the whole kept pretty firm on fruits, they were down some days and up the next. Blueberries and raspberries came in for the first time this season and brought high prices.

Vegetables had a generally lower tendency, particularly cabbage, which came in very freely. Canadian new potatoes making their first appearance on Thursday.

Blueberries.—\$3.50 to \$4.50 per 11-qt. basket.

Cherries.—Sours, 50c. to \$1 per 6 qts., and \$1 to \$1.50 per 11 qts; sweets, 50c. to \$1.75 per 6 qts., and \$1.25 to \$2.50 per 11 qts.

Currants.—Red, 20c. per box; \$1.50 per 6 qts.

Gooseberries.—\$1 to \$1.50 per 6 qts.; \$1.50 to \$2.50 per 11 qts.; 12c. to 15c. per box.

Raspberries.—30c. to 50c. per box.

Strawberries.—14c. to 25c. per box.

Tomatoes.—Hot-house No. 1's, 25c. to 30c. per lb.; outside-grown, No. 1's, \$3.25 to \$3.50 per 11 qts.; No. 2's, \$2.25 to \$2.50 per 11 qts.

Beans.—\$1.50 to \$1.75 per 11 qts.

Beets.—30c. to 50c. per doz. bunches.

Cabbage.—\$5 to \$6 per crate, \$2.50 to \$2.75 per bushel hamper.

Carrots.—40c. to 50c. per doz. bunches.

Canflower.—\$2.50 to \$3.25 per doz.

Lettuce.—Head, 40c. to 75c. per doz.

Peas.—Green, 90c. to \$1.25 per 11-qt. basket.

Peppers, green, \$1.50 to \$2.25 per 11-qt. basket.

Potatoes.—New, \$1.50 to \$1.75 per 11-qt. basket.

Turnips. White, 30c. to 40c. per doz. bunches.

Cheese Markets.

The United Dairyman Cooperative sold 2,464 boxes of cheese at their last Friday auction. There was a good demand for colored cheese, but a poor demand for white. Numerous special whites sold at 25 cents, and one colored sold for 29 cents. The white at 28 $\frac{1}{2}$ cents, No. 2 white, 27 cents, and No. 3 white, 26 cents. On Saturday's local market, 98 boxes of white at 25 cents, and 233 boxes of colored at 28 cents. The white sold for 28 $\frac{1}{2}$ cents, and \$1.05 per lb. sold at 27 $\frac{1}{2}$ cents. At London, 27 $\frac{1}{2}$ to 28 $\frac{1}{2}$ cents was bid. In sales,

Monday's Live Stock Market.

(Dominion Markets Service.)

Toronto, July 12. Cattle.—Receipts, 1,767. The market opened active in choice and good-quality butcher cattle with prices 25 to 50 cents stronger. Fourteen good steers, averaging 1,250 lbs., sold for 17 cents; 19 steers, averaging 1,180 lbs., sold for 15 $\frac{1}{2}$ cents; 25 light butchers, averaging 995 lbs., sold at 15 cents. Good steers sold generally from \$14.50 to \$15.50; common classes held steady. There was a fair demand for good feeders at steady prices. Quotations: Heavy beef steers, \$14 to \$15.75; butcher steers, choice, \$15.50 to \$15.25; good, \$12 to \$14.25; medium, \$10 to \$12; common, \$8.50 to \$10. Butcher heifers, choice, \$13.50 to \$15; medium, \$10.25 to \$13.25; common, \$8 to \$10. Butcher cows, choice, \$10.25 to \$12.50; medium, \$8 to \$10; canners and cutters, \$3.50 to \$6. Butcher bulls, good, \$10 to \$12; common, \$7.50 to \$9.50. Feeding steers, good, \$10 to \$11.50; fair, \$8.75 to \$10.50. Stockers, good, \$8.50 to \$10.50; fair, \$6.50 to \$8.50. Calves. Receipts, 274. The market in good veal was up 50 cents, but common was slow at steady prices. Choice sold at \$14.50 to \$16.50; medium, \$11.50 to \$14; common, \$8 to \$10. Milch cows sold for \$120 to \$150.

Sheep. Receipts, 1,322. The sheep and lamb market was steady; tops in yearlings, 12 cents; lambs, 17 cents. Ewes sold for \$6 to \$8; lambs, \$15.50 to \$17.

Hogs. Receipts, 2,281. The hog market was steady to weaker, bidding in some cases being 50 cents lower. On a fed-and-watered basis, selects sold for \$20.25; lights, \$18.25; heavies, \$19.25; sows, \$15.25 to \$17.25.

Montreal, July 12. Cattle.—Receipts, 1,205. Trading in butchers' cattle fairly good. Three or four loads steers weighing around 1,000 pounds per steer brought \$14.50. Straight loads of good cows brought \$11.50; good young cows in small lots brought \$12 to \$12.50. There were only three or four good bulls, and the price held around \$11. Common cattle were slow selling from \$5 for light bulls to \$9 for mixed lots of light heifers. Quotations: Butchers' steers, good, \$12.50 to \$14.50; mediums, \$10.50 to \$12; common, \$8 to \$10. Butcher heifers, choice, \$12 to \$14; mediums, \$9.50 to \$11.50; common, \$6 to \$9. Butcher cows, choice, \$10 to \$12; medium, \$6 to \$9; canners, \$3 to \$4.50; cutters, \$4.50 to \$5.50.

Calves.—Receipts, 1,381. A few choice lots of calves brought up to \$13.50, and packers were bidding up to \$12 for fairly good lots. Quotations: Good veals, \$11 to \$12; medium, \$6 to \$10; grass, \$6 to \$8.

Sheep.—Receipts, 1,317. A number of the smaller lots of lambs brought \$15.50 and one lot \$16. The most general price for good lambs was \$14 to \$15; common light lambs, \$12 to \$14.

Ewes sold at \$6 to \$9; lambs, good, \$14 to \$15; common, \$12 to \$14.

Hogs.—Receipts, 2,002. Select hogs sold up to \$21 off cars; mixed to \$18 and \$20, according to percentage of sows and roughs. Quotations: Off-car weights, selects, \$20.50 to \$21; sows, \$16.50 to \$17.

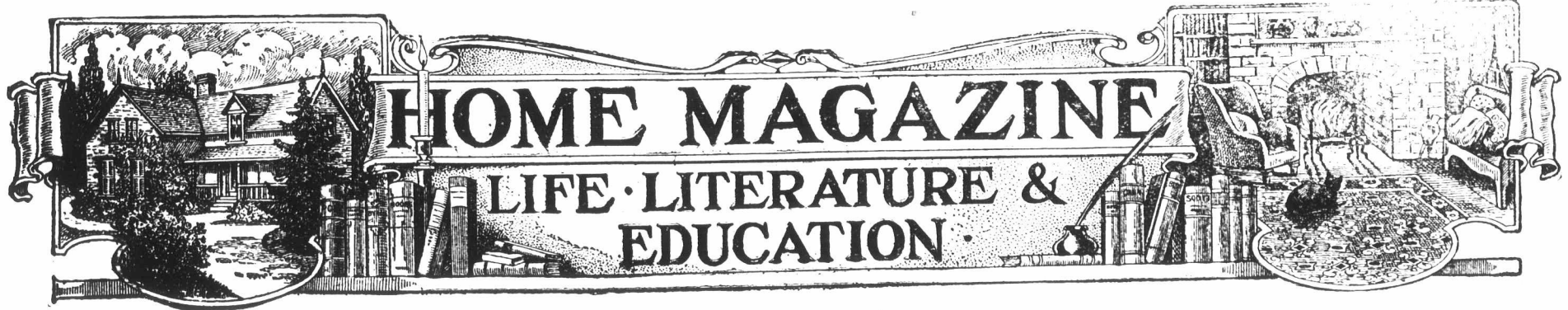
Buffalo, July 12. Cattle.—Receipts, 3,000. The market a quarter higher on choice grades, with common kinds holding steady. Best native steers sold at \$16.75. The top for best Canadians was 15 cents.

Hogs. Receipts, 6,400. Mediums and heavies sold at \$16 to \$17 per cwt; lights, \$17.25 to \$17.35.

Sheep and Lambs. Receipts, 1,400. Top lambs sold for \$16.50 to \$17; best ewes went at \$7.50 to \$8. There were 2,000 calves on the market, the tops selling at \$17.50.

Victory Bonds.

Following were the values of Victory Bonds on the Toronto market, Saturday, July 10: Victory Bonds maturing 1922, 98 to 99; Victory Bonds maturing 1923, 98 to 99; Victory Bonds maturing 1927, 98 $\frac{1}{2}$ to 99 $\frac{1}{2}$; Victory Bonds maturing 1933, 98 $\frac{1}{2}$ to 99 $\frac{1}{2}$; Victory Bonds maturing 1937, 100 to 101.



The Things Worth While.

Some'times I get t' thinkin'
An' it kind o' seems to me
Th' things worth while in this ol' world
Jest simmers down t' three.

A lovin' heart's th' first thing,
An' th' sweetest part o' life
Is when you come at end o' day
To kiddies, home, an' wife.

Th' appetite fer hard work
An' fer trudging t' o' rds th' goal—
That's second in my little plan
Fer happiness o' soul.

An' last a smilin' count'nance
Jest to chase away the blues
An' paint on other peoples' souls
Them shinin' rainbow hues.

If you'd make life worth livin'
Try these big things worth while;
They're three (I'll sum 'em up ag'in)
Jest love an' work an' smile.

Do They?

BY "PUBLIC'S."

"Do nine farmers out of ten think more about crops and live stock than about children?"

That is a question often asked by people who know "the country" only superficially.

True, appearances condemn the farmer. His talk is, chiefly, of crops and cattle. Why not?—They make up the life-work that absorbs every minute of his working hours,—and his working hours are long. Quite often he talks politics, but very rarely education and child welfare, and all the other subjects that group themselves about the child.

But down deep in his heart—where the sacred things are—he is thinking, at least, of his own children. Their welfare is really the mainspring of all that he does. For them he toils early and late, and finds the burden light—because it is for them.

At the same time, may it not be true that, as someone has suggested, most men, off the farm as well as on it, make a great mistake or two in regard to their children?

In the first place, how many of them turn the whole care and training of the children over to "the missus"?—feeling, evidently, that they have quite enough to do if they earn the money to keep things going. Nip and tuck it takes them, too, to do that, it must be admitted, and all honor to them!

But "the missus" has plenty of affairs of her own to keep her busy,—meals to get, and the house to keep clean, and Johnnie's and Mary's clothes to keep in order, besides, perhaps, dairying, and gardening, and chicken-raising, and what-not.—Not much time left to devote to the education and life-training of Johnny and Mary!

Moreover the township council and the county council are like minded with the fathers and mothers in the homes. They, too, have affairs enough of their own—"Roads, bridges, and Houses of Refuge."

—And so, between one neglect and another the children, so far as their education and general training go, are left pretty much to the teacher. What sort of "job" she makes of them depends to a great extent, upon the sort of person she happens to be,—if, indeed, she stays long enough to leave any mark whatever; in many sections a new teacher comes every year.

And so, in passing: Is not all this something to be considered if a new teacher is to be engaged for the on-coming year?

—But is it fair that the whole training of Johnny and Mary should be left to

the teacher? Is it? Is it fair to the children or to the teacher?

After all, few people take into account the value of incidental teaching—and that is a sort of teaching that any father or mother who knows more about anything than the child does, can very well carry out. The writer knows a woman who has for some time been trying to teach her little daughter in this way, and it is astounding to see how much the little mite of six already knows and how alert her little mind is.

Then, there is the boy. Might not any farmer find interest, an absorbing interest, in watching the psychological development of that boy of his, seeing to it that he has the best chance educationally that can be given him (brought right home to him in the home school), and the most uplifting influences?

Would there be no interest in teaching the lad, naturally and incidentally, somewhat in this fashion?

"Bobby, why am I cultivating this corn?"

"Don't know," says Bobby.

"Hoots, lad! Use your think-apparatus!"

"Maybe to keep down the weeds," hazards Bobby.

"Not so bad—but there isn't a sign of a weed."—Whereupon is afforded the chance for a lesson on mulches, and capillary attraction, and the value of keeping moisture about the roots.

Just so may many incidental lessons in every branch of farming, in manners, good principles, honor, the art of thinking, and a thousand other things be given:

for the best chance he can give to that child—for health of body and progress of mind,—not only for the sake of the child, but for the sake of the nation and the world.

Your Health.

BY "MEDICUS."

Questions.

"ANNE," York Co., Ont.—"Dear Medicus": Your interesting articles in the "Advocate" I read and look for every week. Hence a few questions:

1. How is protein milk made?
2. Would oatmeal be better still if cooked with milk? Is rolled oats as good as the round oatmeal?
3. Is meat as necessary in the summer as in the colder weather?
4. Is bacon good for children?
5. What gives children colds? My baby will never stay five minutes covered, even in zero weather. She is very subject to colds. I thought it was through being uncovered at nights. She had diarrhoea last summer very bad. When she gets cold even now it upsets her digestion.

Ans.—*Protein Milk*.—A quart of certified raw milk is taken (certified milk is milk that is extra clean—with a low bacterial count); two teaspoonfuls of essence of pepsin is added. Or you can use a junket tablet instead. Warm to a temperature of 140 degrees,—use your ordinary milk thermometer. Keep at this temperature for ten minutes, as too great a heat will cause the curd to become tough. Then let it stand at room temperature for half an hour. The curd

is then separated from the whey and placed in a cheesecloth bag and allowed to drip over night (best in a refrigerator). The curd is then worked through a fine sieve (36 meshes to the inch). I have used an ordinary river. Then add a pint of fresh buttermilk (not too sour) and a pint of water; or you can instead use a quart of water. To every quart add one grain of saccharin to sweeten it and make it more palatable for the baby. You can buy one-grain tablets from the druggist and crush one down to a powder. When using, the feeding must be warmed only slightly so as not to curdle the milk.

There is a powder you can buy at the drug-store now—made by drying the curd and powdering it. Your doctor can tell you all about the preparation of it.

2. There is no advantage as far as I know in cooking the oatmeal with milk. Of course, the milk would be sterilized in the cooking, and that may be an advantage, especially if young children are eating the milk and porridge. The other week I visited a cousin in Norfolk Co., who was lamenting the loss of his herd of Jerseys. They were apparently well, coat sleek and glossy, appetite normal, but when tested with tuberculosis they were condemned. After they killed, the veterinary opened the chest and found the lungs "just riddled with tuberculosis." The mother was worrying about her three children, fearing they might develop tuberculosis, because she had never pasteurized the milk that the children drank. So the only advantage in cooking the oatmeal with the milk would be that the milk would be sterilized.

It is very difficult to get the round oatmeal in this country. The rolled oats are just as nutritious. You must be Scotch, because in Scotland the round or granulated oatmeal is used almost exclusively.

3. Meat is as necessary in the summer as in the winter. We need more fat in the colder weather, and very often we get a large proportion of our fat when we eat meat. I think it is customary in the country to eat more meat (and that usually means more fat) in the winter than in the summer. The Eskimo lives on blubber nearly all the year round. It is cold up at his home most of the time, and he needs the fat.

4. Bacon is splendid for children, especially when it is fried crisp. It is almost all protein then, with only a little fat.

5. What causes a cold? Well, cold doesn't cause a cold. You have to get the bug. In other words, a cold is caused by an infection, a germ. You can't get consumption without the bug. You can't catch malaria, no matter how hard you try, because there are no malaria organisms in your neighborhood. Neither can you get yellow fever, leprosy, bubonic plague. But you can get tuberculosis, pneumonia, bronchitis, etc., because those germs are being scattered broadcast and we get them into the mouth or nose. (Keep your hands out of your mouth, and be sure to wash your hands before you eat.)

You can understand how chilling the body does not necessarily give you a cold. You have to have the bug. People have more colds in cold weather because they go to concerts in winter time, to church and to shows, and expose themselves to catching the germs from the other fellow (often a mouth spray). Our boys who were at Salisbury Plains or lived in Flanders mud did not have a cold every day, and they were often soaked to the hide day after day. If exposure to cold, say after perspiring freely, for example after dancing, caused cold, why all our young girls would be dead long before this. Or walk down main street in zero weather and study the low-necked dresses. . . . No, "Anne," cold doesn't cause colds. You have to have the bug. I will not deny sitting in a draught may cause your head to be "stuffed up." That is not a real cold; it is a vaso motor affair that passes off in 12 to 24 hours at the longest. Adenoids is a common cause of colds in the head in children. It is very likely that your babe has not been fed properly—and now suffers from "spasmodic"—that is a big word that means that your child is liable to have colds, croup, etc. If you will tell me what food you are giving, it is possible we can advise a diet that will stop your babe from catching cold so readily.



Sketch Model for the War Memorial to be Erected by the City of Stratford, Ont.

The design, by Mr. Walter S. Allward, of Toronto, is to be carried out in granite and bronze. The total width will be 18 feet and the height 16, the bronze figures being 8 feet high. The higher figure represents the spiritual man, the figure going down in defeat represents strife disarmed, the group showing the supremacy of right over brute force. On the side bases will be inscribed the names of Stratford's fallen heroes.

and they may prove to be the most powerful lessons of all in developing Bobby and getting him ready for an effective life.

Surely it's a cad of a father who could fail to be interested in helping on such education of his own flesh and blood!—And what a perverted taste he must have if he can possibly be more interested in a bawling calf, or a grunting pig, or a bin of grain, than in the bright little laddie with inquiring eyes.

A nation's best asset is its children. The man who has a child is responsible

is then separated from the whey and placed in a cheesecloth bag and allowed to drip over night (best in a refrigerator). The curd is then worked through a fine sieve (36 meshes to the inch). I have used an ordinary river. Then add a pint of fresh buttermilk (not too sour) and a pint of water; or you can instead use a quart of water. To every quart add one grain of saccharin to sweeten it and make it more palatable for the baby. You can buy one-grain tablets from the druggist and crush one down to a powder. When using, the feeding must be warmed only slightly so as not to curdle the milk.

FOUNDED 1866

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Cramps.

"*Enquirer.*"—I have cramps in my feet and legs at night. I often have to get out of bed before I can get relief. Sometimes I am bothered in the day. I am a healthy woman past middle life. I am a very busy woman (being the house-keeper).

Answer.—Cramps in the feet and legs are usually associated with hardening of the arteries or Bright's Disease—arterio sclerosis. It is important that you should have your family doctor give you a careful examination, especially of the urine and blood pressure. Sometimes a dilated stomach or an irritable nervous system may cause cramps. You will get some relief by taking a glass of hot milk on going to bed. A hot sponge bath, too, will make you sleep better and quiet your nervous system. Ten grains of the bromide of potash is highly recommended by some, and is well worth trying. Take the medicine just before going to bed. For the treatment of high blood pressure see the article in the June 3rd issue of this paper.

Health Slogan.

Swat the fly before he gives you typhoid fever.

The Children's Poem.**On Getting Up Early.**

I love to wake up early on a shining summer day,
When all the grown-up folks are still asleep;
And—though I really do not know what Nurse or Mother'd say—
I tiptoe to the window just to peep.

I love to lie in bed and watch the sun come creeping in,
And hear the birdies wake up, one by one;
And I quite agree with Granny when she says it is a sin
To get up late, for half your day is done.

Hope's Quiet Hour.**Listen!**

He that hath an ear, let him hear what the spirit saith unto the churches.
—Rev. II: 7, 11, 17, 29 etc.

Jesus stand among us
In Thy risen power,
Let this time of worship
Be an hallowed hour.
Breathe the Holy spirit
Into every heart,
Bid the fears and sorrows
From each soul depart.
Thus with quickened footsteps
We pursue our way,
Watching for the dawning
Of the eternal day.
—Rev. Wm. Pennefather.

I have just been reading in the paper an account of the Hickson "healing mission." Those who saw the "crowds of afflicted people hopefully placing themselves where Mr. Hickson could lay his hands upon them, must have wondered, I think, is their faith centered in Mr. Hickson?—who has so earnestly explained that he is nothing but a channel for God's power, and that God only can heal (whether through doctors or medicines or any other means). When I read of those who were bitterly disappointed because they had not been able to obtain cards of admission, I wondered still more. Can the want of a card bar the way into the consulting-room of the Great Physician? If He can use Mr. Hickson, can He not use other people and other means? Christ healed by His own Divine power, and He still walks (invisibly) among us. His followers have no power of their own. Even SS. Peter and John could only say to the lame man: "In the name of Jesus of Nazareth rise up and walk."

