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# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE SUCCEED

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

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LV.

LONDON, ONTARIO, AUGUST 26, 1920.

No. 1457

## McClary's TECUMSEH Range



*"Let them  
all come!"*

"Cooking for a threshing gang doesn't worry me any more. My new Tecumseh Range is a wonder."

Write our nearest office and we'll send you our booklet "Comfort in the Home," which describes the famous McClary's Sunshine Furnace.

We also make the Sofco Sunshine Pipeless Furnace, the simplest, most effective soft coal installation for household heating yet devised.



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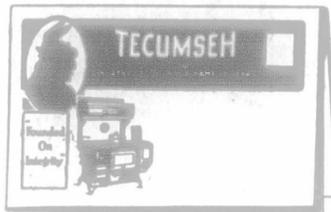
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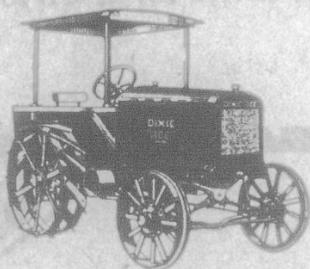
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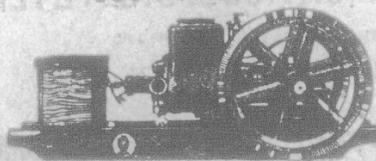
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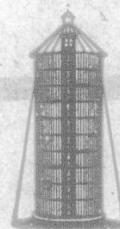
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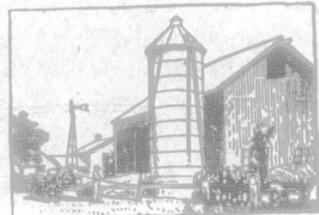
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Yours truly,  
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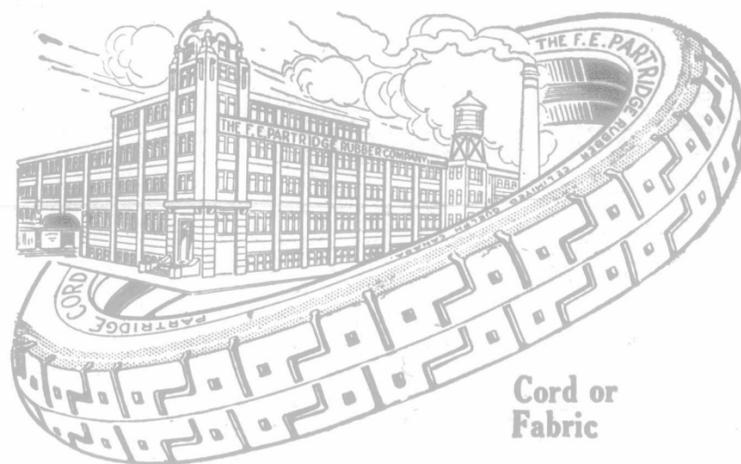
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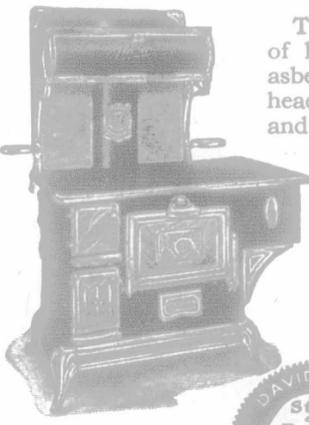
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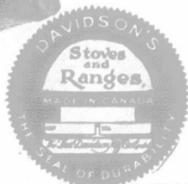
These Davidson Ranges have a body of heavy polished steel, protected by asbestos and hand-riveted with cone-headed rivets, cast iron tops, centres and covers ribbed.