Once when a sick woman pressed through the crowd to touch the garment of the Great Healer, He perceived in Himself that the power proceeding from Him had gone forth (S. Mark V, 30—R. V.) He still knows when a hand is stretched out in humble faith to touch Him, and power still proceeds from Him. No

want of a card, no distance from an earthly healer, can shut out from His presence and blessing any who are willing to place themselves unreservedly in His hands.

It is natural enough to say, like the children:

"I wish that His hands had been placed on my head,
That His arm had been thrown around me."

and yet, if our faith is a reality, we know that neither time nor space can separate us from Him Who is closer than breathing, nearer than hands and feet." Instead of imagining that you are showing faith if you are lamenting because you could not be one of the people on whom Mr. Hickson laid his hands in Toronto during the healing mission, lift up your heart in thankful joy because the Master of Mr. Hickson is close beside you in all His power and love. You can say, with St. Peter: "Whom having not seen, ye love; in whom, though now ye see Him not, yet believing, ye rejoice with joy unspeakable."

"I see Thee not, I hear Thee not,
Yet art Thou oft with me;
And earth hath ne'er so dear a spot
As where I meet with Thee.
Yet, though I have not seen, and still
Must rest in faith alone;
I love Thee, dearest Lord, and will,
Unseen but not unknown."

Jesus is still the Word of God, He is speaking to us today as certainly as He spoke to friends and foes long ago in Palestine.

It was a message from Jesus Christ, the Lord of the seven churches in Asia, which St. John faithfully delivered long ago. And each of the seven messages ends with this command to us: "He that hath an ear, let him hear what the spirit saith unto the churches." The Bible is the Word of God. In it we read what the Spirit said to the churches during various generations. But God is our Father, and a father does not give up communication with his children, and expect them to think only of the words he spoke to them in their early years. A father who loves his children speaks to them often—in praise, rebuke, counsel and everyday communion. We must study the Bible to learn what the Spirit has said in past days to the churches, but we must not refuse to listen to what He saith to the churches today. We must listen to our Father as well as speak to Him. We must keep silence before our Lord, as Mary did, or we shall miss many things He wants to tell us. God spoke directly to the child Samuel and He still speaks directly to listening, obedient, humble souls.

When Daniel needed special knowledge, he and his three friends asked God to reveal the secret of Nebuchadnezzar's forgotten dream. When the secret was revealed in a right vision, Daniel gave thanks to Him Who revealeth the deep and secret things.

In these scientific days men, in such a case, would talk learnedly about telepathy, and would probably say that Daniel,—with his mind concentrated in the forgotten dream of the king,—was able in his sleep to get into telepathic communication with Nebuchadnezzar's sub-consciousness. The dream was not really forgotten, of course, but only mislaid. The king remembered it when Daniel described the image which he had seen, and was amazed to find that God could reveal the secret. He may work through telepathy and get into communication with the sub-consciousness of men in a way recognized by modern science. We can't always understand how the Spirit of God speaks to the spirit of men, but the important thing is that He does speak and that it is our duty and privilege to listen to what He is saying to us.

When a blind man was healed by our Lord the religious leaders of the time felt sure they were showing reverent faith when they said: "We know that God spake unto Moses: as for this man, we know not whence he is." They put their faith in a messenger of God, who had spoken with authority hundreds of years previously; but, when the Living Word of God sounded in their midst, they refused to listen. Leaders of the Christian Church have often acted in like fashion, but now they are taking a more teachable attitude. Like Moses—the great leader

who was also a learner—they are saying to the people: "Stand still, and I will hear what the Lord will command concerning you." It was then that the Lord spake unto Moses.

New problems are pressing on the nations in these days of unrest. Instead of giving way to gloomy forebodings, let us try to listen to the still small Voice, earnestly desiring to hear what the Spirit's special message to our generation really is. As God ruled His people Israel,—using the many sore judgments of war, pestilence and famine, as well as the ease and plenty of a land flowing with milk and honey, to draw their hearts away from earthly idols nearer to Himself,—so the kingdoms of the world are still in His hand. If He rules them with a rod of iron it is only because our headstrong selfishness makes stern measures a necessity.

The Master had yet many things to say unto His disciples when He passed out of their sight, but He did not intend to leave those things unsaid. They should bear them as they became "able to bear them." They should be promoted from class to class in the Great School, learning here a little and there a little as children increase in wisdom and knowledge. "I have yet many things to say unto you," He said, "How be it when He, the Spirit of truth, is come, He will guide you into all truth: for He shall not speak of Himself; but whatsoever He shall hear, that shall He speak."

And so it comes to pass that each message of Christ to the churches ends with the reminder that we must be on the alert, lest we miss the Word which the Spirit is even now speaking. We look sadly at a world, torn by strife between capital and labor. Nation is armed to the teeth against nation. The Christian Church is distracted by internal quarrels. There is one remedy for all these evils. Let us listen to our King's order and try to obey Him in sincerity—"A new commandment I give unto you, That ye love one another."

We are, as yet, very far from that attitude—but at least we want to get nearer together. When I was young we deliberately magnified our differences, now we are trying to find points of contact. The Church is alive,—the Life of Christ thrills through His mystical body,—and life does not stand still. Someone has said: "It is the very condition of progress to be shaken out of grooves, for the difference between a groove and a grave is only a matter of depth."

God is always the "I AM"—abreast of each age and Comrade of each soldier. He is teaching us, here a little and there a little, as we are able to bear it.

"Who follows Him hath peerless Guide,
Who fights this fight fights by His side."
DORA FARNCOMB.

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.

I AM sure that a great many of you who love beautiful and inspiring things, including works of Art as well as the beauties of Nature, were much interested in an item of news that has been appearing recently in the newspaper, viz., that the Toronto sculptor, Walter S. Allward, is completing two pieces of statuary—one for Stratford, Ont., and the other for Peterboro, Ont.,—which are to be set up as memorials to the soldiers of Perth and Peterboro Counties who fell in France and Flanders. Both of these monuments express the same idea, but worked out in a different way—the triumph of Right over mere Might, of the Spiritual over Brute Force.

A year or so a Professor from the United States, who came to this city in connection with the Western University lecture course, gave a lecture on "Pergamos." Now I suppose some of you recognize the word right away, while others have a vague idea of having "heard it somewhere." The vague idea may easily be clarified. First, read the allusions in the first chapter of the Book of Revelation, then, if there are maps in your Bible, turn to one that traces the journeyings of St. Paul. You will there find Pergamos marked as a city in Asia

Minor, not far from the eastern shore of the Egean (or Aegean) Sea. . . . Looking up the topographical reference, you may find the following, or something equivalent to it:

"Pergamos, the capital of Mysia, was at one time the seat of a powerful dynasty and a centre of great wealth and luxury, and at length of pagan profligacy."

If you have an Encyclopædia Britannica at hand you can learn much more, part of which is: That the city was founded by colonists from Arcadia, Greece, but was not of very much account until the time of Lysimachus, who deposited treasures in its fortress under the charge of a eunuch, Philetaerus, who finally rebelled and conquered, so that, in B. C. 283 Pergamos (or Pergamum) became the capital of a small principality. Eumenes, nephew of Philetaerus succeeded him, and he, in turn, was succeeded by Attalus who won a great battle over the Gauls, who then harassed even Eastern Europe, and assumed the title of king. About this time the influence of the Romans began to make itself felt in the East, so Attalus promptly allied himself with them, and under their protection became very prosperous, while his Grecian soul led him to make Pergamos a great centre of art. Thus it was that the "Pergamian School" of sculpture became famous then and for all time.

But Pergamos was pagan, and so its art was pagan in character, and the best art of its sculptors and architects found expression in the creation of a wonderful Acropolis erected in honor of the god Zeus, with a still more wonderful altar as its heart and gem. It was probably because of the fame of this marvellous edifice and the pilgrimages made to it by pagan worshippers, that the place became especially marked by the early Christians, to whom it became known as "Satan's throne," or "Satan's seat." With characteristic courage, however, those early followers of the Christ hesitated not even to dare Satan, as they considered, in his chief stronghold, and so Pergamos became the seat of one of the "Seven Churches."

In the 14th century the city passed into the hands of the Moslems, and finally, although the lower town continued to live, the ancient city fell into decay and became covered with the sands of the desert. . . . About 1878, however, the Berlin Museum sent men to excavate, and the diggers were finally rewarded by coming upon the Great Altar of Zeus itself. Piece by piece it was taken out and sent to Berlin, where restored and mounted, it now stands under a lofty protecting glass roof.

Some pictures of this wonderful altar are in the Encyclopædia Britannica and are before me as I write. The Professor whose lecture I heard had a great many more, which he showed by electric lantern. By these pictures one sees the great altar flanked by pillared wings and approached by a broad, noble flight of steps, the whole worked out in stone. Graceful as the pillars of the Parthenon are the rows of fluted columns that support the roofs of the main structure and the wings—how perfect was the art, how unerring the architecture of those old pagans! But perhaps even more interesting is the carved frieze that runs completely about the wall below. High above the heads of the approaching people, as they came up the hill to the altar, was the frieze, and when they looked up at it they saw a medley of figures—godlike heads and faces, rounded and muscular limbs, flowing draperies, uncouth crouching figures with terrible visages, coils of huge serpents, thrust of spear and gleam of armour! Here and there, too, might be seen a strange figure, part man, part beast, as though from a bestial nature a man was emerging or evolving. . . . The whole represented a conflict of the gods with the beasts, and everywhere the gods were rising, superb, from the fray, while the beasts were being crushed below.

"Profligate," no doubt, were many of the ancients who rioted in the old heathen city, and yet surely the souls were not entirely dead of those who planned the frieze of the Altar of Zeus! And surely, among all those who came up the hill at the call of the bell and the smoke of incense arising from that pagan temple, there must have been one who caught the lesson of the conflict between the gods and the beasts!

Now, down the ages, our own Canadian sculptor works out something of the same

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Don't Hesitate About Preserving This Year

JUST think how your folks will miss the fresh fruits next winter! Manufactured preserves will be unusually scarce and almost out of reach, and compared with their cost your home-made preserves will be a genuine economy.

A pound of sugar is enough for three jars of fruit. The increased cost of sugar really makes but a small difference on each jar you put up. On the other hand, the value of the jar of preserves is greater than ever before owing to the increased cost of other sorts of food. Remember that in preserving you get the value of the sugar twice, first as a preservative of your fruit and again as a delicious and nourishing food.

Last year very similar arguments were advanced against preserving, but those fortunate housewives who invested in neat rows of jars filled with a variety of fruits were well repaid for their foresight. The prudent housewife will again preserve as much fruit as her time and means permit.

For preserving the fine natural colour and flavour of Raspberries and all other fruits, buy LANTIC SUGAR in original packages.

2 and 5 lb. cartons
10, 20 and 100 lb. sacks

The "FINE" granulation which dissolves instantly in the hot syrup does away with the long cooking, and it is long cooking that fades fruit. On account also of its absolute purity and high sweetening power, LANTIC is the best sugar to use for all preserving.

FREE—BOOK OF PRESERVING LABELS. Send a Red Ball trademark cut from a bag or from a top panel of a carton, and we will mail you a book of assorted preserving labels, gummed and ready to attach to the jar.

ASK FOR LANTIC LIBRARY

The most complete collection of receipts ever published. Three separate books on Preserves, Cakes and Candies, and Desserts.

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MONTREAL



"The Seal of Purity"

idea in his memorial statues to the men who fell in the Great War, a sacrifice, if ever there was one, to their idea of Right.

Right against Brute Force—the vision in the mind's eye of the Canadian sculptor of to-day. . . . The conflict of the gods and the beasts, the vision of those sculptors of Pergamos. . . . The dialogue between Krishna and Arjuna—the Higher and Lower Selves—of the Bhagavad Gita. . . . The struggle between Right and Wrong in the lives of the human "folk" of to-day. . . . —Is the coincidence not worth a few minutes' thinking about?

JUNIA.

Worth Thinking Over.

"We have been too comfortable, too indulgent, many perhaps too selfish. And the stern hand of fate has scourged us to an elevation where we can see the great everlasting things that matter for a nation, the great peaks of honor, duty and patriotism, clad in glittering white, the great pinnacles of sacrifice pointing like a rugged finger to heaven."—*Rt. Hon. D. Lloyd George, Sept 19th, 1914.*

What Clothes?

For "Dardanella."
Since you are to make a prolonged stay in one or two large cities you will need much more clothes than if you were travelling straight through when "the least possible" would be a very good rule.

Leaving in September you will need chiefly fall clothes, yet you will have to take something summery along to have in case it should turn hot.

You will certainly need a good suit, also a long coat that will do for motoring and general wear—a Burberry, if you can afford it, if not, a tweed. Some sort of evening wrap also seems necessary, since you are to go to so many things in the evening. A pretty navy blue silk dress (crepe de chine or extra good Shantung) will be very useful for many occasions, and will always look dainty with a fresh collar. A pretty light-colored dress will be needed for evening parties, and probably you will find a fancy Georgette blouse, for theatre wear, etc., very useful. For outings and morning wear you will need a separate skirt or two and enough smocks and monkey-blouses to keep you going. If the weather is hot during the first part of your visit you will certainly need a white skirt, fine white gabardine or wash satin. . . . I'm afraid you will

think this a "dreadful" list, but since you are to be among "good dressers" who go out a great deal, it seems inevitable. Of course, you will have to add a kimono, and if you have a nice sweater coat take it along. A travelling hat and a larger hat, a pair of high walking shoes, Oxfords and pumps will complete the list. . . . White fox furs are lovely for dressy wear, but if you have not an extra set for knockabout use it would be better to choose a darker color—good fox, beaver or Hudson seal.

Her Fireless Cooker.

"I DIDN'T like my cooker at all, at first," said a woman who uses one constantly. "I had half a mind more than once to throw it into the back shed and leave it there. But I—well I stuck to it, and learned how to use it. Now I don't know how I could get along without it. I would give up almost anything else in my kitchen rather than it."

"Just what are the advantages?"

"Why, in the first place, it gives me so much time for other things. Early in the morning I prepare something for dinner and pop it in the cooker. Then I can spend almost until noon doing the

upstairs work, sewing and so on. The cooker never burns anything; no time is wasted looking at things to see how they are getting along. Why I can go to town, or to church, and when I come home there is a nice hot dinner waiting for us! . . . Another advantage is that the kitchen is so much cooler. And then you just can't imagine the saving on fuel! In these times of expensive coal and wood that means something."

"What all, do you cook in it?"

"Oh everything, really. You see I have a good one, with radiators in it. I've cooked all kinds of vegetables, made meat stews, roasted chicken, baked muffins and pie. It's fine for scalloped potatoes, and extra good for oatmeal porridge; oatmeal needs to be cooked so long, you know."

"Well I have a cooker and it balks half the time—simply won't cook," said a bride who is having troubles of her own in the culinary line.

"Maybe you don't heat your radiators enough," said the enthusiast. "I always test mine. I put a bit of manila paper on the radiator. If it browns instantly the stove is hot enough for roasting; if it browns in 30 seconds it is right for baking; and if it browns in 45 seconds it is ready for gingerbread, custard, fruit-

Preserving?
this year?

Save
Half your sugar

and half your trouble, too. There's one way to be sure of rich, mellow jams, jellies and marmalades.

Use $\frac{1}{2}$ sugar and $\frac{1}{2}$ LILY WHITE SYRUP

Just add an equal amount of LILY WHITE Syrup to the sugar and boil as usual. It blends with the sugar into a clear syrup that brings out the natural "fruity" flavor.

Jams never get tough or "candied," jellies are sure to jell with $\frac{1}{2}$ sugar and $\frac{1}{2}$ LILY WHITE Syrup.

Put up every jar of preserves you can this season, and do it better, more conveniently and economically with $\frac{1}{2}$ sugar and $\frac{1}{2}$ LILY WHITE Syrup.

FREE THE CANADA STARCH CO., LIMITED, MONTREAL

Best recipes for sure, easy results in preserving. Send for new booklet of unusual interest to housewives who want economical preserves, jams and jellies. Write to-day. The book is free.

"Premier Leader" STEEL RANGES



These Davidson Ranges have a body of heavy polished steel, protected by asbestos and hand-riveted with cone-headed rivets, cast iron tops, centres and covers ribbed.

A contact reservoir can be supplied to attach to either left or right end. Steel Persian closet at top is an extra convenience.

An exceptionally moderately-priced range of thoroughly reliable quality.

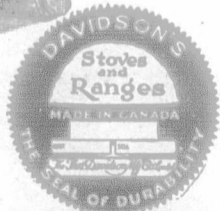
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DAVIDSON

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cake, or anything else that requires slow cooking."

"By the way," she went on, "I have a set of triple pans. I cook all sorts of things in them, in the one compartment, and the flavor never seems to mix, even when onions are in one of them."

"But how do you know when things are done?" asked one of the party in a perplexed way.

The enthusiast laughed. "Well it's a case in which you really have to go by recipe," she said, "you can't do any guess-work with a fireless cooker. I got a book with mine, and ever since I've been collecting recipes and pasting them in a book. Each recipe gives the proper time for cooking. I'll give you some of them. But be sure to have the cover of the cooker clamped tight so no steam or heat can escape, and be sure to take things out as soon as it is done if you want it to have the very best flavor. Always less liquid is used than when cooking on top of the stove."

Her Recipes.

Beef Stew.—Cut 1 lb. stewing beef into cubes and dredge well with flour which has been seasoned with pepper and salt. Melt 2 tablesp. fat in the container and in it brown, on top of the oil stove or range, 2 onions cut in slices, then the meat. Add 3 potatoes cut in bits, also 3 carrots cut in cubes, 2 teasp. salt and 1 level teasp. pepper. Add 2 cups boiling water. Let the stew boil for 5 minutes, then place at once in the cooker, using one radiator underneath which has been heated until the testing-paper browns in 30 seconds. Cook an hour and a half or a little longer.

Scalloped Potatoes.—Pare and slice 4 potatoes and arrange in a baking-dish in layers, sprinkling each layer with salt, pepper and either grated cheese or chopped onion. Pour on enough milk to nearly cover the potatoes. If cheese is used sprinkle some on top. Place in the cooker in rack, using two radiators heated until the testing-paper browns instantly. Bake at least one hour.

Rice.—Take 1 cup rice and wash until the water is clear. Add to it 4 cups water, 1 cup milk, $\frac{1}{2}$ teasp. salt, and bring to a rapid boil. Place in the cooker with one hot disk and cook one hour.

Baked Beans.—One qt. beans, $\frac{1}{2}$ cup New Orleans molasses, 2 teasp. salt, $\frac{1}{4}$ lb. salt pork, $\frac{1}{2}$ teasp. mustard. Soak the beans over night. In the morning put on the stove and bring to a boil. Pour off the water and put beans in an earthen bean-pot. Mix the molasses, salt and mustard with $\frac{1}{2}$ cup water and pour over the beans, lay the sliced salt pork over the top, and add boiling water to cover. Heat both disks until they will brown a little flour sprinkled on top immediately. Place the bean-pot in the rack with disks over and under, and bake all day. Before serving reheat and bake an extra hour in the oven of the stove. Even at that there is a great saving of fuel, as baked beans require several hours baking if the cooker is not used.

Oatmeal Porridge.—Cook as usual on top of stove until thick, then put in the cooker and heat over night.

Canning the July Vegetables.

FOLLOW the general directions for canning vegetables given in these pages in June 17th issue. A few extra suggestions will be found below.

Beet-tops, Spinach, Chard, Etc.—Blanch by dipping in boiling water for an instant, then give cold dip. Add no water; boil in the water that adheres after the cold-dip, or steam in colander for 15 minutes. Pack in jars very tightly. Sterilize in boiler for 2 hours.

Green Beans.—Blanch 5 to 10 minutes, cold-dip, pack in jars, fill up with hot salty water and sterilize 2 hours. Of course, the beans must be prepared as for the table before blanching.

Green Peas.—Shell and wash; blanch 5 to 10 minutes, cold-dip, pack in jars, fill with hot salty water and sterilize for 3 hours. One teaspoonful of salt to the quart of water will be sufficient. A teaspoonful of sugar also will improve the peas.

Young Beets.—Leave 3 or 4 inches of stem and all the root on the beets. Wash well, blanch for 5 minutes, then cold-dip. Remove stems and roots, scrape the skin where needed, and pack in jars. Fill up with salty water and sterilize $1\frac{1}{2}$ hours.

Instead of the salty water you may add a little vinegar, also a little sugar and a few cloves to the water.

Since all vegetables are likely to swell a little while sterilizing, fill the boiling water up only to within a quarter of an inch of the top. Always cool the product as rapidly as possible to prevent over-cooking. Speed all through the canning operation is very important, e. g., do not leave the product too long in the cold-dip; when taken out pack immediately in the jars and go on at once with the process.

July Cookery.

Raspberry Betty.—Butter a pudding dish and dot a tablesp. of butter over the bottom. Cover with a layer of bread-crumbs, then put on a layer of berries and sprinkle thickly with sugar. Repeat until the dish is full, having crumbs and butter on top. For a small pudding beat an egg and add to it a cup of rich milk. Pour this over and bake half an hour. Serve with sugar and cream.

Graham Pudding.—One cup butter, 1 cup milk, $\frac{1}{2}$ cup sweet milk, 1 egg, $1\frac{1}{2}$ cups Graham flour, $1\frac{1}{2}$ teasp. baking-powder, $\frac{1}{2}$ teasp. soda, 1 teasp. salt, 1 cup seeded raisins. Melt the butter, add the well-beaten egg, the molasses and the milk. Mix the dry ingredients and add to the liquid. Pour into small buttered cups, filling them two-thirds full, and steam. Serve with cream and sugar. You may dot with jelly, add a spoonful of jam, or serve with raw fruit.

Cherry Betty.—Two cups stoned and chopped cherries, 2 cups breadcrumbs, 2 tablespoons butter, $\frac{3}{4}$ cup sugar, some ground cloves and cinnamon. Butter a baking dish or casserole; put in a layer of cherries, sprinkle with sugar and then with spices; next put a layer of crumbs. Continue the layers until all is used, having crumbs on top. Dot with butter and sprinkle with sugar and spice. Cover and bake 45 minutes in a moderate oven. Uncover to brown, and serve warm with hard sauce.

Raspberry Pudding.—Two cups crushed berries, 2 cups boiling water, $\frac{1}{2}$ teasp. salt, 2 tablesp. lemon juice, $\frac{3}{4}$ cup sugar, 2 egg-whites, $\frac{1}{2}$ cup cornstarch. Mix together the berries, boiling water, sugar and salt. Stir in the cornstarch blended with $\frac{1}{2}$ cup additional cold water. Stir constantly until it boils and thickens, then place over hot water and cook for 30 minutes. Cool it slightly, add the lemon-juice, then fold in the egg-whites which have been beaten stiff. Put all in a mould which has been dipped in cold water. When cold and stiff turn out, cover thickly with whipped cream, sprinkle some fresh berries over, then some sugar, and serve at once.

A Few Good Simple Sandwiches.

Egg Sandwiches.—Boil eggs for half an hour. Do not drop in water to cool, as that toughens them. Let cool in the shells. When cold chop fine and mix with enough salad dressing to be quite moist. Have some crisp lettuce cut into shreds with the scissors. Spread thin bread with plenty of butter. Upon one of two matching slices spread a thick layer of the egg mixture. Cover with shredded lettuce, then place the top slice over and press together lightly.

Fish Sandwiches.—Prepare exactly as for egg sandwiches, using fish instead of egg.

Meat Sandwiches.—Put meat through a chopper, salt lightly and use as filling. The bread may be spread with mixed mustard, if liked.

Nut Sandwiches.—Put nuts through the chopper and prepare exactly as for egg sandwiches.

Cucumber Sandwiches.—Have the cucumbers very crisp and cold. Cut in slices and put on the bread, cover with a rather sharp salad dressing, then proceed as for egg sandwiches.

Gingerbread or Brown Bread Sandwiches.—Split the gingerbread, or cut the brown bread into thin slices. Spread thickly with butter, then with jam or marmalade, and press together.

Honey-and-Nut Sandwiches.—Mix 1 cup honey with 2 teaspoonfuls lemon juice, then stir in enough finely-chopped nut meats to make a stiff paste. Use as filling for buttered white or brown bread.

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Raising Perennials From Seed.

MANY flower lovers save expense by raising their own perennials from seed. July is a very good month for sowing, as sufficient time will be left for root-growth before snow falls. Among the flower seeds that may be sown at this time are arabis or rock cress, aconitum (blue), campanula (biennial), clove pinks, Oriental poppy, hollyhock, delphinium (larkspur), sweet William, pentstemon, Shasta daisy. Choose a shady place for sowing and keep the young plants moist. The seed should be sown thinly and afterwards transplanted when the second pair of leaves appears. Just before winter sets in protect by 3 or 4 inches of dry leaves securely held down by branches or old boards. A cold frame is still better.

The Windrow

A man who is very much interested in the "Be Kind to Animals" campaign, has a big red barn near a crack. He has had painted on it the words "Be Kind to Animals." "It will be seen by hundreds daily from the train," he says, "as people always look at my dogs and poultry when passing by." This man does not know how far his influence may reach.

The Boy Scouts of the United States have determined to exclude all trapping advertisements from their publications, because of the extremity of cruelty to animals caused by the practise of getting furs in this way. . . . Not long ago, at a large meeting composed of organizations and clubs of many sorts in Milwaukee, a new slogan was adopted. The slogan was "Leave It to the Scouts." It was agreed that if the Scouts live up to the rule of their manual nearly everything of importance to the next generation may safely be left to the Scouts.

The University of Utah is trying out a novel experiment this summer, nothing less than holding its summer school on top of the Wasatch mountains, 8,500 feet above sea level. The spot chosen is in a high mountain valley, and although the sides of the canyon are covered with a forest of pine and fir, a fifteen-minute climb from the valley brings one to ravines where the snow lies perpetually. Within a circle of ten miles across there are no less than seven mountain lakes. With the scenery, the cool, invigorating air, and the seclusion, the spot is believed to be ideal for summer study.

The London (Eng.) *Lancet* states that a method, by electricity, of rendering milk free from tuberculosis without raising the temperature higher than 63° or 64° has been perfected. By its use the keeping power of the milk is slightly increased while the taste and other qualities are not altered.

To those who assert that the League of Nations is, so far, futile, the champions of the League point to a number of achievements and ask only for time and support that others be accomplished. They enumerate the following results, already established: (1). The establishment of open diplomacy. (2). The appointment of a Permanent Advisory Commission for Military, Naval and Air Questions. This is regarded as the first real step towards the prevention of future wars. (3). The League is functioning to raise the world's labor standard, two international labor conferences already having taken place at its initiative. (4). The League is bringing the health authorities of the various countries into touch with one another, and into co-operation with the League of Red Cross Societies. (5). The League is administering the Sarre Valley and port of Dantzig.

A Swede was being examined in a case in a Minnesota town where the defendant was accused of breaking a plate-glass window with a large stone. He was pressed to tell how big the stone was but he could not explain. "Was it as big as my fist?" asked the nervous judge who had taken over the examination from the lawyers in the hope of getting some results. "It ban bigger," the Swede replied. "Was it as big as my two fists?" "It ban bigger." "Was it as big as my head?" "It ban about as long, but not so thick," replied the Swede, amid the laughter of the court.

A Story That Ends in a Row of Sweet Peas.

BY ISABEL BAYNE.

THE rain had fallen in torrents. The boulevards were sodden, and the pavement held dirty, treacherous little puddles. Not content with half-drowning the unlucky pedestrians, a dull drizzle still fell and chilled everyone to the marrow.

Careering through the streets on this bleary night, came the bulky figure of a woman, like a ship in dirty weather. Here she loomed distinct, as the glare of the shop or street lamp fell full upon her.

In front of a dismal-looking building, with a half-obliterated sign "Laundry" labelling its uninviting exterior, the woman paused. Not a solitary light shone here, nor any sign of human activity. A dirty, dilapidated, rat-infested place, whose only inhabitant was the woman at the door; at this moment the door was a barricaded door, nailed from top to bottom with boards. There stood the woman wringing her hands in half-choked words of protest.

Laying down her bundle she hurried to the policeman at the corner. "See," she said in clear, ringing, rich Scotch, "He has nailed up the door and I cannot get in. You must get a hammer and knock it down for me. Do hurry!"

"Madam, I cannot do that. It is his property, and I cannot lay a finger on it. Could you not go somewhere else for the night?"

"No! I have nowhere to go. No one wants me. I am wet to the skin. Can you not help me?"

"Well, I will see Langdon, and see what he will do. Wait a bit."

In the back of a tailor-shop, warm and brightly lighted, sat Langdon discussing various social matters with other gossips, and cracking ribald jokes as they sat, some on stools and some on the edge of the tables.

"I have given her notice fifty times," cried the irate Langdon, "and she's got to get out. I'm not going to have her there. She's just got to go."

"Well, she has no place, and you'll have to let her in to-night, poor creature; she's wet to the skin. I say, Langdon, what sort of cad are you?"

"Come, Langdon, come old boy, let the old lady in. Come, you're not as bad as that."—This from the gossips.

At length permission was granted; and the policeman having broken down the barricade lit matches to show the way up the dirty, rickety, wretched, broken stair.

Divesting herself of the cape she wore, she took a paper sack of charcoal and made a little fire at which she hung her dripping garments; with a hastily made cup of tea she sat before the tiny heat while tears rained down her face.

On her knees she poured out her heart, "Oh my Father I am all alone. I haven't a roof over my head. Thou ownest all the world. Surely there is a little corner for me. True, I have made mistakes. I have not been provident. I have been over-generous. I should have kept when I gave, but surely that is not a very great fault. I hope that Thou wilt help me." And that strong woman shook with sobs.

Through that town of seventeen thousand professedly Christian people that woman walked for days looking for lodgings, always to be gainsaid. She was eccentric, she was meddlesome, she didn't always have the rent, and a score of other excuses.

At length a woman whose daughter was a nurse took her to be company at night, and there she remained for a year.

"Well, Craigie's on the move again looking for lodgings."

"What's the matter now?"

"Wilson's have broken up house and the new people wouldn't keep her."

"Well, I tell you what I think. I think it's a perfect disgrace to the members of St. Andrew's Church that they don't provide a little house for Miss Craig. She can make her own living if she only had a lodging."

"Yes, but every one thinks she should go to the Refuge. The town did seem in a mood to help her one time, but what's everybody's business is nobody's business, and Mayor Rechman says, "It would only establish a precedent, and she had better go with the rest."

"Oh him and his precedent, as if he had anything to think with! Miss Craig is a different person from Sam Mulloy that never lived a sober day. She is an educated woman. She has gone to St.

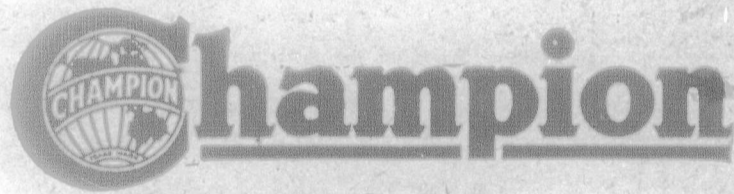


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Andrew's Church for years and years and never missed a Sunday. She helps all she can too. I know she isn't practical, but she is big in her views. I tell you there are half the elders in our church that are not her equal spiritually. She reads aloud delightfully, and she loves company. It's just stupid to send Miss Craig to the Refuge."

"Well, my dear Ethel, everything you say is true, but what can we do?" This was the conversation of two office girls who didn't even have the franchise.

Mrs. Amette sat in her cosy sitting-room when the telephone rang. In a moment she turned to her son a lad of fourteen. "Miss Craig wants to come here for the night, what shall I say?"

"Say no! That's what! What do we want with that old thing. Everybody laughs at her. You know when she once comes, you can't get rid of her."

Mrs. Amette, sweetly, "I am so sorry, Miss Craig, but I am expecting Miss Porter for the night, and I have just that extra bed. How are you getting along? Ah! I am very sorry! I hope you will soon be nicely settled."

Then Miss Craig tried the McGees and the Olivers, and the Shermans' but always the same result; at last poor, tired little Miss Wendall, a private teacher, gave up her bed, while her father raged.

This state of affairs lasted off and on six years, but everybody said, "Let her go to the Refuge, she's a nuisance." Could they have heard the prayers that God heard they would have been stricken in their hearts.

There lived in that same town a stenographer—a woman with strong, clear mind—much above the average in intelligence. She watched all these little dramas in and out the church with increasing disgust. The insipid, cheap, social phase, passing for religion, moved her to wonder what our covenanting ancestors would think of it all.

Then there came a time when she was called to other work, and other scenes, but she carried with her the memory of that solitary woman so valiantly fighting against the Refuge.

In Western boom days she had invested in lots in a town, and like others began to think the money lost. What was her surprise one day to receive a letter from a business man of that city who, wishing to have a branch confectionery across the river, offered her a thousand dollars for her lot.

"This is found money!" she said as she looked at the cheque—"and now what to do with it!"

There was the old house at home—badly in need of repair. Paint and verandahs would make it look very fine. She would like to do that. Then she had often thought she would like to have a little business of her own—a children's clothing store—and then she was sure the time had come for that apartment she had always so wished to have. There were twenty possibilities under that thousand dollars. The thought of the apartment brought up Miss Craig. How many times she had said to herself, "If I had the money I would help her!" Would it not be throwing money away, though? Miss Craig was improvident. Business men said she was wholly impractical. Then she tried to put herself in Miss Craig's place, and the Refuge looming before her. A well-bred woman, and fighting for her life without adequate weapons. She should help her. The thought grew to a conviction. The conviction to a determination, and that to a deed. The thought gave her a deep satisfaction. The other things must wait.

She thought of a Scotchman in that town—a lawyer—she knew he sympathized with Miss Craig, she had heard him take her part many times; and she knew he had paid her rent two years at least that no one knew about. She would write to him.

The sun was setting over the bay. The sky was flooded with a golden light that fell with a soft radiance over the freighters and barges in the channel. A rosy flush spread over the dingy, rear window of a business office, and threw into strong silhouette the man at the desk. Before him was spread the letter, but his eyes were looking far into the golden horizon beyond.

He read the letter once again: "I have come unexpectedly by this money, and I wish you to help me to secure some place

where Miss Craig can be housed and spared the Refuge. I am sending you four hundred dollars. I do so hope you can help me in this. It will give me much satisfaction to help her fight that seemingly hopeless battle. Your business position will show you how to do the best you can. Thanking you."

Yours sincerely,

Joan Andrews.

He folded the letter and put it in his breast pocket, turning again to the fading brilliance of the sky. A week later Joan got this letter.

"My Dear Miss Andrews:
"I cannot say how pleased I am to help you with this matter. It gives me keenest pleasure. I have this to propose. There is a small house belonging to the navigation company no longer in use. It could be cleaned, repaired and painted and placed on a lot I have near the Union Depot for \$700. I would like to add the other three hundred if that meets with your approval. I am sure Miss Craig would be all right there."

Sincerely yours,

John Dalrymple.

"As if anything could be better!" exclaimed Joan.

So it was arranged that Miss Craig would be finally settled with all her belongings in a neat, little cottage near the Union Depot. To be sure it had but two tiny rooms and a kitchen, but Miss Craig's gratitude was soulful.

"I wish you could tell me how I got this?" she said one day to John. "Couldn't you tell me anything? I do believe it was you, yourself that did it."

"Indeed, you are mistaken! I'll tell you one thing. It was a woman who planned it, and a woman you must thank for it. That's nothing new I suppose."

"Then the city didn't help me one bit, did they?"

"The city never gave you one cent, nor the church either. Rest assured of that!"

"Well, you tell that woman that if an old woman's prayers are worth anything, she shall have mine as long as I live."

"Dear Miss Andrews:

"The deed is done. Miss Craig is duly installed with all her household goods, including that museum of fancy boxes and crochet patterns she always carried about. I left her on Saturday night sitting by her fire in that one-armed rocker, very comfortable and very, very happy. She desired me to say that she would remember the woman who gave her this on her knees as long as she lived, and she meant it."

I had a pang at not being included because I needed those prayers, and for other reasons. You have increased the world's happiness, and made right more secure. I see that clearly; you have given me a stirring up too and I hope this will not be the only business you will entrust me with."

Yours very sincerely,

John Dalrymple.

A month later Joan was sitting in her room, cold and a little lonely, courageous soul though she was.

"Next year I mean to afford that apartment," she was saying. "I am going to have a real fire, and live like a human being." A gentle rap interrupted these soliloquies. "Miss Andrew, a visitor downstairs for you!"

"Very well, Mary. In a minute." Everything was quiet as Joan came down expecting to see Mrs. Allenbound for the never-ending Guild. She stood still in surprise for there was John Dalrymple.

"Really! I am so glad to see you!" she said heartily. "I never dreamed to see you here."

"To tell you the truth," he said, when the greetings were over, "I had something really important I wanted to say to you."

"An investment?" queried Joan. "You know I spent all my money and lawyers can't do anything without money?"

"You are unfair there; you helped Miss Craig to happiness, and now I want you to help me! I have a house on Glen Avenue that I want to go and live in. Could I persuade you to come and try it out with me?"

Joan had a curious trembling feeling. "You want a house-keeper?" she said. "Now what would you pay me?"

"With devotion Joan. I want a wife—a real human being—with an intellect and a soul of human kindness—who can help me and whom I can help sometimes.

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Joan Andrews.

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I want a wife— ith an intellect dness—who can help sometimes.

Do you think you could do it?" John had advanced across the room and his voice had pleading earnestness in it. Joan arose—superb little figure that she was—and came.

There is a tiny house near the Union Depot where an elderly woman grows avenues of sweet peas. Everything she touches turns to bloom.

There is another house on Glen Avenue where a woman sings all day long. Which of these houses is the happier I do not know, but I do know that in each of them the spirit of largeness dwells.

Love of Animals is Key to Character.

In an "Introduction," written for "Thoughts on Humane Education," P. P. Claxton, U. S. Commissioner of Education says: "The really great are ever gentle and kind and the greatest are the kindest and most gentle. Cruelty and indifference to the feelings of one's fellows or of any sentient beings are marks of coarseness of nature or want of proper instruction and training. Fineness of fibre, inherited or acquired, in man or woman, as in woods and textiles and cordage, is a sure element of strength.

"Thoughtfulness of the feelings and interests and welfare of others comes chiefly from careful instruction and training in childhood and youth. Learning to think and care for the welfare of wild and domestic animals makes one more thoughtful and careful of the feelings and welfare of men, women and children.

"How much richer and fuller is the life of the man or woman who has learned to sympathize with all nature and to treat all creatures kindly and mercifully. For indeed the quality of mercy is not strained. It blesses him that gives even more than him that receives. Our best living is not in abstract and logical thinking, but in true and kindly living and in actions prompted by good will. He who has learned to regard the birds as little brothers of the air and to look upon domestic animals and the beasts of the field as his less fortunate kindred who need his help finds a pleasure in their color and voice and motions, and a joy in the contemplation of their habits unknown to those who are without this feeling of kinship. He feels, as others cannot, the throbbing of the life of the world and rejoices in the recognition of his kinship with the universe.

"The teaching which leads to these results is a part of the inalienable rights of all children and must be included in the education of home and school if we would replace the old cruelties by thoughtful kindness and make the new world a world of freedom and progress and brotherly love."—Our Dumb Animals.

Who Am I?

I am more powerful than the combined armies of the world.

I have destroyed more men than all the wars of the world.

I am more deadly than bullets and I have wrecked more homes than the mightiest of siege guns.

I steal millions each year. I spare no one, and find my victims among the rich and poor alike.

I loom up to such proportions that I cast my shadow over every field of labor from the turning of the grindstone to the moving of trains.

I massacre thousands upon thousands of wage-earners in a year.

I lurk in unseen places, and do most of my work silently. You are warned against me, but you heed not.

I am restless, I am everywhere in the home, on the street, in the factory, at railroad crossings, and on the sea.