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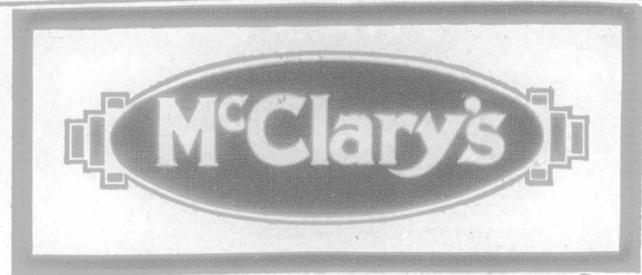
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Purina Pig Chow contains Hominy Meal, Digester Tankage, Blackstrap Molasses, Ground Barley, Corn Gluten Meal, Cracked Corn, Linseed Oil Meal, and Alfalfa Flour, with a trace of charcoal and salt.

Compared with corn, barley, shorts, hominy or similar ingredients by weight, Purina Pig Chow will produce 100 lbs. of live hog with one-third to one-half less feed. Fed individually or in combination with other feeds, Purina Pig Chow will produce 25 to 50% more weight.



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 and Deserve?**

**G**IVE her this convenience which you would demand if you had the house work to handle.

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



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

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

**Empire Systems** are powerful and compact. They are very reasonable in price and made in different sizes to suit the needs of your own farm.

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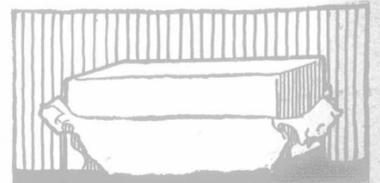
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# The Farmer's Advocate and Home Magazine

PERSEVERE  
AND  
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ESTABLISHED  
1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

LV.

LONDON, ONTARIO, AUGUST 26, 1920

1457

## EDITORIAL.

Treat the seed wheat with formalin to avoid smut—it pays.

Pasturing new seeds is not a good practice. Avoid it if possible.

The uncultivated summer-fallow is worse than no summer-fallow.

The daily press is kept busy these days reporting murders, assaults and political speeches.

By the appearance of some corn fields, an extra silo will be needed this year to house the corn.

The cattle derive the benefit of shade trees in the pasture field during the hot, sultry August days.

The appearance of some gardens would convey the impression that there was a better crop of weeds than vegetables.

Showery weather of early August was just what the root crop wanted. One can almost see the turnips and mangels expanding.

Make a good seed-bed for the wheat, but if the Hessian fly has been bad in the past delay sowing beyond the usual date.

The catchy harvest weather is delaying operations so that many a farm boy is wondering if he will get through harvest in time for the big exhibitions.

The disk, cultivator, or gang-plow used on the unseeded stubble field will start many weed seeds germinating, thus lessening the crop of weeds next year.

Is your farm noted particularly for any one thing? Surely there is one thing it will produce better than any other. If you haven't discovered what it is, dig!

The pessimist who complained about bad weather and poor crop prospects last April and May is still complaining about the catchy weather visited upon us during the harvesting of a bumper crop.

City men have the idea that they know all about farming, but the bluffer is soon discovered when forced to tackle a few farm problems. Farming is a man's job, and one cannot have too much experience.

A good deal of delay owing to breaks in machinery, loss of tools, etc., is due to gross carelessness. When will men learn to put things in their places, do things at the right time, and, above all, think before acting.

Plan the work so that time will not be lost while waiting for the dew to dry off so the binder, or hauling, can be started. The time may be utilized in straightening up around the buildings, cutting weeds, hauling a few loads of manure etc.

The railways of Canada have applied for an increase of 40 per cent. in freight rates and will probably get half of it or more, the express companies have made application to increase their charges, and the Bell Telephone Company are out after their share of the spoils. The long-suffering consumer, who pays the bills would be well advised to put his pocketbook in his inside pocket and lock up his change.

### Is Blue Ruin Impending?

There is a demand in some quarters for the blue-ruin, wolf! wolf! type of agricultural buncombe that has always been more or less chronically preached, and of late years has become acute. The wolf! wolf! cry has been heralded abroad when there was no wolf. It was only a ground-hog that could have been destroyed by organized effort and modern methods. The result, however, has been bad rather than good. Parents on the farms have become dissatisfied. The youth of the country have been shown two pictures, the rosy, luxurious life of the city, and the farm where slavery and oppression abound. They have naturally chosen the field of luxury and ease as the scene of their future activities, only, when their eyes were opened, to turn upon their own people denouncing them as profiteers and hoarders of wealth.