I bring sickness, degradation and death, and yet few seek to avoid me.

I destroy, crush and maim; I give nothing but take all.

I am your worst enemy.

I AM CARELESSNESS.

SEL.

A Women's Institute in Library Work.

After the Meaford, (Ont.), Women's Institute presented the Public Library Board with \$250, they were so grateful that at their annual meeting in January they appointed two members of the

LISTER PREMIER CREAM SEPARATOR

YOU have always had the highest opinion of the thoroughness and reliability of machines made up to the high British standard, and rightly so.

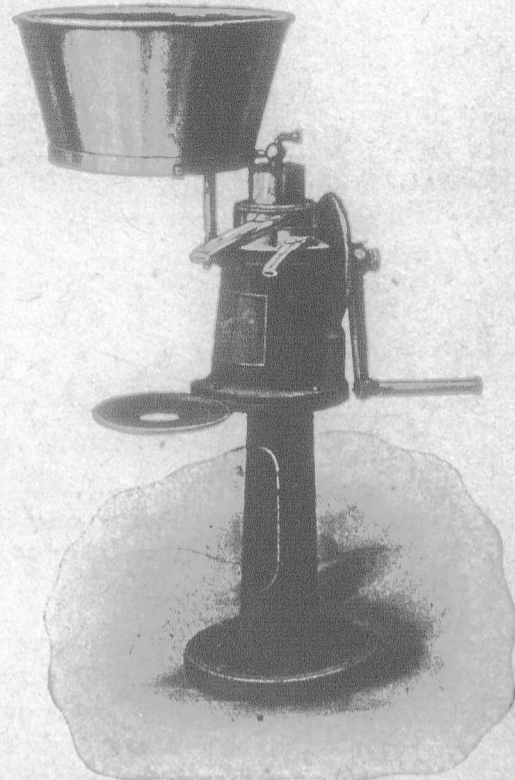
The Lister Premier Cream Separator helped to build the world-wide reputation. One trial will convince you that for clean skimming, easy cleaning and easy running it has no equal. No working parts are exposed to dust. It is the simplest machine made—can be taken apart and reassembled in a few minutes.

Skim-milk delivery is up high enough to permit of large can being used. Discs are aluminum and never can rust. They go on in any order. This saves time and bother. All revolving parts run in oil—ensuring continuous easy-running and cleanliness.

See our agent in your town, or write direct for full particulars.

Lister Engines and Grinders—Lister Silos and Silo Fillers—Avery Tractors

R. A. Lister & Company (Canada) Limited
58-60 Stewart St., TORONTO



A Portable Columbia Grafonola Adds Music and Games to Picnics' Pleasures

Mighty few people can afford to take an orchestra or band to make music at their picnics. But anyone can have the band and orchestra selections, special musical games and marches which Columbia children's records provide.

Make your picnics musical milestones in happy little children's lives. Take along a Vacation Model Columbia Grafonola. Type D-2 is easy to carry. Its tone is always ample in volume for outdoor games.



Some Jolly Columbia Records to go along.

- Oh! By Jingo, One-Step, and Rose of Chile, Tango Fox-Trot. A2948 10-inch \$1.00
- Lassie, Medley Waltz, and Alabama Moon, Medley Waltz, Introducing "My Paradise." A6153 12-in. h \$1.65
- Oriental Stars, One-Step, and Bound in Morocco, Fox-Trot. A2906 10-inch \$1.00

- Buddha-Dardanella, Fox-Trot, and Limehouse Nights, Medley One-Step. A2876 10-inch \$1.00
- Venetian Moon, Fox-Trot and Bo-La-Bo, Fox-Trot. A2895 10-inch \$1.00
- The Bells of St. Mary's, Tenor Solo with Orchestra and Chimes, and Vale of Avon March, Wingate's Band. R4020 10-inch \$1.00

New Columbia Records are out the 10th and 20th of the month
Columbia Grafonolas Standard Models up to \$360.

F185

COLUMBIA GRAPHOPHONE COMPANY, TORONTO.

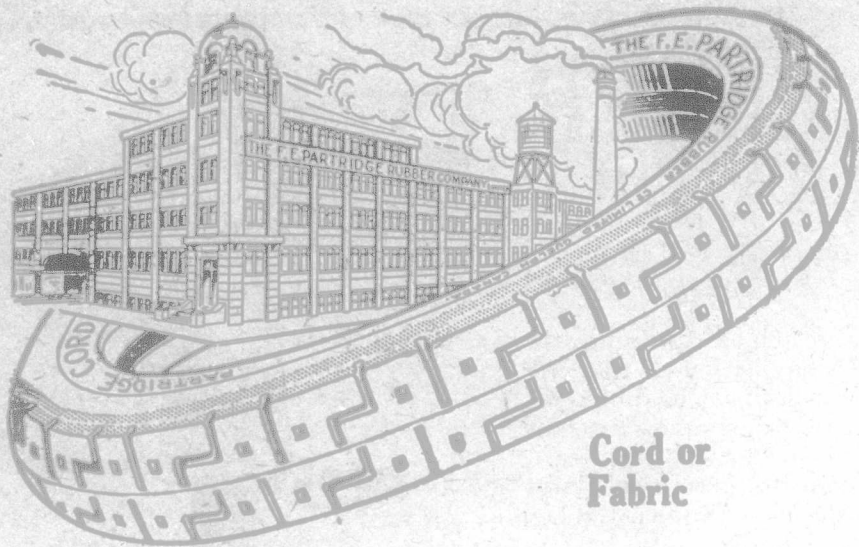
Women's Institutes on the Board, giving them charge of selecting books for girls and juveniles' interests. Now the women have started a children's story hour, each Saturday from 2 p.m. to 3 p.m. The teachers of the Public Schools and some of the Women's Institute members volunteered to assist with this story hour. The children are delighted. Here-tofore, the Public Library Board consisted

of men. The first children's story hour was on the first Saturday in February, and will be kept up regularly from now on.

It was time for baby girl to be in bed, but no amount of coaxing would take her. At last father offered to lie on the bed till she fell asleep. Off she went pick-a-back and the tired mother leaned back in her chair with a sigh of

content, ready for a hard-earned rest.

Ten minutes—twenty—half an hour, and she was wondering when father would be down, when all at once she heard a soft, stealthy pit-a-pat. Nearer came the steps, and then a little white-robed form with a tiny finger on her lips stood in the doorway, "Hush, hush, muver," she said: "I's got farver to sleep."—The Wellspring.



Cord or Fabric

Strength obeys reality and not appearance. Strength is according to quality.

The reality which produces the strength and dependability of Partridge Tires is the exceptionally good quality of all material used—and the skill which converts them into agents of comfort and economy.

You can't buy better tires than Partridge—so why not buy Partridge?

127A

PARTRIDGE TIRES

Game as Their Name

Supply and Demand Govern Price and Profits

The demand for food exceeds the supply, consequently prices are up and producers are assured good profits. The more produced, the larger the returns!

Wise farmers will cultivate every available acre. If this means outlay of capital beyond your immediate cash resources, discuss the subject of a loan with the manager of our nearest branch.

THE DOMINION BANK

BLAIRGOWRIE SHORTHORNS!

3 imported bulls. 10 imported females in calf or calf by side. 2 Scotch-bred bulls. 5 Scotch-bred cows with calves by side. JOHN MILLER, ASHBURN, ONTARIO (Myrtle C. P. R. and G. T. R.)

Current Events

On July 10th Sir Robert Borden formally resigned as Premier of Canada and Hon. Arthur Meighen, former Minister of the Interior, was sworn in as his successor. At time of going to press the Cabinet has not been named. Hon. N. W. Rowell resigned from the Ministry, and Hon. Martin Burrell, becomes Parliamentary Librarian.

The most interesting feature in Ontario politics at present is the fight between the Hydro interests and the Drury Government. The Government has halted the hydro-radial extensions as proposed by the Hydro Commission, at the present time, and have decided to name a commission to investigate and report on the radial situation.

Sir Lomer Gouin, for fifteen years Premier of Quebec, tendered his resignation on July 8th. He will be succeeded by Hon. L. A. Tachereau.

The United Farmers' Co-operative Societies of Ontario are making plans to manufacture goods which the wholesale houses refuse to sell to them.

The Dominion Geological Survey Department announces that oil shale has been found along the valleys of the Mattagami, Moose and Abbitibe Rivers, Northern Ontario.

An Experimental Farm is to be established at Swift Current, Sask.

Work on the Chippawa power canal was resumed July 8th.

A large pulp mill is to be erected at Kapuskasing, Northern Ontario. Also mills are to be built at Fort William, Port Arthur, and Nipegon.

The new commissioners of the Board of Commerce held their first meeting at Ottawa on July 6th.

Farmer candidates for the Federal election are already in the field in North Bruce, South Bruce, North Huron, South Perth, North Oxford, Norfolk, Lincoln, Wentworth, North York, West York, Muskoka, Nipissing, East Algoma, Russell, Victoria and East Elgin.

At the Democratic Convention at San Francisco James M. Cox, Governor of Ohio, was nominated as candidate for the Presidency and Franklin D. Roosevelt for the Vice-Presidency.

Senator Lafollette, of Wisconsin, is likely to be the Presidential choice of the third party Convention which opened at Chicago on July 10th.

The Conference between the Allies and the German delegates at Spa, now in session, is regarded as the most important international event since the armistice. At a meeting on July 3rd the Allied Premiers decided to readmit Germany to the new Council of the Nations of Europe, which will probably supersede the Supreme Council. The Conference at Spa opened on July 5th, and is the first of a series of Conferences which will probably be called for the purpose of restoring Europe.

The Russian Soviet Government has accepted all conditions laid down by Premier Lloyd George for resumption of trade with the Allies. This arrangement has been reached as a result of the conferences with envoy Krassin in London.

The Greeks continue to press forward in Anatolia in their campaign against Mustapha Kemal's Nationalists. It is reported that they have wrested Brussa from the Turks. The Nationalists, on the other hand, have occupied Beicos, on the Asiatic shore of the Bosphorus, about 10 miles from Constantinople.

A recent despatch says the Bolsheviki have broken through the Polish northern front and crossed the Beresina River at three points. General Brusiloff has issued an appeal to all former Russian army officers, wherever located, to come to the defense of the integrity of National Russia against any foreign effort to

dismember the country. Brusiloff is in command of the armies operating against the Poles.

Major-Gen. Gorgas, former Surgeon-General of the United States, the man under whose direction Panama was cleaned up and freed from yellow fever and malaria, died last week. During the war Gorgas led the warfare of typhus in Siberia, and at the time of his death he was preparing to go on a mission in West Africa for the British Government.

Sir Herbert Samuel has been appointed as Administrator of Palestine under the British mandate. At the great international "Zionist" conference held in London last week the plans presented by an American delegation of 42, proposing to send engineers to plan railways, build irrigation systems, etc., were accepted, and a Jewish emigration to the Holy Land will begin in the near future. The movement is resented by both Christians and Moslems in Palestine, who claim prior rights in the country.

The Chinese Government has decided to establish a Consulate General at Moscow.

A rebellion, headed by Tuan Chi Jui, former Premier and Minister of War, is in progress against the President of China.

Beekeeping and the Sugar Situation.

With sugar over 20 cents a pound, and the outlook of a possibly higher price and uncertainty of supply, beekeepers will find it advisable to pay more attention than usual to saving of wholesome honey for wintering the bees safely.

Each colony should have not less than 40 pounds of stores for winter. The honey gathered in June and July from alsike and white clover is perfectly wholesome and makes the finest winter stores. Most of the honeys gathered from other abundant sources in June and July are also wholesome, but honey gathered from mixed sources in August and September is, as a rule, less so, and is, therefore, liable to cause dysentery which will weaken or kill the colony before spring. Some kinds of fall honey are very injurious. However, buckwheat honey and the honey from certain species of goldenrod and aster that grow abundantly in dry situations, if it ripens before cold weather, are wholesome.

It would, therefore, be wise to save combs of clover honey in order that several of them may be placed in the hive about the centre. These combs should be given early enough in the fall, that is to say, about the middle of September, to allow the bees time to empty a few cells to make a place for the winter cluster to occupy. Care should be taken that these combs of honey are taken from colonies that are entirely free from American foul-brood. It will be advisable also to save extra combs of honey sufficient to give each colony one more comb in spring, but the honey given in spring need not be of the best quality.

A strong colony of Italian bees containing a prolific young queen often has very little honey in the brood chamber when the supers are removed in the fall. A simple way to supply such a colony with suitable stores for the winter is to give or leave it a super full of clover honey.—F. W. L. Sladen, Apiarist.

Paint for Preservation.

Property waste due to deterioration and decay in Canada constitutes a problem of paramount and far-reaching importance.

Continuation of the present tremendous loss vitally effects the economic future of the country. If with the cessation of the war, we are to enter successfully upon a period of reconstruction and expansion it is imperative that conservation go hand in hand with development. It is as necessary to conserve created wealth as it is to prevent waste of national resources. Nature in time may restore devastated forest areas, but it takes human labor to raise anew or repair property that has decayed from lack of protective paint. This work absorbs energies that would otherwise be devoted to industrial and economic progress.

Paint for preservation is absolutely essential to the Conservation of Property.

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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.

Testing Cream.

Will sour cream give a better test than sweet cream?
J. W.

Ans.—There should be no difference, provided the cream is properly cooled and is not rancid when tested.

Hereford Herd Books.

1. Where can I secure Hereford herd books? What will they cost?

2. What is the best way of killing ox-eye daisies?
W. F.

Ans.—1. Write H. D. Smith, Ancaster, Ontario. He is the Secretary of the Hereford Breeders' Association, and may be able to put you in touch with someone having these books for sale.

2. A short rotation of crops and shallow plowing, followed by cultivation until late in the fall, then plowed the regular depth will go a long way toward destroying this perennial. It is seldom seen in the grain field, but appears abundantly in hay fields, pastures and waste lands.

Poison Bran Mash for Grasshoppers.

The grasshoppers destroyed a field of beans, and now I wish to plant it to buckwheat. What can I do to get rid of the grasshoppers?
L. W.

Ans.—It is altogether likely that the grasshoppers will have disappeared, especially if there were frequent rains. A poisoned bran mash sprinkled over the field has proven effective in destroying these pests. The mixture consists of 20 lbs. bran, 1 quart of molasses, ½ lb. Paris green, and 2 or 3 gallons of water. The bran and Paris green should be thoroughly mixed when dry, and the molasses dissolved in water to dampen the bran.

Miscellaneous.

1. A young cow dropped her second calf on April 18th this year. Another older cow calved Feb. 13th this year. Neither of these cows have come round again. Would you please explain the reason, as I wish to take them away to breed again. Both are in good health and milking well.

2. I cannot get cream to "whip" in this hot weather. I keep it 24 hours in the cool and add pinch of salt, but it does not stiffen. Can you assist me with this? I made butter the other day on a warm day. I think I had a little too much cream in the churn. The cream went all stiff and there appeared to be a great quantity of butter-fat and no buttermilk at all. I put it all into a larger churn and continued churning, but failed to effect any alteration, so was compelled to wash the soft fat as well as I could. After I had worked it a great deal and put butter into crocks, much water collected on the surface. I should like to know the cause of this.

3. A heifer was bred last 6th October. She was two years old then. She has never come round again and is not in calf. Could you please explain this?
F. J. D.

Ans.—1. Little can be done. We do not know the cause, but nature will have to have her way. Turn the cow with the bull for a short time each day. This may bring her in season.

2. It is possible that the cream is not rich enough. We frequently have difficulty in whipping thin cream, but have always overcome this by having the cream thick, which can be done either by tightening the cream screw or turning the separator a little faster. It is quite possible that the churn was too full and there was not concussion enough to cause the butter to gather properly. Adding cold water when the cream was put in the larger churn should have shown results and caused the butter to gather, after which the moisture could be worked out. The water collecting in the crock is an indication that the butter was not sufficiently worked to remove the moisture.

3. We have heard of similar cases, but do not know the cause. It is, no doubt, a freak of nature.

Gossip.

J. Pollard, whose advertisement of Chester Whites, appears in another column of this issue, writes that he has a considerable number of choice pigs of both sex on hand at the present time. A large figure was paid for the breeding sows. One of them is from an imported sow that weighed 700 lbs. The dam of many of the pigs is Tawwa Callaway Perfection, sired by Springbank Jim, out of a prize-winning herd. If in need of some breeding stock, write Mr. Pollard for prices and description of the pigs.

The Miller-Dryden Shorthorn Sale.

Wednesday, July 21, will be a gala day for Shorthorn breeders at Maple Shade Farm, Brooklin. Not only will lovers of the red, white and roans have an opportunity of seeing as choice a lot of richly-bred Shorthorns as were ever gathered together on one Ontario farm, but they will have the chance of taking home with them some of these good things at their own price. Practically the entire offering of 120 head are imported, and what Canadian-bred stuff is in the sale is just as good as the imported stock. There are 65 cows with calves at foot, and 25 cows and heifers that are bred. There are a number of yearling open heifers and these make as strong a line-up as was ever seen in a yearling class at our largest Canadian exhibitions. Those beginning a Shorthorn herd will find females to their liking and such as will be ideal foundation stuff on which to build a herd. Breeders of long standing will be able to secure outstanding females to strengthen their herds. There will be Rosewoods, Augustas, Lavenders, Brawith Buds, Rosemarys, Claret Mayflowers, Broadhooks, Miss Ramsdens, etc. A good deal of the offering is of show-ring calibre and all are good breeding propositions. For the convenience of the public, a special train will leave the Union Station, Toronto, for Maple Shade Farm. The sale special will leave Toronto after arrival of the chief morning trains on all lines. If at all interested in Shorthorns you cannot afford to miss being at Maple Shade Farm on Wednesday, July 21. Write W. A. Dryden, Brooklin, for a catalogue, mentioning "The Farmer's Advocate."

To the Breeders of Men.

You talk of your breed of cattle,
And plan for a higher strain,
You double the food of your pasture,
You heap up the measure of grain;
You draw on the wits of the nation
To better the barn and the pen;
But what are you doing, my brothers,
To better the breed of men?

You boast of your Morgans and Herefords,
Of the worth of a calf or colt,
And scoff at the scrub and the mongrel,
As worthy a fool or a dolt;
You mention the point of your roadster
With many a "wherefore" and "when,"
But, ah, are you counting, my brothers,
The worth of the children of men?

You talk of your roan-colored filly,
Your heifer so shapely and sleek;
No place shall be filled in your stanchion
By stock that's unworthy or weak,
But what of the stock of your household?
Have they wandered beyond your ken?
Oh, what is revealed in round-up
That brands the daughters of men.