We should treat the whole matter frankly and not drive the young people to the city with hard-luck tales that are only twenty-five per cent. true. Farming has its drawbacks, all will admit; and a few become millionaires when they engage in city industrial activities, but the 35 or 40 per cent. of Canada's population who live amid rural environment have just as much reason to be happy, and they are just as prosperous as any other 35 or 40 per cent. that can be chosen from the remaining citizens of this country.

There are wrongs to be righted; there are economic conditions that are not to our liking and do not appeal to farmers as a class, but over and above all there is the honesty, the usefulness, the freedom, the independence of the calling and the natural, unadulterated life on the farm which places it above all others in the category of occupations in this or any country.

The farmer's task to-day is to fight for the social and economic well-being of the industry in which he is engaged, and enlist in this noble cause the vigorous, red-blooded youth of the country which are being constantly impelled cityward by the oft-repeated tales of agricultural decay and oppression.

### Canada Needs More Good Breeding Horses.

There is a splendid opportunity now to stimulate the breeding of good draft horses, and a great impetus can be given to this enterprise by the introduction of some superior stallions.

From the Great Lakes to the Atlantic there is a scarcity of good draft horses; they are not to be found in any number anywhere in Canada, for the West, like the East, got filled up with a lot of misfits for which there was no place, and the impression got abroad that the demand for horses was a thing of the past. Breeding fell off, enthusiasm waned, horsemen put on the soft pedal, and the general result has been a scarcity of good horses. The old hunting grounds have been culled repeatedly, and there is a tendency to discontinue the fruitless quest of horses where other power, though perhaps not as satisfactory, can be more easily obtained.

Not only is there a famine in the draft horse line, but there is a dearth of high-class breeding stallions. One would not require the fingers of both hands on which to count all the Clydesdale and Percheron stallions in Ontario that are really good enough to mate with some of the best mares in the Province, and the fingers of one hand would not be required to count all the Clydesdale and Percheron stallions in Ontario that are really high-class, outstanding breeding horses. We simply haven't got stallions that have proven themselves outstanding when measured according to the standards of the breeds. Ontario should afford, at least, a good Clydesdale and a good Percheron for there are a considerable number of mares that would produce with anything on this continent or the Old Country, if they were mated properly and given an opportunity.

We should have a Clydesdale horse with the same prestige in Ontario that Dunure Footprint has in Scotland; we should have a horse to which the good mares all over Ontario would be sent; we should have a horse that people would talk about and travel long distances to see. Such a horse might cost Ontario twenty or twenty-five thousand dollars, but what is that to the Province when a few automobile manufacturers would spend as much or more on a show or convention to advertise their goods. It would be worth \$100,000, in one year, to the horse-breeding industry of this Province if the people could be awakened to the necessity of breeding good horses and the advantages that would accrue therefrom.

Barring accident or misfortune the revenue from a good breeding stallion would maintain him and eventually discharge the initial debt. "Footprint," we are told, covers about 200 mares in a season, but this is more than should be expected of any horse. There is no reason why artificial breeding methods could not be utilized and a high-class stallion so employed as to do the horse industry of Ontario inestimable good at little provincial expense. Alberta has done this very thing; Saskatchewan has a similar scheme projected; Ontario and the Eastern Provinces should do the same thing, only in a bigger way, and place at the disposal of breeders good stallions of the various leading breeds.

The first step in the rehabilitation of the horse-breeding industry is the awakening of optimism and enthusiasm, and perhaps the newly-coined word "peptomism" best describes the missing attribute. A better feeling toward the horse, backed up with action on the part of farmers and horsemen and Departments of Agriculture, would bring the prince of farm animals again to the front, and allow it to play its rightful part in the agricultural and industrial development of this country.

### Truth 'in Fabric.

The trade and consumers generally demand that fruit growers do not include any scabby or wormy apples in a barrel of number ones, and if a dairyman or butter-maker should leave more than 16 per cent. of moisture in a pound or a box of butter the guilty culprit is arraigned and prosecuted forthwith. Wool is sold on a graded basis, or else the producer is paid a flat rate that is sure to be sufficiently low to provide for lack of quality or undue losses in weight when scouring. How changed is the situation when one goes to purchase woolen goods! What guarantee has a buyer that he is not getting fifty per cent. shoddy or an admixture of cotton? Some may say they can tell the difference, but we are not all so discerning and the less skilful ones are often "fleeced." There is a "truth in fabric" Bill pending in the United States, which, if carried, will compel clothing and cloth manufacturers to label materials with the percentage of shoddy contained in them. "All-wool" clothing is considered a misnomer that is fooling everybody. If we must have truth in the label on a barrel of apples, truth in butter, truth in wheat, truth in wool, truth in advertising, truth in the written and the spoken word, then it would do no harm to have truth in the fabric that has been returning such handsome dividends to the manufacturers of textiles and garments.

It would not be correct to boldly state that the beef breeds have lost the natural power to function as producers of milk. Many of the most highly-prized breeding cows in numerous beef herds are able to rear a calf well and some to spare. Generally speaking, a good breeding cow is a good milker, and her calves do well. However, in the show-ring the ideal embraces only beef conformation, type and fleshing. It would be better still to add another requirement and let it be evidences of milk production, sufficient at least to rear a calf and rear it well.

## The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

Published weekly by  
THE WILLIAM WELD COMPANY (Limited).

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

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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### Cleanliness on the Farm.

There is nothing that sets a homestead off and makes it appear homey more than a well-kept lawn and some evergreens tastily placed. The most humble cottage can be made the most desirable home in the world if it is properly environed with flowers, vines, lawn and shrubbery. One driving through the country observes a great variety of dwellings, and it does not seem possible that the scarcity of help in some cases and the abundance of it in others can account altogether for these regrettable differences. Another thing which the observer cannot fail to notice is the great variety of outworn and obsolete machinery scattered about some yards, and the absence of it on other homesteads. Parts of these implements are frequently of value and should be saved up for cases of emergency. However, in the great majority of cases outworn farm implements will never be used again. They have been replaced with other types and with different kinds of parts. The junk trade is the logical and most profitable outlet for most of this antiquated and discarded farm machinery. A wholesale clean-up would improve the premises and increase the revenue of the owner.

### Woman's Life on the Farm.

BY ALLAN McDIARMID.

They are strong on investigations over in the United States. The results of another one has just been made known to the people. This time it has had to do with conditions on the farms of the country and the hunt for facts has been carried on by the Department of Agriculture.

I've often wondered about these reams of facts and figures that are sent out through the country so generously by the Government, and which are the results of the labor of its clerks and heads of departments. Most of the reports are nearly two years behind the times and have lost what interest they might otherwise have had. It looks as though it were a job especially invented for the benefit of Government employees, whereby they might kill time and draw a comfortable salary for doing it.

We don't want to be too hard on our various departments of agriculture, but it's a safe bet that a number of men employed therein would be doing more for themselves and their country if they were on farms of their own and giving us practical demonstrations of their knowledge of seeds and soils, and of their relation to the problem of making a living on the farm—with the balance-sheet showing a few dollars to the good every

year. The best bulletin ever sent out is the good work done on his farm by some live farmer. It takes a great deal of talk to sell a new kind of seed corn, but when men see it growing twelve feet high in a dry year they'll do the talking to get some of the seed.

I'm not anxious to get a reputation as a knocker of Government agricultural institutions; all I'm trying to say is that I think too many of the employees in them are non-producers, in every sense of the word, and no country is wealthy enough to support a class of that kind. This part of the political graden needs a little weeding out, if the whole thing is not to be plowed up completely, later on.

But, in connection with the report on farm conditions in the United States mentioned above, the work that went into it was worth doing, I think; for the figures brought out are interesting and what is of more importance, they are likely to have some effect in improving the lot of the average housekeeper in the country.