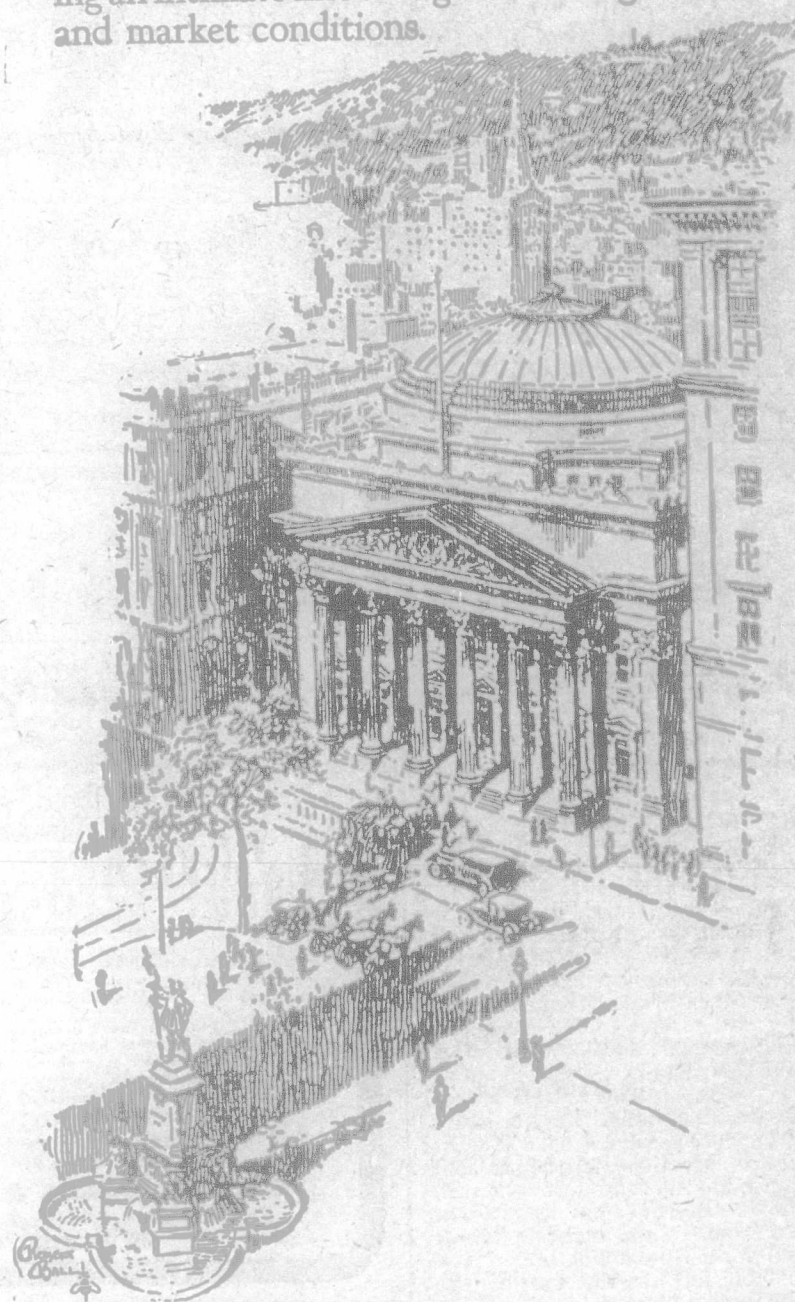
And what of your boy? Have you measured
His needs for growing year?
Does your mark as his sire, in his features,
Mean less than your brand on a steer?
Thoroughbred—that is our watchword
For stable and pasture and pen;
But what is your word for the homestead?
Answer, you breeders of men!
R. Trumbull, in Our Boy's Monthly Magazine.

Elevator Boy.—"I told de boss to-day I wanted a raise."
His Chum.—"What did he say?"
Elevator Boy.—"He told me to get in an' pull de lever."

At the Service of a Great Industry

The farmers of Canada are engaged in one of Canada's greatest industries and produce a large part of the Dominion's wealth.

THE banking requirements of this great industry are far-reaching and demand a nation-wide service—such a service as the Bank of Montreal affords with a branch in every important centre of Canada, each having an intimate knowledge of local agricultural and market conditions.



We invite farmers to talk over their banking problems with the manager in our nearest branch.

BANK OF MONTREAL

Established over 100 years

Branches in all important centres in Canada. Savings Departments in all branches

TOTAL ASSETS in excess of \$500,000,000

SARNIA—FENCE

FENCE SOLD WITH
THE GUARANTEE
"YOUR MONEY BACK
IF NOT SATISFIED"

Special Bulletin!

1250 tons of wire now on hand or en route to us from the mills, also large supply of BARBED WIRE on hand.

You will be needing fencing in order to utilize your fields for pasture.

The feed will pay for the fence. You cannot farm profitably without plenty of good fences.

WRITE us for "Hints on Temporary Fence Construction," fence prices and Bargain list

The Sarnia Fence Co., Ltd.

Winnipeg, Manitoba

Sarnia, Ont.



The Farmer a Social Reformer.

BY W. MIDDLEMASS BROWN.

Wherever agriculture is the prominent feature in a country, then it forms a basis for the development and progress of that country along other lines:—Agriculture generally, in an eminent degree, occupies the attention of a hardy class of people. Where families are raised under the beneficial influences of Nature, fresh air and beautiful scenery, then a race of people may be produced, that by means of a proper educational system may become a great nation. The physical, mental and normal development of a rural population supply the backbone of a nation's progress. The cultivation of the land to best advantage may, in many instances, produce as much as will meet the necessary demands of the nation. Where the amount of produce essential to the nation's sustenance has been raised, then mills, factories and other buildings are erected for the manufacture of the other commodities for the use of the people. Villages and towns spring up in certain localities that are suitable for transportation of produce to other parts of the country or distant lands. Railways are laid and canals constructed as means of transfer. And as the commercial and industrial importance of the towns increase then they become cities, which draft away largely the young people from our rural districts. In the cities the life of the people becomes more complex, and the mental and moral qualities of the citizens are constantly in demand for the proper administration of civic affairs. It is observable that the men who have been prominently serviceable in this connection have frequently been reared in rural districts, and circumstances have conduced them to leave for city life. But the man who is a farmer wields a power in the nation which few

others possess. He has the means at his command for raising and lowering the prices of commodities necessary for the nation's maintenance. And by so administering his affairs wisely he can be of great service in advancing the material interests of the community and nation, and bringing forward those reforms that are conducive to a nation's welfare. The life of the farmer being much in the open field of Nature, he has the opportunity of having that quiet reflection which is beneficial to the consideration of important questions of national interest. Having generally a good deal of spare time during the winter months, he can devote himself to reading of all kinds, and the farming journals and newspapers of the country engage his attention. Agriculture and

politics are the chief subjects which call for study and discussion among the farmers of Canada. Agriculture being their vocation the political bias naturally leans towards the farming interests. Everything from a political point of view, that will advance the prosperity of the farmers is brought forward, debated, advocated and placed before their parliamentary representatives. The farmers, however, have not only their own interests at heart, but also the welfare of the country. It is the produce of the country that is bought by the people, and in many cases it is exported to foreign lands. The relationship that exists between these lands and our own country call for careful diplomacy. The social element we thus find is an important feature that engages the attention of the farmer. All that

THE LOAF THE WORLD
NEEDS

THE LOAF THE WORLD
HAS IN SIGHT

Wheat yields from 72 to 75 % Flour.
1 bbl. Flour (196 lbs.) makes about 295 loaves.
Figure out the shortage for yourself.

WHAT are wheat prospects for 1920-21?
Here is some of the latest information:

France has made very little gain in wheat acreage. England and Wales have less wheat acreage than last year. U.S. farmers plowed up 11.9% of winter wheat sown last fall. Australia's crop is off 41%. South Africa's wheat is short 23%.

Make every acre of wheat sown count in 1920

Results obtained at 5 leading experiment stations show an average increase of 11 bus. of wheat per acre from the use of fertilizers.

Figure out what such an increase on your own wheat would buy.

For wheat on medium loam soil use 250 to 300 lbs. per acre of fertilizer carrying 2 to 4 % ammonia, 8 to 9 % phosphoric acid, and 2 to 4 % potash. Best application is made with the wheat drill with fertilizer sowing compartment.

For further information write

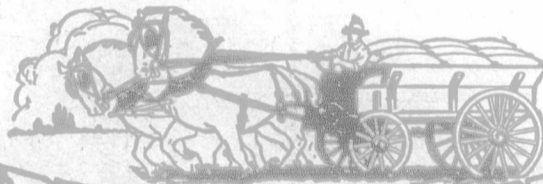
The Soil and Crop Improvement Bureau

of the Canadian Fertilizer Association

Henry G. Bell, B.S.A., Director

1111 Temple Building Toronto

60



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. **\$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

interests him in the development of agriculture reacts upon the welfare of the people. Not only so, but he also takes an interest in the mental, moral, religious and educational advancement of the community where he resides.

The Provincial Governments have instituted district offices throughout several of the counties, where their representatives are stationed, and offer free information to the farmers and others, upon the various subjects connected with agriculture. Farmers' institutes are also organized where subjects connected with agriculture are freely discussed, and improvements introduced as to the raising of crops, rearing of cattle, cultivation of orchards, bee-keeping, etc. Women's Institutes are also formed in some of the districts where subjects particularly pertaining to the home and farm duties of the housewives are introduced and debated upon. Such institutions cannot but be of great assistance in advancing the status of agriculture along social reform lines, and place the farmer in a position far in advance of any other vocation, in being a benefactor to this vast Dominion and the world at large.

In a certain home-missionary movement every participant was to contribute 5s. that she had earned herself by hard work. The night of the collection came, and various and droll were the stories of earning the money. One woman had shampooed hair, another had made doughnuts, another had secured newspaper subscriptions, and so on.

"Now, madam, it is your turn," he said. "How did you earn your 5s.?"

"I got it from my husband," she answered.

"Oh!" said he. "From your husband? There was no hard work about that."

The woman smiled faintly.

"You don't know my husband," she said.



Thresher Belts RUN TRUE AND DELIVER THE POWER

RED WING THRESHER BELTS are on the job, day and night, rain and shine.

They are built for service—to run true and deliver the power no matter how long or how hard the drive.

All through the Canadian West wheat fields, RED WING Belts are the favorites because they have met the most severe tests to which any thresher belts can be subjected.

The strong, tough Cotton Duck—solidly stitched with yarn of the same high quality, protected by a blended oil which prevents friction, and the entire belt enclosed in special red paint—means a thresher belt that has proven its extra service and extra economy in every section of Canada where grain grows.

Both "RED WING" and "SAWYER" are stitched cotton endless belts—"WESTERN" and "STAR" are rubber endless belts. All four are Dominion Rubber System Products, an assurance in itself of satisfaction.

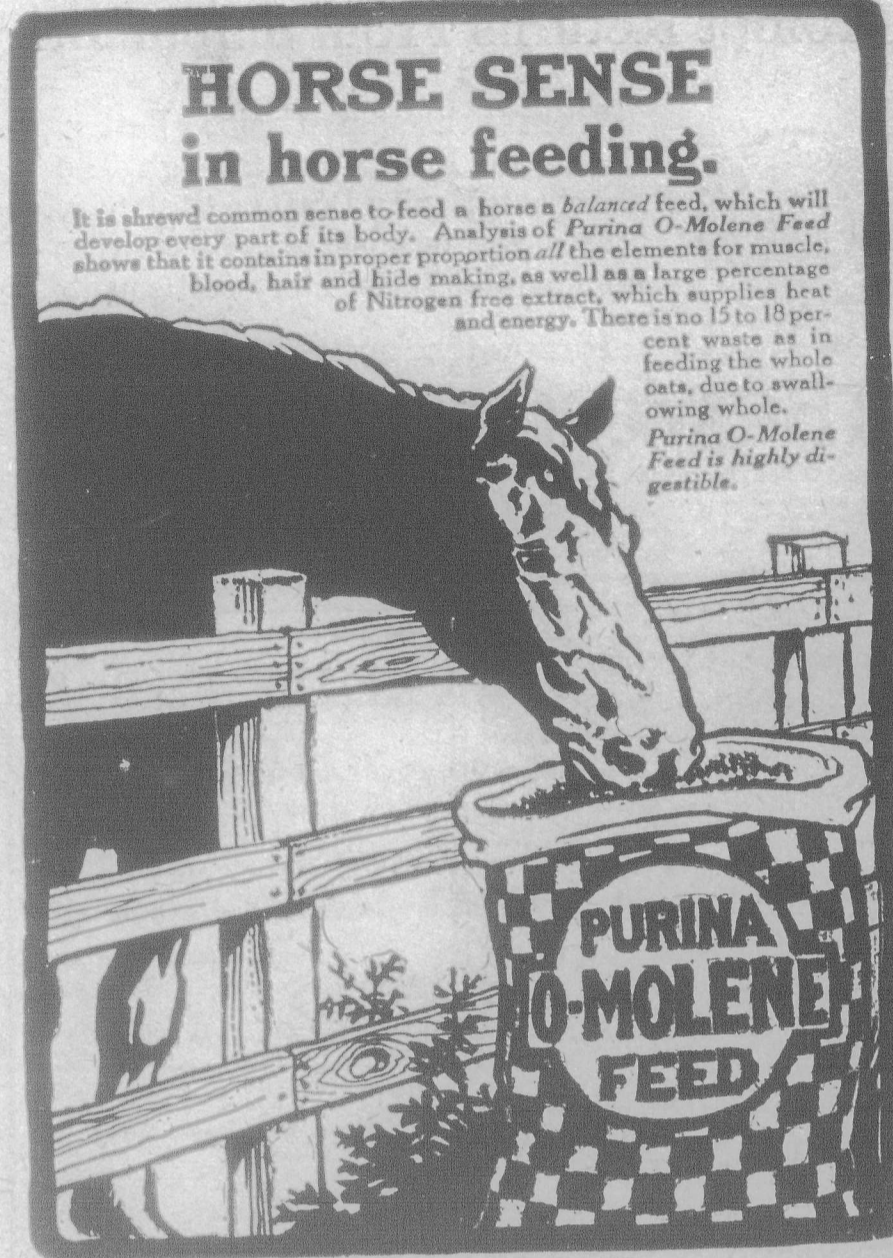
Our nearest Service Branch will serve you promptly.



**DOMINION RUBBER SYSTEM
SERVICE BRANCHES**

are located at

HALIFAX, ST. JOHN, QUEBEC, MONTREAL
OTTAWA, TORONTO, HAMILTON, LONDON
KITCHENER, NORTH BAY and FORT WILLIAM 18E



HORSE SENSE in horse feeding.

It is shrewd common sense to feed a horse a balanced feed, which will develop every part of its body. Analysis of Purina O-Molene Feed shows that it contains in proper proportion all the elements for muscle, blood, hair and hide making, as well as a large percentage of Nitrogen free extract, which supplies heat and energy. There is no 15 to 18 per-

cent waste as in feeding the whole oats, due to swallowing whole. Purina O-Molene Feed is highly digestible.

ASK YOUR DEALER, OR WRITE

THE CHISHOLM MILLING COMPANY, LIMITED, TORONTO
"There's a Purina Feed for Every Need"

Planning to Keep up the Milk Flow During the Summer and Fall.

(Experimental Farms Note)

Once more we are entering upon the season of the year when the dairy farmer expects the greatest yield from his cows and his pastures, and if the season is right the land will be fairly "flowing with milk and honey." Unfortunately, however, the season is not always just as right as it might be. Invariably in one section or another there is a drought with its consequent shortage of pasture and decrease in milk flow.

It is important at this time that some form of supplementary feed be supplied, for if the milk flow is once allowed to decline it is almost impossible to get it up to previous high mark again. A little extra feed at this time will produce more milk than will three times the amount fed after the decline has taken place. Many will have profited by past experiences and have made preparation for the shortage of pasture by sowing a piece of annual pasture or soiling crop. Others again may have some of the previous year's crop of silage to fall back on. In any, and particularly the last of the above methods, we have a very efficient means of supplementing the pastures. For those who have not yet made any provision it is not too late to sow an extra acre of corn, some fall turnips, or even a piece of rape. The turnips may be pulled as needed and fed tops and all while the rape may be pastured off in the late summer and fall. Where previous preparation has not been made, cuttings of the regular crops, such as green oats and peas, second-cut clover, and green corn will have to be made to fill the bill.

To speak of grain feeding on pasture at present prices seems absurd, and it will be found to be somewhat of an extravagance except with very high producing cows. Where the grains are obtainable a mixture of two parts bran and one each of ground oats and cottonseed meal is excellent.

Apart from the feeding of the cows, there is the question of water and shade supply. Both are very necessary.

BOYS AND GIRLS

From the Atlantic to the Pacific

There are ambitious boys and girls who are making extra money by sending in the names of new subscribers to

The Farmer's Advocate and Home Magazine

One of our boy representatives earned \$30.00 in two months. He worked in his spare moments, earning generous commission on each new subscription he sent in.

It Costs You Nothing, but Your Time

You do not have to buy any supplies, as we furnish all the information and supplies necessary for you at all times.

**All that
You Earn
is Clear
Profit**

Coupon The William Weld Co., Limited
London, Ontario

Gentlemen:—I want to begin earning money in my spare time by sending the names of new subscribers to *The Farmer's Advocate and Home Magazine*. Please send supplies and instructions at once.

Name.....Age.....

Name of Subscriber.....

Address.....

Where sufficient protection from the flies, in the form of shade or underbrush is not to be found, it would be advisable to keep the animals in the stable during the hotter part of the day allowing them out in the evening. Where supplementary feed has to be cut and hauled to the cows less waste will be occasioned when fed while inside. Where the cows have of necessity to be out all day they should have protection from the flies by spraying with some good fly repellent.
G. W. Muir, Animal Husbandman.

The Celebrated Russian Novelist Turgeneff.

The celebrated Russian novelist, Turgeneff, tells a touching incident from his own life, which awakened in him sentiments that have colored all his writings. When Turgeneff was a boy of ten his father took him out one day bird-shooting. As they tramped across the brown stubble a golden pheasant rose with a low whirr from the ground at his feet, and, with the joy of a sportsman, he raised his gun and fired, wild with excitement, when the creature fell fluttering at his side. Life was ebbing fast, but the instinct of the mother was stronger than death itself, and with a feeble flutter of her wings the mother bird reached the nest where her young brood were huddled, unconscious of danger. Then, with such a look of pleading and reproach that his heart stood still at the ruin he had wrought and never to his dying day did he forget the feeling of guilt that came to him in that moment, the little brown head toppled over, and only the dead body of the mother shielded her nestlings.

"Father, father!" he cried, "what have I done?" as he turned his horror-stricken face to his father. But not to his father's eye had th's little tragedy been enacted and he said: "Well done, my son; that was well done for your first shot. You will soon be a fine sportsman."

"Never, father; never again shall I destroy any living creature. If that is sport I will have none of it. Life is more beautiful to me than death and since I cannot give life, I will not take it."

—Our Dumb Animals.

Prompt Returns From Shipments



38

When you ship Grain, Butter, Cheese or Fruit, put through The Merchants Bank a Draft on the buyer. This is the business way of securing prompt and satisfactory settlement.

It saves time and possible loss.

THE MERCHANTS BANK

Head Office: Montreal OF CANADA Established 1864.

With its 149 branches in Ontario, 67 branches in Quebec, 1 branch in New Brunswick, 3 branches in Nova Scotia, 44 branches in Manitoba, 44 branches in Saskatchewan, 87 branches in Alberta and 11 branches in British Columbia, serves rural Canada most effectively.

WRITE OR CALL AT NEAREST BRANCH.



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.

COLLIE PUPS FOR SALE—GOOD CATTLE, dogs—five dollars. P. L. McPhedran, R. R. No. 3, Petrolia, Ont.

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

FOR SALE, COLLIE PUPS, MALES \$8.00, Females \$5.00, guaranteed heelers. Andrew Dorda, Belmont, Ont.

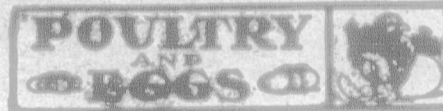
SCOTCH COLLIES, THREE MONTHS OLD—Guaranteed workers or money refunded. Males \$10, females \$5. C. Walker, Wilton Grove, Ont.

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

WANTED: DAIRYMEN, AT ONCE. MUST be good milkers. Steady employment, \$55.00 per month, room and board. Apply Dairy Dept., Speedwell Hospital, Guelph, Ontario.

FOR SALE about 300 squares new 28 gauge corrugated sheets suitable for barn roofing and siding also ridge rolls and have starter etc. at a bargain.

Listowel Drilling Machine Co., Listowel, 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.

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 24 CENTS

a pound for live hens, any kind, any size, F.O.B. your station, if you live within 300 miles of Toronto, or 29 cents a pound if you pay the express and lose the shrinkage. Ship in boxes made of any rough boards, or I will send crates free.

ALBERT LEWIS

666 Dundas, West Toronto, Ontario

PATENT SOLICITORS—Fetherstenhaugh & Co. The old-established firm. Patent everywhere. Head Office: Royal Bank Building, Toronto. Ottawa Office: 5 Elgin Street. Offices throughout Canada. Booklet free.

Subscribers!

Don't Forget

The "Farmer's Advocate" has been working for you since 1866.

Send one new subscription and \$1.50 and we will advance the date on your own label 6 months.

KELLEY FEED & SEED CO.

Write for price list on feeds of all kinds—car lots or less.

We specialize on concentrates.

We can now supply Bran and Shorts in limited quantities.

We are buyers of Hay, New Potatoes and all kinds of Field Grains both for Feed and Seed.

Reference: Royal Bank

Phone:
Day: Kenwood 764
Night: Kenwood 3275

780 DOVERCOURT ROAD
TORONTO, ONT.

THE MOLSONS BANK

Incorporated in 1855
Capital and Reserve \$9,000,000
Over 136 Branches

THE MOLSONS BANK ASSISTS FARMERS

Almost every farmer finds his money tied up in stock or crops at certain seasons. If he needs assistance he should consult our local Manager.

Savings Department at all Branches



The four essential points are here STRENGTH and LOOKS—PRICE and WEAR. Johnson Ideal Halter Co., Sarnia, Ontario

Sale Dates.

July 17.—F. G. Gale, Waterville, Que.; Jerseys.

July 21.—Dryden-Miller sale, Brooklin, Ont.; Shorthorns.

July 31.—Ontario Duroc-Jersey Breeders' Association, Essex, Ont.

Aug. 18.—J. E. Brethour, Canadian Exhibition Grounds, Toronto; Yorkshires.

Markets

Continued from page 1290.

Montreal.

Dressed Hogs.—The sultry weather is having its effect on the market for dressed hogs, but prices showed little change at 29½c. per lb. for abattoir-dressed, fresh-killed stock.

Poultry.—Interest is now being manifested in the poultry market with the receipt of this season's crop. Fowl broilers and spring ducks are coming in more freely. Some dealers are offering graded prices for broilers, according to size, but others are quoting 50c. a lb. for those weighing 2½ lbs. and over. Fowl was steady at 33c. to 34c. for heavy, and 26c. to 30c. for medium and light. Ducklings were 35c. to 40c. Storage stocks are almost exhausted except for a few roasting chickens and turkeys.

Potatoes.—With the continued receipt of American potatoes prices of Canadian stock are showing an easier tone. Quebec white stock was quoted at \$4 to \$4.50 per bag of 90 lbs., in car lots, ex-track, while about 75c. is added for smaller lots, ex-store.

Eggs.—There is a fairly active demand for eggs for immediate consumption, and prices are generally firm. Selected fresh eggs were quoted at 60c. per dozen; straight candled eggs 57c.; No. 1 fresh 54c.; No. 2 fresh, 49c.

Butter.—The price of butter continued in an upward direction, with quotations showing an advance over the previous week. Pasteurized creamery was quoted at 58¼c. to 59c.; finest creamery, 57¼c. to 58c., and fine 57c. to 57¼c. per lb.

Cheese.—There is no large demand for cheese, and prices are sagging at 28½c. to 29c. per lb.

Grain.—Oats were quoted at a decline from a week ago, with No. 2 Canadian Western at \$1.48; No. 3 Canadian Western, \$1.46, and No. 2 feed at \$1.44 per bushel, ex-store.

Flour.—Trade in spring wheat flour continues slow, and supplies on hand are ample to meet requirements. Prices continued steady at \$14.85 per barrel in jute bags for Manitoba spring wheat, ex-track, Montreal freights, with smaller lots at 10c. higher, and a discount of 10c. all round for cash.

Winter wheat flour is ruling firm, with sales of broken lots of choice grades at \$14.40 to \$14.50 per barrel in new cotton bags, and at \$14 to \$14.10 in second-hand jute bags, ex-store. White corn flour was unchanged at \$12.80 in odd lots for shipment to country points, and rye flour at \$12.50 per barrel in jute bags.

Millfeed.—Bran in mixed car lots with flour was \$55.50 per ton and shorts \$62.50, while without flour bran was selling at \$58 per ton, and shorts at \$64, including bags, delivered to the trade.

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

Hides.—Prices of hides are showing a firmer tone, with steer and cow hides at 16c. per lb.; bull being 12c. per lb. Calf skins were 22c. to 24c. per lb., and kips 15c. per lb. Lamb skins were 35c. each, and clips 50c. Horse hides were \$5 each.

Chicago.

Cattle.—Good to best yearlings, light and handyweight steers 50c. to 75c. higher. Heavies largely 35c. to 50c. higher. Others uneven, steady to higher. Better grades fat cows and heifers 50c. to 75c. higher. Cannors and cutters and bulls mostly steady. Veal calves \$1.50 to \$1.75 higher. Lower grades stock steady.

Hogs.—Market steady to 15c. higher. Top, \$16.40; bulk light and light butchers', \$15.90 to \$16.30; bulk, 250 pounds and over, \$13.90 to \$15.90; pigs steady; bulk desirable kinds, \$13 to \$13.75.

Sheep.—Twelve cars choice Idaho lambs, \$16.40; one car wethers, \$8.50. Compared with week ago better grade fat lambs, \$1 to \$1.50 higher. Others up \$3 to \$5. Yearlings and wethers mostly 75c. to \$1 higher. Ewes, \$1.50 to \$2 higher. Feeders and breeding classes mostly 50c. to \$1 higher.

Brant Farmers Big Enterprise. Sixty Thousand Dollar Property Purchased.

The Brant Farmers' Co-operative Society, Ltd., of Brantford, Ont., one of the farmers societies affiliated with the Co-operative Union of Canada, has only been incorporated a little over three years. Since it commenced business it has been financially successful and done an increasing trade. During the last year there has been a remarkable growth in the volume of business which has taxed the capacity of the premises occupied to the utmost extent. Some idea of this may be gathered from the fact that while the trade for the corresponding period a year ago was only \$29,371.01, that for the six months ending May 31st, last was \$80,672.42, thereby showing an increase of \$51,293.41.

The directors have consequently been compelled to look for a better location, and they have entered into a provisional agreement to purchase the property owned and formerly occupied by the Dominion Flour Mills, Ltd., on Colborne Street, the principal business thoroughfare, and close to the market square. It extends through to Wharf Street and has a frontage on both streets of 180 feet, with a railway siding the whole length of the property on Wharf Street. On the West side it faces Bain Street, so that the property has a frontage to three thoroughfares. The price is \$60,000, and it is proposed to spend \$15,000 to \$20,000 in fitting a part of the property on Colborne Street for retail stores, offices and apartments; East end of the Colborne Street section and the whole of the rear to be retained for the business purposes of the Society. In connection with the scheme it is proposed to provide a Rest Room for the farm women of the county. At a special general meeting of members, to which the farming community generally was invited, held on the 21st June, a report by the directors with reference to the transaction was submitted. Estimates were given showing the difference between the annual outlay on the property now occupied and the much larger property it was intended to acquire, and how the same may be provided for. In the purchase is included a chopping mill in good condition, which will be a considerable convenience to the Society and its members.

A Dumb Friend.

We're growing old, I guess, old horse,
Our race is almost run;
My hair is white, your mane is thin,
But my, the work we've done!
You've helped me earn my daily bread,
We've tilled the soil together,
You ne'er complained at snow or rain
Or any kind of weather.

We've done our duty by mankind
And we deserve no blame;
Our day has passed, the sun hangs low,
Since we've grown old and lame.
You knew my footsteps when I came,
You whinnied soft and low;
You knew my voice and followed me
When I would come and go.

My wife and children loved you,
You were gentle as could be.
They are gone but not forgotten,
And you're all that's left to me;
So we'll jog along together—
Of all else I am bereft—
And I'll always keep you, Dobbin,
For you're all that I have left.

—J. Walter Briggs.

Worms.

The one certain thing in dogdom is that puppies invariably have worms. As soon as you see the symptoms, which begin with whining cries of pain and distension of the abdomen, the puppy should have immediate attention. Diet him lightly on milk the day before, omitting entirely the evening meal. Next morning, while the stomach is empty, administer a tablet composed of santonin and calomel, each one grain. Two or three hours afterward give a tablespoonful of castor oil, and at noon feed lightly on warm broth. Repeat this treatment in three days.—Country Life in America.

For Dependable Breeding Females, Attend
THE DRYDEN-MILLER SALE OF
Imp. Scotch Shorthorns

120
LOTS

The Greatest Aggregation of Breeding Cattle
Ever Catalogued for a Canadian Auction

120
LOTS

One Hundred Breeding Cows Sixty-five Cows with Calves Eighteen Unbred Heifers

The best from two great importations. Every animal regardless
of age guaranteed a breeder. Selling at

MAPLE SHADE FARM, BROOKLIN, ONTARIO

12 o'clock noon

WEDNESDAY, JULY 21, 1920



With all due respect to other events of the year, this sale of 120 choice imported breeding cattle is without doubt the premier Shorthorn event of the summer of 1920. The number of animals selling is not only greater than that of any one-day sale yet held in Eastern Canada, but the quality and individual merit of the offering is also outstanding. It is certain that the best of two great importations have found their way into this offering, and added to these are a half dozen Canadian-bred cattle that are in every way equally attractive. With the exception of one 10 months' Augusta bull calf the entire number is made up of breeding females, and sixty-five of these are selling with their calves, the latter all being British bred. The sires of these youngsters are in nearly every instance leading present-day Scottish sires, and the calves, with few exceptions, should

prove equally attractive as the dams with which they are selling. The offering throughout is one of great importance, and every good breeder should find it both pleasant and profitable to contend for such cattle in open competition on July 21st.

Special attention is called to the train accommodation which has been provided for on sale day. A "special" will leave the Union Station, Toronto, on the morning of sale, immediately after the arrival of all important morning trains from west and southern points (about 9 a.m.), and proceed by way of Whitby Jct. to Maple Shade Farm Crossing; returning to Toronto in the evening after the close of the sale.

All arrangements have been made at Maple Shade to make everybody comfortable. All are promised an enjoyable day. If you are interested in your breed you should be present.

EVERY CANADIAN BREEDER SHOULD ATTEND THIS SALE

Will. A. Dryden
John Miller, Jr. } Owners

For Catalogues address
WILL. A. DRYDEN
 Maple Shade Farm
 Brooklin - Ontario

Auctioneers { **CAREY M. JONES**
"SCOTTIE" MILNE
CAPT. T. E. ROBSON

4 Northern Electric FEATURES

KLAXON HORNS

Safety to Pedestrians and Car

GABRIEL SNUBBERS

Comfort on the Roughest Road

BOYCE MOTO-METERS

Accurate Knowledge of Motor Temperature

AUTOMOBILE MIRRORS

Combine Safety, Comfort and Appearance

Ask Your Accessory Dealer or Write Us

Northern Electric Company
LIMITED

MONTREAL HALIFAX TORONTO LONDON WINNIPEG CALGARY VANCOUVER
QUEBEC OTTAWA HAMILTON WINDSOR REGINA EDMONTON



"GALT" Corrugated Steel Sheets

FOR ROOFING AND SIDING

We manufacture these Sheets both in Galvanized and Painted Steel, in lengths of 4, 6, 8 and 10 feet.

WE ALSO MANUFACTURE

"GALT" STEEL SHINGLES, VENTILATORS
ORNAMENTAL EMBOSSED STEEL CEILINGS, ETC.

The Galt Art Metal Co., Limited, Galt, Ont.

Questions and Answers. Miscellaneous.

Book on Pig Raising.

What is a good book on pig feeding?
J. B.

Ans.—"Productive Swine Husbandry," by Day, is as good a book as we know of and can be purchased through this office at \$2.25.

Cow Failing in Flesh.

A cow freshened a month ago and appeared to be all right until a week ago, when she commenced losing in flesh and developed a poor appetite. What is the cause?
G. C.

Ans.—It is possible that she did not clean properly, and this has poisoned the system. If so it may take months for her to regain normal condition. There may be some other trouble which an examination might reveal. If a veterinarian is handy it is advisable to call him to examine the cow. Otherwise give 1½ pounds of Epsom salts in a quart of water. Feed well and keep her comfortable.

Cows Do Not Show Oestrus.

Is there anything that will bring a cow in heat? I have some cows that did not come around last summer, and I milked them through the winter. Through the winter they came around at different times, but now again when I want to take them to the bull they do not show any signs of oestrus. They are in good condition and look well.
E. A. K.

Ans.—Little can be done. Possibly the cows do not show oestrus plainly, and turning the bull in the yard with the herd for an hour or two each day may have the desired results.

Permanent Pasture.

What is the best combination of seeds to sow for permanent pasture? I wish to prepare the soil this summer and sow to rye this fall. I want sweet clover in the mixture. How many cows should 12 acres pasture through the grass season? Will sweet clover grow when fall sown? How would oats and sweet clover do for milk production?
A. W.

Ans.—The mixture recommended for permanent pasture on fairly high land is orchard grass 4 lbs., meadow fescue 4 lbs., tall oat grass 3 lbs., meadow foxtail 2 lbs., white clover 2 lbs., alsike 2 lbs., Kentucky blue grass 4 lbs., timothy 2 lbs., alfalfa or red clover 3 lbs. Some of these grasses are hard to get at the present time, and sweet clover may be added. This is a biennial plant, but enough goes to seed while in pasture to give a stand the next year. Sweet clover may be sown in the fall, but we would prefer sowing this mixture in the spring. Oats and sweet clover should make a very good combination, as we find the cows do well on this pasture.

Registering a Clydesdale.

1. I have a pure-bred Clydesdale mare. I bred her to a Percheron horse this spring. If I breed her back to a Clydesdale horse next year may I have that colt registered?

2. How many crosses of imported Clydesdale stock must I have before I may have them registered?

3. If in these crosses I bred one mare to a Percheron horse must I start to breed over again?

4. How many crosses of imported Percheron stock must I have before I may have them registered?

5. What is the best cure for sore shoulders on colts and on work horses?

6. How can I prevent sore shoulders on colts?
Q. S. S.

Ans.—1. We believe so.

2. Four crosses for mares and five for stallions.

3. Yes, the first mare is considered as foundation stock.

4. So far as we are aware there is no grading up in the Percheron breeding. In order to have an animal registered it must trace to registered stock.

5. Some of the commercial gall cures give good results. Bathing the shoulders and applying a white lotion composed of 1 ounce acetate of lead and 6 drams of sulphate of zinc to a pint of water has been found to give results.

6. By gradually accustoming the colt to work, bathing the shoulders with salt water, airing the shoulders by lifting the collar on warm days, and by having a proper fitting collar.

Answers.
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Raising.
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Fistula and Poll Evil



Any person, however inexperienced, can readily cure either disease with Fleming's


Fleming's Fistula and Poll Evil Cure

—even had old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days leaving the horse sound and smooth. All particulars given in Fleming's Vest-Pocket Veterinary Adviser. Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durable bound, indexed and illustrated. 75 FLEMING BROS., Chemists, Church Street, Toronto, Ont.

THICK, SWOLLEN GLANDS

that make a horse Wheeze, Roar, have Thick Wind or Choke-down, can be reduced with

ABSORBINE



also other Bunches or Swellings. No blister, no hair gone, and horse kept at work. Economical—only a few drops required at an application. \$2.50 per bottle delivered. Book 3 is free. ABSORBINE, JR., the antiseptic liniment for man-kind, reduces Cysts, Wens, Painful, Swollen Veins and Ulcers. \$1.25 a bottle at dealers or delivered. Book "Evidence" free. W. F. YOUNG, Inc., 258 Lyman's Bldg., Montreal, Can.

Aberdeen - Angus

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

Shropshire and Southdown Sheep

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

Inspection invited, satisfaction assured.

Larkin Farms - Queenston, Ont.

SUNNY ACRES

Aberdeen - Angus

Present offering—A few young bulls ready for service.

G. C. CHANNON, - Oakwood, Ont.
Telephone—Oakwood. Railway—Lindsay.
G. T. R. and C. P. R.

Aberdeen - Angus

Meadowdale Farm

Forest, Ontario

Alonzo Mathews Manager H. Fraleigh Proprietor

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.

Balmedie Aberdeen-Angus

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

THOS. B. BROADFOOT, FERGUS, 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.

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.

CHAS. GRAHAM - Port Perry, Ontario

"Advocate" Advts. Pay.

Some Reasons Why Oleomargarine Should be Excluded from the Canadian Market.

The National Dairy Council, representing every branch of the Dairy Industry in every Province of Canada, unanimously passed the following resolution at its annual meeting in Winnipeg on the 17th of February last:

In amplification of that resolution, which expresses in clear and forceful terms the united voice of the great Dairy industry of Canada, I beg to submit some reasons why oleomargarine should be excluded from the markets of Canada.

1.—BECAUSE IT IS DISPLACING BUTTER, WHICH IS ABSOLUTELY NECESSARY IN THE DIET OF A HEALTHY NATION.

Butter is not a relish. It is a concentrated vital food. It is all food with no waste. One pound of butter contains as much nourishment or real food for the body as 41 eggs, four pounds of beef-steak, or thirty-two pounds of canned tomatoes. The real value of a food cannot be determined by its appearance or cost. Butter-fat is an absolutely essential food. It is indispensable to growth, health and vitality. There is no substitute for butter. No food can take its place, much as those prompted by selfish interests or greed would like, and try to make one believe. Butter is more than fat. It promotes growth and health in addition to heat and energy for the body. Proper food is essential to the well-being of the individual; upon proper food depends largely the growth of the child, and the health of the adult. There is no problem before the country of greater importance than the one of properly feeding and nourishing its people.

Statistics in the United States show that one out of every four children in that country is suffering from under-nourishment, and that 350,000 of them die every year from no other cause than poor or deficient food. It is not a case of poverty, so much as a case of ignorance. The food now given those children costs even more than proper food would cost. Similar figures are not available for Canada. While the condition of our children is doubtless not as shocking as in the United States, because a greater proportion of our people live on the land, where the children are fed on milk and butter in greater abundance, still children suffering from malnutrition are far too numerous in our centres of population.

It is the sacred right of children to be given wholesome food, that they may grow up to be strong and healthy men and women. Lord Beaconsfield has said: "The strength of a nation depends on the health and strength of its individual members. It matters not how wealthy a nation may become, how large its cities, how vast its armies and navies, if the health of its people is on the decline, it will rapidly perish and decay."

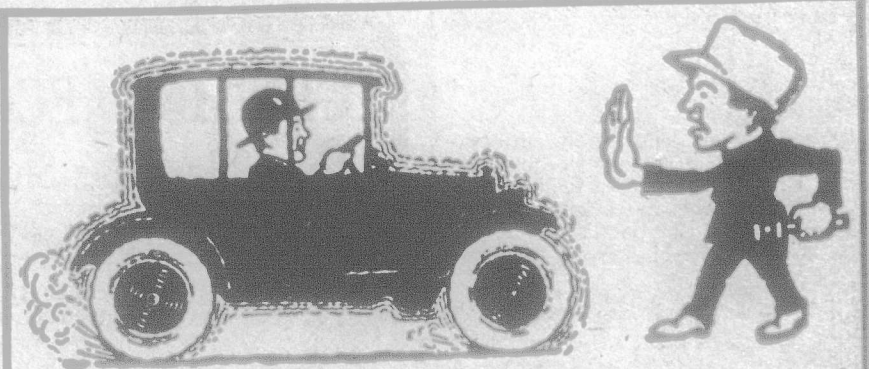
Herbert Hoover, who won such honor for himself and his country as United States Food Administrator, puts the case clearly when he says:

"The basis of child welfare is health and physical development, the foundation of child health lies in proper feeding. In its broad aspects the proper feeding of children revolves around a public recognition of the interdependence of humans upon dairy cattle. The white race cannot survive without dairy products."

2.—BECAUSE OLEOMARGARINE IS NOT A SUBSTITUTE FOR BUTTER

Butter is indispensable to growth and health. There is no substitute for butter. The first food a family should buy is butter. The last food to be dispensed with is butter.

Scientists have established that there is a vital food substance found in butter-fat, which is absolutely necessary for growth and health, which is not found in animal or vegetable fats, such as are used in the manufacture of oleomargarine. Professor E. V. McCollum, of Johns Hopkins University, who is one of the greatest author-



Stop That Chatter!

Equip Your Ford with Brakes which Grip Evenly, without Chattering

WITH LION Brake-Linings on your Ford you can pull up quickly and evenly, without chattering or jolting. By a new Canadian process, these brake-linings are impregnated with a special frictioning compound, giving them wonderful resistance to wear—and a sure, smooth, silent grip.

Lion Brake-Linings will improve your Ford and make driving more enjoyable. Insist on their use when having your brakes relined. Your Garage man can supply you.

Hamilton Cotton Co., Limited, Hamilton, Ont.