Improvement in our surroundings comes mainly because of two things. First, through seeing what our neighbor has, and does; this is the force of example. And second, through having our attention drawn to the loss we sustain by sticking to old methods. This is the force of education.

A close estimate shows that there are seven million wives on the farms of the United States. Ten thousand of these were canvassed recently and the questions put and the answers given bring out, pretty well, the strenuous nature of the life of the woman who goes into partnership with a "tiller of the soil." And we may take it for granted things are pretty much the same throughout Canada as they are in the "States."

Anyway here are some of the results of the catechism to which these women made reply:

Fifty out of every hundred of them are up in the morning by five o'clock. The remaining fifty let the sun act as their alarm clock. This makes an average length of eleven hours and eighteen minutes for the farm-woman's day, the year round. The daily rest-period amounts to an hour and a half in summer and two hours and a half in winter. (More than we would have guessed). We have known farmer's wives in this country who didn't seem to have more than about two minutes and a half rest-period in the day.

In regard to a yearly vacation, it's a case of "not much doing." Only thirteen out of the hundred get any. The other eighty-seven get theirs by change of work, which we have all heard is as good as a rest.

As to the nature of woman's work on the farm and the extent to which the "men-folks" help out, we get some information. Fifty-four per cent. attend to the heating stoves and furnaces, carrying in the wood and carrying out the ashes. Sixty-one per cent. carry water from springs or wells, from an average distance of thirty-nine feet. This would seem to figure out, for the seven million farm women, to around fifty-three thousand, five hundred miles for every trip they make to the pump. Quite an argument for getting running water into the country homes.

In six out of ten of the homes there are sinks and drains, but bath-rooms are to be found in only twenty per cent. of them. However, the farm housekeeper is clean if she is anything. The report is fifty-seven per cent. with washing machines, forty-seven per cent. with carpetsweepers and ninety-six out of every hundred with fly-screens.

It has been said a few million times that the farmer will buy machinery for himself, but not for his wife. The fact that ninety-five per cent. of the women on the farms of the United States are supplied with sewing-machines goes quite a way in proving the contrary. And twenty per cent. of them have electric or gas irons.

Ninety out of the hundred do their house-work without any outside help and all but six of them do the bread-making for the family. About the same proportion do the sewing and mending, this last taking about an hour and a half of their time every day.

The question "how many of you help with the field-work?" brought out the information that twenty out of every hundred farmer's wives help their husbands in this way. And for an average of seven weeks in each year.

In connection with chicken-raising, eighty-one per cent. of the women look after their own poultry. But only twenty-two get the money at selling-time and only sixteen make good their claim to the eggs.

About one-third of the women do the milking. And about three-quarters of them do the washing up of pails and separators afterward.

Sixty per cent. do the churning. But only eleven get hold of the butter money. (The American farmer would seem to be something of a diplomat, as well as a financier.)

Conditions, on the whole, show improvement over past years. Sixty-two out of every hundred farm homes have automobiles. And seventy-two have telephones. Thirty per cent. of the women keep a set of farm account-books. Twenty-two per cent. of the homes have electric or gas power installations.

About eighty per cent. of the farm women own the lands on which they are living, presumably in partnership with their husbands, these husbands still daring to assert their rights, in contrast to their brothers in the cities.

Last, and most important, in regard to the children on the farm, the figures show that there is an average of only one and one-fifth children, under ten years of age, to the home. There is an average also, of less than one child between the ages of ten and sixteen. Apparently, the present is not an era of over-production on the farms of America, in some lines, at least.

If the reporting of this final item has any effect in "speeding up" things in rural America we will be willing

to take back a good deal of what we said about the Department of Agriculture investigators and mathematical jugglers. They may have their uses, after all.

### Nature's Diary.

BY A. BROOKER KLUGH, M. A.  
THE SYRPHUS FLIES.

"Things are not always what they seem" is an old saying which is just as true in the study of insects as it is in various affairs of life. It is particularly applicable to many of the Syrphus Flies, which while they are true flies, resemble bees, bumble-bees or wasps so closely that most people are afraid to touch them for fear of being stung. Their resemblance to bees and wasps is intensified by the fact that they are usually seen just at the time and place that bees and wasps are most abundant—about flowers on bright sun-shiny days.