At all Dealers and Garages

LION Brake-Linings for FORD CARS



MADE IN CANADA
Look for the RED LINE
sure, smooth, silent

LISONALLY FARM

OAKVILLE, ONTARIO
F. W. BAILLIE, PROPRIETOR

WORKING HERD MANAGER

FOR SCOTCH SHORTHORNS, WANTED AT ONCE

When applying give full particulars of past experience and state wages.

A. PETRIE, Manager

ities on the use of foods, for the preservation of vitality and health in his book, "The Newer Knowledge of Nutrition," at page 16, after alluding to certain experiments in diet says:

"With this diet the interesting observation was made that growth could be secured when the fat in the food mixture was butter-fat, whereas no growth could be secured when the butter-fat was replaced by lard, olive oil or other vegetable oils."

3.—BECAUSE THERE IS NOW NO SHORTAGE OF BUTTER IN CANADA, AND NO NECESSITY TO USE AN INFERIOR ARTICLE INSTEAD OF IT.

The sale of oleomargarine was not permitted in Canada prior to December, 1917, when by Order in Council under the War Measures Act, it was temporarily allowed during the period of the war. Its importation, manufacture and sale in Canada was temporarily continued by legislation passed at the last session of Parliament. It is nearly 18 months since the armistice was signed, and practically all soldiers from outside of Europe have long since been withdrawn from that continent; so that there is not now the necessity of conserving butter-fat so that it might be supplied to our soldiers and our allies, that existed during the war. There is therefore now no special reason why people should be induced by deception, or otherwise, to eat an inferior article as a so-called substitute for butter.

We are now producing considerably more butter in Canada than our people consume, and its production is steadily increasing. In round figures the production of creamery butter in Canada for the past four years, according to the Dominion Bureau of Statistics, has been:

1916.....	82,000,000 lbs.
1917.....	87,000,000 lbs.
1918.....	93,000,000 lbs.
1919.....	98,000,000 lbs.

As evidence of the increasing surplus of butter manufactured in Canada, the Bureau of Statistics gives the exports of butter from Canada in figures as follows:

1918.....	4,900,000 lbs.
1919.....	13,600,000 lbs.

GENUINE ECONOMY IN TIRES

These Bargains Shipped to You on Approval



WHY pay the increased price for tires when you can get such big bargains as we offer?

These are the cheapest tires on sale anywhere, and you can examine them before buying. Order by mail or wire, and we will ship tires to you at any address East of Fort William, express paid, C.O.D. Give them a thorough examination and satisfy yourself you are getting a genuine bargain. If they do not please you just ship them back at our expense.

Could anything be fairer?

Here are some of our phenomenal prices:—

Size	Plain Tread	Non-Skid Tread
30x3 1/2	.....	\$16.50
32x3 1/2	.....	17.00
31x4	..... 18.00	26.00
33x4 1/2	.....	30.00
34x4 1/2	.....	33.00
35x4 1/2	..... 28.00	.....

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

TUBES! TUBES!! TUBES!!!
30x3 1/2—fully guaranteed—\$2.25.

Order Now. You'll never find a better opportunity to cut down your tire expense.

Security Tire Sales Co.

516 Yonge Street, Toronto

PUSLINCH PLAINS SHORTHORNS

Five bulls for sale by Burnbrae Sultan -80325-

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

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.**

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

Ontario Veterinary College

110 UNIVERSITY AVE. - TORONTO, CANADA

UNDER THE DEPARTMENT OF AGRICULTURE OF ONTARIO AND AFFILIATED WITH THE UNIVERSITY OF TORONTO

It offers a complete course of instruction and training in Veterinary Science. Calendar containing full information as to entrance, tuition fees and courses of study mailed on application. Session begins Friday, October 1st, 1920. Write for Bulletin and Calendar.

C. D. McGILVRAY, M.D.V.,

Dept. D Principal

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**

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.**

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 calves. 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.**

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. Long-distance Phone. **A. A. COLWILL, R.R. No. 2, Newcastle.**

Pear Lawn Shorthorns, Hackneys and Yorkshires—One imported-in-dam Miss Ramsd'n bull, 14 months; one Secret bull, 12 months, imp. sire and dam; one bull, a Flattery, 12 months, imp. sire. A one Golden Rose bull, 6 months, imp. sire and dam; one imported Hackney stallion, A 1; two Hackney stallions few young cows with calves at foot. One imported Hackney 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.

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.

The Salem Herd of Scotch Shorthorns

HERD HEADED BY GAINFORD MARQUIS, CANADA'S PREMIER SIRE

Write us about the get 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

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** Brantford 7 miles. Oakland 1 mile. 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, Shedden, Ont., P.M., M.C.R.**

Cedar Dale Scotch Shorthorns—Pleasing Cattle and Pleasing Pedigrees—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.**

SHORTHORNS—CLYDESDALES

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

The exports of butter last year were larger than they have been since 1907. Why should the health and vitality of our people be jeopardized by giving them, an inferior article in place of butter, while our good butter is being sent to nourish other nations? It is the duty of our Parliament to encourage a greater use of butter in Canada. If it were not for the unfair competition of oleomargarine, our production of butter would have been larger to the extent of the nearly 30,000,000 pounds of oleomargarine that was consumed in Canada during the first two years of its admission to the Canadian market.

4.—BECAUSE BUTTER AT PRESENT PRICES IS A CHEAP FOOD.

The value of a food depends upon the amount of digestible material and growth-promoting substances it contains, not upon its appearance or cost, per pound. Butter at 75 cents a pound may seem high, as compared with beefsteak at 35 cents a pound, but when measured by the actual food value, health and strength-giving power, beefsteak is expensive at 35 cents a pound and butter cheap at 75 cents. People should be more interested in the amount of real food they can secure for a dollar, than in the relative prices of foods per pound, regardless of food value. On a food value basis, butter at 75 cents per pound is twice as cheap as beefsteak at 35 cents per pound, three times as cheap as canned peas at 15 cents a pound, three times as cheap as eggs at 60 cents a dozen, and six times as cheap as canned tomatoes at 15 cents a pound. A comparison cannot be made with oleomargarine because no one who buys or eats oleomargarine in this country knows what they are getting or what there is in it. There is no law or regulation in Canada requiring the stuff called oleomargarine to be composed of any specified materials or that its composition should be given on the package in which it is contained. Even if we were told to-day what oleomargarine is made of, the manufacturers are quite free to change the ingredients of their products to-morrow, and again the next day if they wish. The price of butter is of course, higher than it used to be, but its increase has not been out of proportion to the increase

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CALEDONIA, ONT.

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C.R.

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number of choice bred
d bulls. Prices right
Markdale, Ont.

Shorthorns

Scotch. Stallion colt,
and be satisfied.

LUMBUS, ONTARIO

**ACUTE ECZEMA
ON BABY'S HEAD**

Face, Neck, Arms. Terrible
Sight. Itched And Burned.
Cuticura Heals.

"Baby was two months old when I noticed little pimples on her head. They kept getting worse and spread till her head, face, neck and arms were one mass of eruptions, burning, itching, and bleeding. I was told it was acute eczema. I had to sew up her arms and legs in linen. She was a terrible sight. For one year I had no rest night or day.

"We got Cuticura Soap and Ointment. In less than two weeks she began to mend and in a few months she was healed." (Signed) Mrs. Boorman, 243 McDonnell St., Peterboro, Ont., April 19, 1919.

Stop the use of all doubtful soaps. Use Cuticura for all toilet purposes.

Soap 25c, Ointment 25 and 50c. Sold throughout the Dominion. Canadian Depot: Lyman, Limited, St. Paul St., Montreal.

Cuticura Soap shaves without mug.

Cream Wanted

Ship your cream to us. We pay all express charges. We supply cans. We remit daily. We guarantee highest market price.

**ONTARIO CREAMERIES
Limited**

LONDON ONTARIO

**Maple Shade
SHORTHORNS**

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

W. A. DRYDEN

Brooklin - - - Ontario

**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.

FOR IMMEDIATE SALE

Dual-Purpose Shorthorn Sire

Monteith Duke 2nd, 100792. Calved June 12th, 1915. Sire, Bowling Duke = 91278 = (114416). Dam Fortune 20th 91415, by The Patriot (Imp.) 50100. Splendid breeder. Weighs 22 cwt. in breeding condition. Sure and active and very quiet. Apply to—

J. H. WIGGINS, - Kemptville, 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.

in the prices of other necessities of life, like bread, meat, clothing, boots, etc. All these things the farmer must buy for himself and his family. Bran or some other grain product is a necessary feed for dairy cattle. Before the war I bought bran for use on my farm at \$18 a ton. Recently the Canadian Wheat Board, a Government appointed body, authorized an increase in the price of bran to \$51 a ton at Montreal. Farm labor has gone up 200 or 300 per cent., and in some parts of Canada it is almost impossible for farmers to get help at any price.

5.—BECAUSE THE SALE OF OLEOMARGARINE LEADS TO DECEPTION AND FRAUD.

The manufacturers of oleomargarine take advantage of the position that butter holds, as a desirable food in the estimation of the public, by imitating the color and the texture of butter and the size of packages in which it is contained. They also use the word "butter" frequently in their advertisements.

This style of advertising shows that the manufacturers of oleomargarine desire to trade on the reputation that butter has in the world. By the use of the words "creamery butter taste," "churned," "pasteurized milk," "dairy salt," etc., it is quite evident the intention is to try and get the public to imagine they are getting butter or at least something that is very near butter. If the purchaser of the article is not deceived, it gives him the opportunity of deceiving the consumer. Oleomargarine is wrongly served as butter in many hotels, restaurants and boarding houses throughout the country, and the consumers are deceived and do not get what they pay for. As evidence that the sale of oleomargarine leads to deception, it may be noted that there have been numerous prosecutions and confiscations for attempts to dispose of oleomargarine as butter. From the 1st of November, 1919, to the 1st of April, 1920, there have been ten cases in which 3,715 pounds of oleomargarine were confiscated. In one case in Toronto, where prosecution was carried on by the Department of Health and a fine of \$100 and costs imposed, it is estimated the offender would have made \$4,000 profit between January 1st and February 5th last, by mixing oleomargarine and butter, and selling it as butter, if he had not been found out. There are doubtless many cases of infringement of the law by the retail selling of oleomargarine as butter, which are never detected.

6.—BECAUSE OLEOMARGARINE IN DISPLACING BUTTER IN THE CANADIAN MARKET KEEPS UP THE PRICE OF BUTTER

Canada imports a considerable quantity of oleomargarine from the United States. This comes in free of duty, but Canadian butter must pay a customs duty to reach the markets of the United States.

The importation and manufacture of oleomargarine in Canada was allowed by Order in Council passed in December, 1917. From that time to the 31st of January, 1920, the figures for the importation and manufacture of oleomargarine in Canada are as follows:

Imports	Pounds
Animal.....	10,167,348
Vegetable.....	1,168,748
Total.....	11,336,096
In Canada:	
Animal.....	17,598,595
Total in 2 years.....	28,934,691

The consumption of this quantity of oleomargarine in Canada during the past two years means that that much butter was displaced from the Canadian market. This may not have been of much importance in war time, but it is very discouraging to the Canadian farmer to see his home market taken away from him by the introduction of an article with which he cannot compete because it is made of cheap, inferior substances which he cannot use in the manufacture of butter.

7.—BECAUSE IT IS IMPOSSIBLE FOR BUTTER TO COMPETE IN PRICE WITH OLEOMARGARINE. THEY ARE DIFFERENT SUBSTANCES OF DIFFERENT FOOD VALUES.

A standard of purity for all butter sold in Canada is fixed by the Dairy Industry Act, 1914, but there is no law fixing the ingredients of oleomargarine. The manufacturers can put what they like in it and they can change the formula every day if they wish. No one knows what oleomargarine is made of except the maker. He is not required to tell any

HOT WEATHER

the season when a

**DE LAVAL
SEPARATOR**

saves most over
any other separator
or skimming system



IT'S A GREAT MISTAKE for any dairy farmer without a separator or using an inferior machine to put off the purchase of a New De Laval Cream Separator in the summer months especially with butter-fat at the present unusually high price.

Great as are the advantages of the New De Laval over all other separators, as well as over any gravity setting system, at every season of the year, they are even greater during the mid-summer season than at any other time.

This is because hot weather conditions occasion greatest butter-fat losses with gravity setting and render it most difficult to maintain quality of product with any gravity system or unsanitary separator, while, moreover, the quantity of milk is usually greatest, and any loss in either quantity or quality of product means more.

Then there is the great saving in time and labor with the simple, easy running, easily cleaned, large capacity New De Laval machines over all other methods or separators, which naturally counts for more at this time of the year.

Hence the great mistake of putting off the purchase of a New De Laval Cream Separator in summer, whether you already have a poor machine or none at all, and every dairy farmer should keep in mind not only that a De Laval will pay for itself in a few months but may, if desired, be bought on such liberal terms as to actually save its own cost while being paid for.

Every claim thus made is subject to easy demonstration, and every De Laval local agent is glad of the opportunity to prove these claims to you, in your own dairy, without cost or obligation on your part.

Why not see the nearest De Laval agent at once? If you do not know him, write to the nearest office for catalog or any desired information.

THE DE LAVAL COMPANY, Ltd.

MONTREAL PETERBORO WINNIPEG EDMONTON VANCOUVER
50,000 Branches and Local Agencies the World Over

**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.

J. A. & H. M. PETTIT :: FREEMAN, ONTARIO
Burlington Jct., G.T.R., only half mile from farm.

Reyburn Milking Shorthorns

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
Long-distance 'phone and telegraph.

DUAL-PURPOSE SHORTHORNS

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 - Meadowvale, Ont.

HILLVIEW DUAL-PURPOSE SHORTHORNS

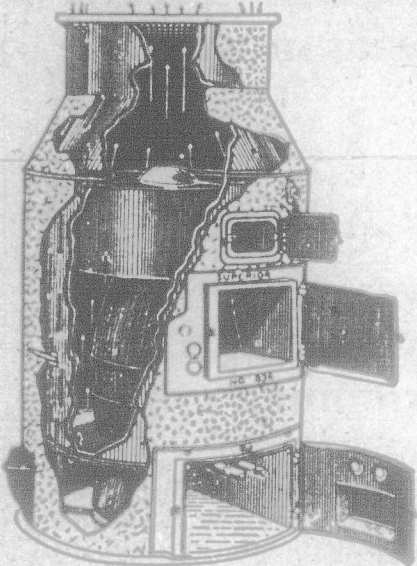
I have in my herd seven officially tested cows, some with R.O.P. record of 7,900 lbs. as a two-year-old and 11,500 lbs. in 4-year class. Herd headed by Kitchener 104066, a heavy, thick grandson of Dairymaid 86086. Two young bulls for sale. Government test tells what their dams have done at the pail,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

DUAL-PURPOSE SHORTHORNS

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.

The Pilot Superior Pipeless Furnace Heats Your Entire House



When the warm air leaves the register, it expands and rises naturally to the ceiling, where it is deflected and circulated through the doors or transoms. The cool air from all parts of the house moves at the lowest level towards the register. This circulation of air currents to and from the register tends to equalize the temperature. In the thousands of houses where the Pilot Superiors have been installed, the variation of temperature between that in the room or hall where the register is located and that in the other rooms is not noticeable. During the coldest weather of the winter of 1917-18 many owners reported temperatures of seventy degrees or more in their kitchens, bathrooms and second-floor back rooms.

Manufactured by
The Hall Zryd Foundry Company, Limited
Hespeler, Ontario
Write for particulars.

Crescent Cleansing Soda



DAIRYMEN:

Perfect and Sanitary Cleansing of
**SEPARATORS, VATS and DAIRY
UTENSILS** is economically and
effectively performed by the use of

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Bags, 5 lbs.

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Always
Use the same

Windsor Dairy Salt

THE CANADIAN SALT CO., LIMITED

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.

one or to print upon the package what is in it. The purchaser of oleomargarine does not know what is in it, and, therefore, does not know whether he is getting value for his money or not. The retail price of oleomargarine on the Ottawa market is 40 cents a pound. In the "London Grocer" of March 13, 1920, margarine is quoted for sale at 1 shilling 1 penny (26 cents) per pound. Can it be that the English manufacturer is getting too little for his product, or why is the price 14 cents less in England than in Canada?

The price of dairy butter on the market is now down to 55 cents a pound, a reduction of at least 20 per cent. on last winter's prices, but the only change in the retail price of oleomargarine on the Ottawa market is an increase from 38 to 40 cents, which was made some weeks ago.

8.—BECAUSE THE MANUFACTURE OF OLEOMARGARINE IN CANADA DOES NOT TEND TO DEVELOP THE RESOURCES OF THE COUNTRY AS DAIRYING DOES.

It should be remembered that the manufacture of oleomargarine in Canada means nothing for the development of the resources of this country. The meat packers can get rid of all their by-products as lard, shortening, soap or other commodities. Whereas you cannot strike a more severe blow at the prosperity of Canada than to discourage and check dairy farming. Is it worth it, where there is only 15 cents a pound difference in the price of butter and oleomargarine, and butter has so much greater food value? The packers put up fats in one-pound packages, which are sold as shortening at 38 cents a pound retail. Any one who cannot afford to buy butter, can get their fats in shortening, which is considerably cheaper than oleomargarine.

Let them have their fats, as fats, and not colored up and flavored as imitation butter.

No one can fairly object to the people of Canada eating more animal or vegetable oils or fats if they want to, but they should know what they are doing and what they are getting, and they should not be deceived by being given a so-called substitute for butter.

Would it be proper to take the products of a saw-mill, mix some wheat with it, chop it up fine, color it, flavor it, and put it up in packages like shredded wheat and sell it as a substitute for shredded wheat?

9.—BECAUSE IT IS UNPATRIOTIC AND FALSE ECONOMY TO DISCOURAGE AND INJURE THE DAIRY INDUSTRY OF CANADA, BY CURTAILING THE USE OF BUTTER.

An American packing house concern that sells a large quantity of oleomargarine in Canada, has been busy for the last few months in conjunction with retail merchants associations, circularizing Women's Societies and Trade and Labor Councils, trying to induce them to make representations to the Government, and to Parliament, in favor of continuing the sale of oleomargarine in Canada. If they succeed, it means big business and handsome profits and, therefore, their enterprise will be justified, but what about the organizations of consumers who allow themselves to be made use of by the packers? Householders should realize that there is no economy in depriving their families of the health-giving, vitalizing properties of butter. Would one of these mothers, who now through ignorance, is engaged in a campaign against butter, be willing to give her baby skim milk at seven cents a quart, instead of whole milk at 14 cents a quart, because it is cheaper? Yet skim-milk is much nearer the food value of whole milk, than animal and vegetable fats are to the food value of butter. It is sometimes said by oleomargarine manufacturers that they put 20 per cent. or 30 per cent. of butter in their oleomargarine. If they do, it is just 20 per cent. or 30 per cent. richer in butter-fats than it otherwise would be, but it would still be 80 per cent. or 70 per cent. deficient in butter-fats, and, consequently, away below the food value of butter. A loyal citizen of Canada should take pride in the prosperity of his country. Agriculture is our greatest industry and dairying is the most important branch of our agriculture. It is the patriotic duty of every Canadian to refrain from any act which will be injurious to the dairy interests of Canada.

We have vast areas of unoccupied land in this country which require to be populated and developed. Much of it is suitable for dairying. It is in the interests of Canada that dairying should be

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 not remain long. Write today.

RAYMONDALE FARM, Vaudreuil, Que. D. RAYMOND, Owner, Queen's Hotel, Montreal

Hamilton House Holstein Sires

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 81 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.

D. B. TRACY - (All Railways Bell Phone) - COBourg, ONT.

Hospital for the Insane, Hamilton, Ont.

HOLSTEIN BULLS ONLY FOR SALE

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.

"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.

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.

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GRIESBACH BROS., L.-D. 'phone, Collingwood, 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, out of high-producing dams, backed by noted blood and big records. 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.