Some of the Syrphus Flies, or Hover Flies, as they are sometimes called, are rather large, decidedly hairy and colored in orange and black, thus simulating bumble bees; others are smaller, hairy, and brown and black and look like other species of bees; while others, such as the species shown in the figure, are smooth and banded with black and yellow, and thus resemble wasps. This simulating of the colors and patterns of bees and wasps by many of the Syrphus Flies is apparently a case of protective mimicry, the flies, sharing in the immunity from attack which is a result of the possession of most effective stings by the insects they mimic.



A Syrphus Fly.

Twice natural size.

Much as they resemble bees and wasps the careful observer will have little difficulty in distinguishing the Syrphus Flies from the insects they mimic. In the first place they have, like all true flies, but one pair of wings, instead of the two pairs, (one large and one small), characteristic of the Hymenoptera to which the bees and wasps belong. Second, their antennae ("feelers") are not so large as those of the bees and wasps, nor are they "elbowed." Third, their manner of flight is different. They poise or hover in the air like a hummingbird, and remain suspended in the same place for a longer time than a bee or wasp, without moving the body at all, and with wings beating so rapidly as to be practically invisible. Then they dart suddenly away, keeping the body in a tense horizontal position, and again hover in a new location. Fourth, when at rest on a flower or leaf a Syrphus Fly will usually keep its wings half spread, while those of a bee are closely folded or crossed over at the tips.

While the adults of all species of Syrphus Flies are found about flowers, and feed on nectar and pollen, the larvae of the various species differ widely in their food-habits. The larvae of many species feed on aphids and are usually found in the middle of a colony of these plant lice. The larvae of other species feed on decaying wood, others on manure or soft mud rich in vegetable matter, while others again feed on decaying flesh. The larvae do not have a distinctly differentiated head, and their external mouth-parts are either lacking or consist of two or four hooklets, the latter being present in the case of those which feed on aphids and being used to hold their prey while they suck out the contents of their bodies. The larvae of those species which in a more or less fluid medium have long slender projections at the end of the body bearing breathing-tubes at the tip, so that when the body of the larva is buried in the semi-fluid mass in which it is feeding this long "tail" protrudes to the air and enables it to breathe. The larvae provided with this appendage have been termed "rat-tailed maggots."

The larvae of some species of Syrphus Flies live in the nest of bumble-bees, where they play the part of scavengers, feeding on waste and excreta and on the bodies of such bee larvae as die.

When the larvae of the Syrphus Flies pupate, they do so in the last larval skin which hardens and assumes an oval shape, and when the fly is ready to emerge, which is in from two to twenty days depending on the species, the front end of the pupa-case is pushed off and the mature fly comes out.

The myth that swarms of honey-bees may be generated from the carcasses of animals, which has been prevalent since very ancient times and among various peoples, arose from the fact that one of the Syrphus Flies, *Eristalis tenax*, which very closely resembles a bee, breeds in decaying carcasses.

Many of the Syrphus Flies are of considerable economic importance. Those which feed in their larval stage on aphids consume very large numbers of these injurious insects, and since one aphid may in the course of six weeks become the progenitor of 5,000,000,000 offspring it is easily seen that any form which tends to keep these insects in check is decidedly beneficial. Many of the adults, particularly those with hairy bodies to which pollen readily adheres, play a part in the pollination of the flowers they visit.

# THE HORSE.

## Mistakes of Exhibitors.

The exhibition of high-class horses at "high-class" horse shows is practically a business, and is conducted in most cases by those who thoroughly understand the game; hence, to exhibitors of this class we have nothing to say, as they are well posted on "the tricks of the trade." But a few hints to the ordinary horse owner and exhibitor, who exhibits only at local fall fairs may not be out of place.