A Capital Young Holstein Bull for sale—a son of Lyon's Hengerveld Champion whose dam is the 25.83 lb. Junior three year-old daughter of Baroness Madeline 34.48 lbs. The dam of this young bull gave 19.82 lbs. with her first calf and is full sister to a 29.95 lb. cow. He will make a good herd sire and will be sold worth the money. T. W. McQUEEN, Tillsonburg, Ontario

PROSPECT FARM JERSEYS

Herd sire, Torons of Prospect Farm 12094, whose sire, Lous Torono 106614, dam and both grandams, have an average R.O.M. record of 14,261 lbs. milk and 966 lbs. butter, 85 per cent. fat. Lous Torono is a grandson of Hood Farm Pogis 9th, 55552, and Hood Farm Torono 60326, both Gold Medal bulls. Torono of Prospect Farm, dam Keetsa 333656, has a 2 year Record of 10,627 lbs. milk, 617 lbs. 85 per cent. butter and on retest has milked 60 lbs. milk a day. She is a daughter of Hood Farm Torono 99265, whose first 17 daughters, as 2-year-olds, averaged 8,746 lbs. milk and 600.01 lbs. butter 85 per cent. fat. We have for sale young bulls sired by Torono of Prospect Farm and from R.O.P. cows, also choice young bulls sired by Brampton Bright Togo 5760, and cows and heifers bred to Torono of Prospect Farm, due to calve Sept. and Oct. Pure bred and high grades. The high grades will make choice family cows. R. & A. H. BAIRD, R. R. 1, New Hamburg, 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. FREDERICK G. TODD, Owner, 801 New Birks Bldg., Montreal, P.Q. Farm at Morin Heights - F. J. WATSON, Manager

The Woodview Farm CANADA'S MOST BEAUTIFUL JERSEY HERD
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.

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 butter-fat—write me or visit the farm. Males and females of all ages for sale. James Benning, Summertown Sta., G.T.R. Williamstown, C.P.R. Bell Telephone 78-3 Cornwall

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We now have for sale
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encouraged and that these vacant lands be cultivated and made productive. Let us take no action which will hamper and discourage dairying.

The Province of Quebec is the greatest butter-producing province of the Dominion. It produces 35.8 per cent. of all the creamery butter made in Canada. It is the cheapest province to live in. Increased production of butter tends to bring down the high cost of living. It will be the greatest good for the greatest number to keep oleomargarine out of Canada and encourage a greater production of butter. Who really wants oleomargarine in Canada, except the manufacturer and retail vendor, who makes money out of it? The Canadian workmen, who are as good as the best, want the best in the way of food. The average man would not eat oleomargarine if he knew what he was getting. Therefore why continue the means of deception? Let us be loyal patriotic Canadians, and in the interests of Canada and the Canadian people banish oleomargarine forever from our markets.—D'ARCY SCOTT, Secretary and General Counsel, National Dairy Council of Canada.

Collection of Annual Agricultural Statistics 1920.

Amongst the statistical reforms accomplished or inaugurated by the Dominion Bureau of Statistics, established in 1918, none is of more importance than that which is concerned with agriculture, the leading industry of Canada. To farmers it is of supreme importance to know what areas are being devoted to particular crops in their own and other countries, how such crops are being extended or withdrawn from cultivation and what is the volume of production in one season as compared with another. They should, by means of accurate information on these points, be able to form their own judgment as to the local crops likely to prove most remunerative. Similarly, a knowledge of the numbers of farm live stock, and whether these are increasing or decreasing from year to year, is important to all dealers; and is at least of equal importance to breeders and producers.

During the past three years the annual agricultural statistics of the Dominion have been based upon returns of areas sown and numbers of live stock on the farm, collected from individual farmers in the month of June. This information is obtained by means of a simple card-board schedule, which is distributed to farmers through the agency of the rural school teachers and children. The cards, when completed, are first sent to the Provincial Government, which, after having them sorted into counties or districts, transmits them to the Dominion Bureau of Statistics at Ottawa for final compilation into totals by adding machinery.

As schedules are now being distributed for the collection of this year's returns of the areas sown and the numbers of farm animals, it is desirable to call the serious attention of farmers to the duty of filling up the simple schedule required. Any farmer who does not receive a card before the end of June should apply for one either to the school teacher in his school district, to the Agricultural Department of his province, or to the Dominion Bureau of Statistics, Ottawa.

It is the aim of the Dominion and Provincial statistical authorities to secure an annual return from every individual farmer in the Dominion. The issue of trustworthy annual agricultural statistics is important for all classes of interests in Canada, but to none is it of greater importance than to farmers themselves, who otherwise carry on their industry in the dark and are liable to be victimized by unscrupulous traders. No individual returns are published, and the information collected is not used in any way for taxation purposes. It is confidently expected that as farmers become better acquainted with the system organized for their benefit and realize the practical value to themselves of accurate agricultural statistics there will be a continuous increase in the proportion of returns. Meanwhile, it should be remembered that whatever degree or error may attach to the figures issued is attributable to the estimate that has to be made from the actual returns.—E. H. Godfrey, Dominion Bureau of Statistics, Ottawa.

Remington UMC

Duck Shooting is Coming!

Are you ready for the rousing days when duck shooting opens? Keen eyes, steady hands, good judgment and a Remington UMC pump gun will bag the ducks as fast as they come.

The "old reliable" pump gun gives you six shots quick! Bottom ejection, solid breech, hammerless, safe, its velvet smooth slide action is swift and sure.

For shells—of course, Arrow and Nitro Club Wet-proof, Steel-lined shells will get results.

Remington UMC of Canada, Limited
WINDSOR, ONTARIO

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ALL safety razors seem alike because of the similarity in size and appearance. As regards the AutoStrop Razor, however, the resemblance ends there. Its peculiar and additional advantage is that, without being larger than any other safety razor, it combines within itself a self-stropping feature that enables the user to keep the blade sharp without taking anything apart. It thus prevents dull blades and the expense of buying new ones.

You may not be interested in economy of blades, but surely you want a good shave and that is only possible with a stropped blade.

Any dealer will demonstrate the AutoStrop Razor to you, guarantee satisfaction, or refund of purchase price. Only \$5.00—complete with stropp and twelve blades in an attractive assortment of cases.

AutoStrop Safety Razor Co., Limited
AutoStrop Building, Toronto, Canada 294

AutoStrop Razor
—sharpens itself

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

Shropshire Yearling Ewes bred to Bibby's 84 (imp.) ram and eye lambs sired by him. Two Shorthorn bulls. Two Clydesdale stallions.
W. H. PUGH, Myrtle Station, Ont.

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, Sudden Torredor, we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed.
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Yearling rams for flock headers. Yearling ewes and breeding ewes in car lots.
Chas. J. Shore, Glanworth, Ont.

YORKSHIRES
Pigs of different ages, both sexes, from large litters.
WELWOOD FARM
Farmer's Advocate, London, Ontario

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.
HOOD FARM, INC., Lowell, Mass.

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.

CHESTER WHITES
Choice young pigs, both sexes, sired by Gauwa Collaway Edd. Imported. No. 19831. Also a few gilts bred to same boar.
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Young sows, bred for September and October farrow. Choice boars of all ages.
LESLIE HADDEN, Box 264, Sunderland, Ont.
Elmvale Chester Whites—O. I. C. strain (high class) of sows over 10 weeks of age. A few sows of seven months; also one boar.
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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.
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Prospect Hill Berkshires—Young stock, either sex, for sale, from our imported sows and boars; also some from our show herd headed by our stock boar, Ringleder. Terms and prices right.
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Meadow Brook Registered Yorkshires—Ten choice young boars fit for service, from prize-winning stock. Prices reasonable for quick sale.
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Young sows, bred for June and July farrow, and boars for sale. Write or phone.
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YORKSHIRES Extra choice young pigs, ready to ship. Dams bred by Featherstone—Sire by Brethour. Prices right. Order early.
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Get Fresh Air In**

FRESH air is still cheap. Help yourself to plenty and do the same for your stabled animals. Give them the continuous supply that is *absolutely necessary* to vigorous health, growth, and production of profits.



Equip your buildings with
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Ventilators

Scientifically constructed to give maximum exhaust under all conditions. Never any down-draught. Thoroughly efficient, easily attached, and a handsome addition to any building.

Made in 11 sizes and 5 styles, for every place where air is to be exhausted—Barns, Stables, Factories, Garages, etc. Extensively used by Railroads and Corporations for all kinds of buildings.

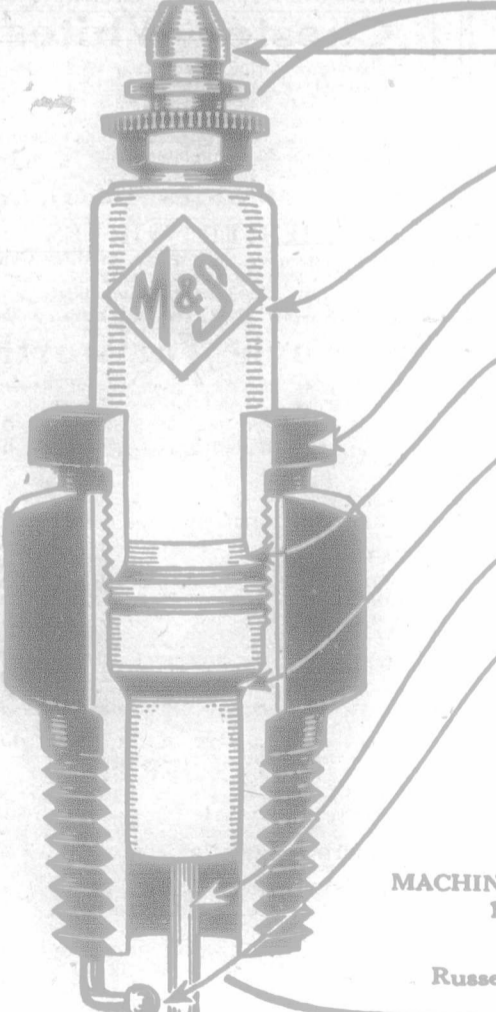
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Manufacturers of the famous "Eastlake" Shingles, "Empire" Corrugated Iron, Garages, Metallic Ceilings, etc.

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Three-in-one terminal adapted to any style ignition wiring, slip-on, screw connection or Butch style.

High grade, non-absorbent porcelain, petticoat style. High heat test. Interchangeable.

Bushing which holds porcelain within outer shell.

Copper asbestos gasket between bushing and porcelain.

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One-piece centre electrode (not welded) 97% nickel steel.

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Russell Motor Car Co., Ltd. 105**

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Our School Department.

Agriculture.

BY GEO. W. HOFFERD, M. A.

Some one has said that "Agriculture is the oldest of arts and the most recent of the sciences." But we do not know how, when or where primitive agriculture began. The lowest races did not practice it, and even in the present time many tropical forest tribes have no idea of sowing and reaping. Their notions of getting food are limited to gathering such fruits and roots as they have found by experience to be edible. Some Australian tribes have learned the folly of destroying a permanent source of food, but the idea of attempting to increase it by efforts of their own has not yet dawned upon them.

Many hunting tribes, such as those of the Amazon forests, practice a simple form of agriculture, which gives the women a little to do while their husbands are away on hunting expeditions. But it is only an attempt at rude cultivation, for the climate is such that fruits of gorgeous beauty and attractive scent and taste offer themselves without cultivation. It is not then unlikely that agriculture, in most regions, began in this way. The crude little experiments turned out well from time to time, and consequently would be repeated; and agriculture of a primitive kind would gradually take its place among the occupations of a tribe.

Frequently, also, the attack of stronger neighboring tribes would reduce the area of the hunting grounds of the weaker, who occupied it, and game for them would become so scarce that the practice of agriculture naturally would grow more important. The husbands would give up their wandering life, to some extent, and gradually remain for long periods in settled villages as primitive tillers of the soil. In advanced social conditions men do all the hard work, leaving to the women that which requires time and the exercise of such virtues as patience, rather than strength.

Tropical lands offer highly favorable conditions for plant life, and there agriculture is most easily undertaken. Both heat and moisture are abundant, and vast quantities of decaying vegetable matter enrich the soil, making it exceedingly fertile. Crops ripen all the year round; and there is not one but many harvests during the year. There the method of agriculture is easy, but slow to improve, for where a little trouble is enough, man is not inclined to take more. Some African tribes abandon a clearing when the virgin soil shows signs of exhaustion. They move to a new area, which in turn they exhaust. More troublesome crops are only introduced when such simple methods fail. Among agricultural African tribes in tropical regions to-day are found many stages of progress in agriculture from the nomadic agriculture to the excellent cultivation by many negroes.

A great advance is made as soon as tribes begin to cultivate crops for seed, such as corn, rice, wheat and millet. These involve much labor, and develop the ingenuity and foresight of the tribes who

engage in their cultivation. They gradually discover better methods of working the soil, the use of fertilizers, improved implements and irrigation; and so agriculture passes from the stationary into the progressive stage.

Our school boys and girls know that agriculture has developed much faster in some parts of the world than in others. Even at the present time many tribes have got no further than sowing and reaping with the crudest implements, and stick only a handful of shoots into the ground to let mother Nature do the rest unassisted. The tribes a little more advanced have learned to select and preserve seed from the harvest for the next seeding time. Still more advanced peoples, such as are found chiefly in the clearings of the temperate forest regions of Europe, Asia, United States and Canada, however, understand manuring, cover crops, crop rotation, grafting, budding, pruning, irrigation, insecticides, fungicides, and similar methods of increasing the yield. Indeed, to-day, it is our aim to make agriculture a science as well as an art.

The Sun.

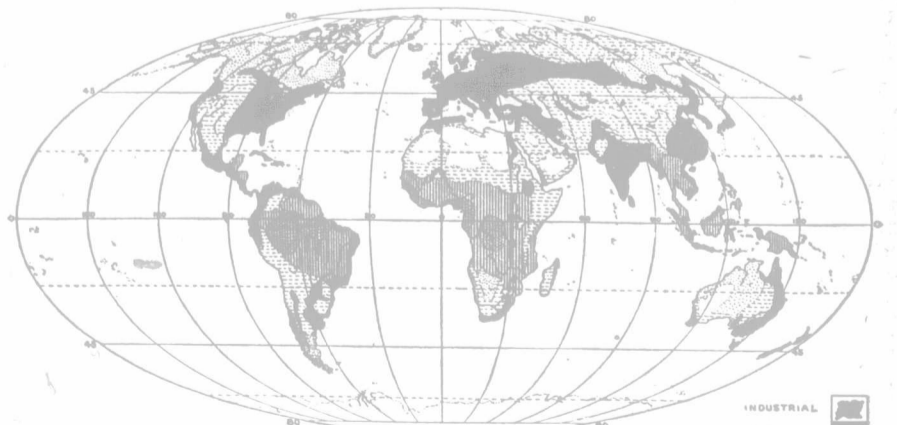
BY DR. D. W. HAMILTON.

The sun is a great, round ball of fire giving out a great deal of heat and light. The light is so bright, that although the sun is millions of miles away, it dazzles the eyes. During the day it looks yellow like fire, but sometimes in the evening, when it is setting, it looks red. The sun does not move. The earth whirls round like a top. When the side which we are on is nearest the sun, we get plenty of light and heat. We call that day-time. When the earth turns round so that we are on the side in the shade, we call it night. Because we are moving we think the sun is moving. The sun rises in the east and sets in the west. The sun gives us light and heat, without it no animals or plants could live.

"Kind words are little sunbeams,
That sparkle as they fall;
And loving smiles are sunbeams,
A light of joy to all."

Legal Weights in Dominion of Canada.

	Lbs. per bushel
Wheat.....	60
Oats.....	34
Barley.....	48
Rye.....	56
Buckwheat.....	48
Flax.....	56
Indian Corn.....	56
Peas.....	60
Beans.....	60
Beets.....	60
Carrots.....	60
Parsnips.....	60
Potatoes.....	60
Turnips.....	60
Clover Seed.....	60
Timothy Seed.....	48
Blue Grass Seed.....	14



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This Reliner is a complete new tire lining made by Goodyear to reinforce tires weakened by long, hard driving, road shocks or accidents.

You can apply the Goodyear Reliner right in your own garage without expert help. Shaped to fit the casing, it can be cemented in and the tire ready for running in half an hour or so.

If you prefer, your repairman will apply it for you for a small service charge.

Watch your tires carefully for fabric breaks inside.

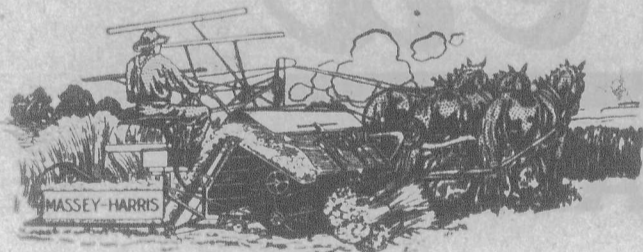
If any appear, see a Goodyear Service Station or your tire repairman about Goodyear Reliners at once.



GOODYEAR
MADE IN CANADA

RELINER

Massey-Harris



The Worth is in the Wear

INVESTING your money in a binder that will go to the scrap heap in a couple of years is poor business. Be sure to buy a machine that will last long enough to produce a profit as well as pay for itself. The good machine repays your outlay by long service.

Hundreds of Massey-Harris Binders which have been in use from fifteen to twenty years are still doing good work. Could anything prove more fully their durability? The durable machine is the profitable machine.

Massey-Harris Binders are renowned for long service

MASSEY-HARRIS CO. Limited

Head Office: Toronto, Ont.

AGENCIES EVERYWHERE

Milking 25 Cows In 60 Minutes



PRETTY good milking you will admit! Yet it is by no means unusual for one man with a Macartney double unit to milk a herd of this size in less than an hour.

What this means in dollars and cents is easily illustrated. The average person milks about 8 cows in an hour, by hand. Figuring wages and board at 25 cents an hour, handmilking one cow costs about 3 cents or 75 cents for the entire herd. Twice a day for 365 days means a wage expense of \$547.50.

At 25 cents an hour the labor cost per cow with the Macartney Milker works out at 1 cent, or 25 cents per day. Twice a day the year 'round this would mean a milking cost of \$182.50, or a yearly saving of \$365.00 through the use of the Macartney Machine Milker.

Simple figures but very expressive. And remember that Macartney means profit in other ways. It means more milk per cow, longer lactation periods, less hired help and more time for other important work in the fields.

The Macartney Machine Milker is a real money making investment. You are losing money without it. You gain in every way when you adopt it.

Free Particulars

Further information concerning the Macartney Machine Milker will be mailed you on receipt of the attached coupon filled in as indicated. This information will not obligate you in any way. Even if you are not contemplating an immediate purchase our literature will prove helpful and interesting.

The Macartney Milking Machine Co. Limited
OTTAWA

Please send me full particulars about the Macartney Machine Milker

The Macartney Milking Machine Co. Limited

316 CATHERINE ST. OTTAWA (B-1)

Name _____
Address _____

I have _____ cows

Write to The Farmer's Advocate and Home Magazine for Instructions on how to make money by securing NEW SUBSCRIPTIONS



Dependability Assured By Government Test

THIS drawing is from a photograph taken while a Canadian Government inspector was testing a Renfrew Two Wheel Truck Scale. Every Renfrew Scale is tested thoroughly in this way. The slightest defect or inaccuracy means complete rejection for that scale. So that only the ones that conform perfectly to requirements pass out of the work-shops to the Sales department.

After this inspector's test there can be no room for doubt as to the scale's absolute dependability. You can trust a Renfrew Scale always. The inspector's certificate is to be found in an envelope tacked on the bottom of the platform. The

Renfrew

TRUCK SCALE

has been fully approved by thousands of Canadian farming men and women. It will weigh anything from 1 lb. to 2000 lbs.—from a hen to a horse. It can be wheeled about as easily as an ordinary truck. When not in use it can be tipped up and stood in a corner out of the way.

It is a splendid money saver. One user wrote recently to say that he saved money with it "every time he used it." Another in *three ordinary deals*, saved \$50! We have had hundreds of letters from Renfrew Truck Scale users, and in every case, the scale has been making and saving money.

With a Renfrew you can weigh your livestock before selling; weigh grain before taking it to elevator; weigh milk and find out the production of each cow; weigh milk and cream before taking to cheese factory or creamery; weigh all the supplies you buy; weigh all the live stock, poultry, vegetables, etc., that you sell; weigh the feed you give your stock. (These are only a few of the uses to which it can be put on the farm.)

The Renfrew is the most useful and handy scale ever invented. You cannot afford to be without one any longer. Write us to-night for prices and particulars.

The Renfrew Machinery Co., Ltd.

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