The too common practice of taking untrained colts or horses into the show-ring is a mistake. It is a common practice among exhibitors to pay no attention whatever to the fitting or training of their colts, but to take them to the fair absolutely green and unfitted, except that they have been taught to lead in a manner. They are brought before the judge in this condition, he looks them over and then wants to see them in action; but they have not been taught to lead properly, hence go sideways or backwards, or in some cases can with difficulty be induced to move at all, or may plunge and rear or do anything except lead. This is provoking to the judge, sometimes dangerous to all in the ring, annoying to the audience, and disappointing to the exhibitor, especially when his entry is probably superior to the better-fitted, better-trained and better-mannered colt that wins.

The judge in such cases is often severely criticized and credited with not being able to recognize a good colt. He is doubtless aware that the awards have not gone to the animals that under more favorable conditions would have won, but he is also aware of the fact that some trouble and pains are necessary to fit and train a colt for exhibition, and that each animal must show his action and gait to enable any person to correctly judge of his relative qualities. He should also thoroughly recognize the fact that his judgment of the animals before him must be influenced by what they are at the time, not what they probably would be under different conditions. The general appearance of an unfitted and untrained colt may indicate that if fitted he would be a better animal, and if trained would show better action than those he selects for the awards. At the same time the colt is neither fitted nor trained, while the others are, and he (the judge) also knows that a colt of good conformation and all indications of showing good action is sometimes a great disappointment when moved, and as he is judging entirely by what he sees, not from what he probably would see under different conditions, he is compelled to award the prizes to those that show what they can do. In other words, he does not want something that "has been" or "will be" but something "that is." Then, again, the exhibitor who has spent time and money in training and fitting his exhibit so that it may appear at its best before the judge, deserves some recognition over him who has taken no pains in this respect, but apparently brought his animals to the show with the hope of winning prizes without much effort or expense. Such an exhibitor takes no pride in his horses, but exhibits simply for the money he may win, and his winning seldom reflects credit or glory to either himself or the society.

Even sucking colts should be taught to lead, and stand well on the halter. When this is done there is less danger of accidents, it gives the judge a much better opportunity to judge correctly and the exhibit a better opportunity to show to advantage. It will be noticed in this class that the colts that are trained to halter usually win.

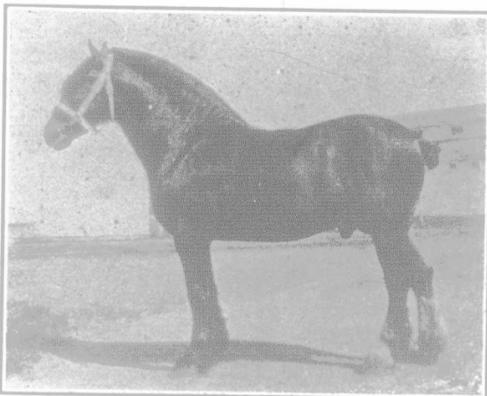
Another mistake often made is entering horses in the wrong classes. This is particularly noticed in the roadster and the carriage classes. A good roadster entered in the carriage class is often beaten by horses not worth nearly as much money, while a good carriage horse shown as a roadster will of should meet the same fate. Here again, the judge is often unjustly criticized. The most valuable horse cannot justly win unless he be properly classified. There are horses that are hard to classify. While reasonably valuable and serviceable, they have not the special characteristics of either class sufficiently well marked to make them reasonably typical, hence the owner is undecided how to enter them. In such cases it is not uncommon for the prospective exhibitor to enter in both classes, and, after getting as good an idea as possible what the competition will be, exhibit in the class in which he thinks he has the better chance of winning. Horses of this kind cannot win in fair company in either class, although they may have greater market value than those that win. If they have sufficient size they may properly be called "general purpose horses" and show in that class, but if too small they simply "have no class" for show purposes. It should be remembered that exhibitions are supposed to have an educational value, and it is the duty of the judge to be consistent in making awards, and stay as closely as possible to type and general characteristics in the different classes.

Another mistake frequently made by exhibitors when there is something wrong with their horses is to explain to the judge that the animal met with an accident very recently, that caused the swollen leg, bunch, blemish or lameness, etc., and that he "will be all right in a day or two." Now, the judge cannot be held responsible for the accident; he did not cause it, neither could he have prevented it; but, here is the horse, lame or unsound. The lameness or unsoundness may be of only a temporary nature but in most cases the probable termination of the trouble is simply problematical, and he must judge the horses as they are, not as what they were before the accident, or probably will be in an indefinite time. There are other animals in the class that have not "met with an accident," but are sound,

and unless decidedly inferior to the injured animal they should win. There are cases in which the judge may be justified in giving the horse "the benefit of the doubt," but he must be very careful not to abuse this privilege.

Of course, in the breeding classes such things are looked upon from a different standpoint. So long as an injury or blemish does not interfere with the animal's breeding qualities, and there be no danger of him, or her transmitting to the progeny a predisposition to trouble, it should be overlooked.

In conclusion, we may say that one of the greatest troubles at the ordinary, small agricultural fair is the failure of the exhibitors to be on time with their animals. More time is often spent in waiting for the classes than in judging them, and often, even after waiting a long time after notice has been given, or where there is a program, if a class be judged and the prizes awarded and a tardy exhibitor appears afterwards with his entry, there is a great cry. He blames the judge, the directors, the exhibitors and everybody, and wants the class called again and re-judged, for, of course, he knows "he should win." Exhibitors of this kind make things very unpleasant and uncomfortable for everybody, and, in our opinion, no notice should be taken of their complaints, or reasons for being late, and a few lessons of this kind would teach them to be prompt. WHIP.



**Major Mascot.**  
A Western Clydesdale champion stallion, owned by Vanstone & Rogers.

## LIVE STOCK.

It is the number and quality of calves raised that determines the success of a herd.

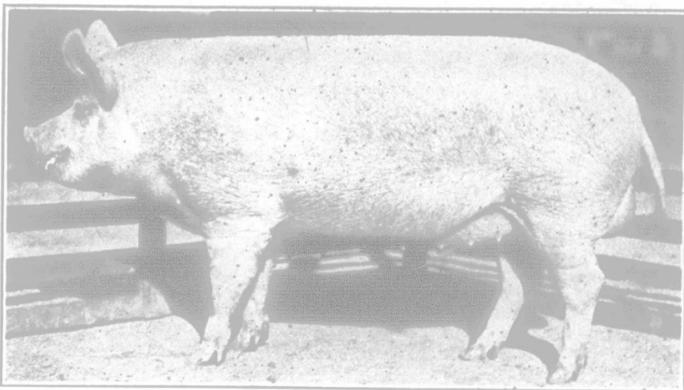
It does not pay to buy a ewe with a poor mouth. Examine carefully before buying.

The quality of feed stored will partially determine the profit from live stock feeding next winter.

It is not advisable to crowd live stock in cars or cratts during hot weather. Give them breathing space.

At this time of year the water trough should be cleaned frequently. Stock do not like drinking from a scum-covered trough.

There are records of 4,264 Aberdeen-Angus cattle passing through American sale-rings the first six months of 1920 at an average of \$756.73.



**Oak Lodge Cid.**  
Highest priced male in the Brethour sale, going at \$400 to A. Welstead, St. Catharines.

Old ewes, poor milkers and shy breeders, should be culled from the flock and marketed. It is by culling and judicious breeding that the flock is improved.

Prof. Sackville, of the O. A. C., finds that getting the sows away from their litters for a couple of hours each day relieves the sow a good deal, and does not hurt the pigs.

Why is it some people cling tenaciously to mediocre stock when at a little added expense their crops could be marketed to greater advantage. The breedy animal is a more efficient machine than the scrub.

## Rejuvenating the Pastures.

Quite a few permanent pastures become practically run out. Weeds gain the ascendancy, and year after year fewer cattle are carried per acre. Many of these pasture fields are difficult to break up, and the question is how to increase the amount of feed produced. It is important that an effort be made to prevent the weeds from seeding, as many of them will die out if not reseeded. During a wet spell timothy, orchard grass, meadow fescue, alsike, white clover, etc., may be scattered over the ground and the field given a stroke with the harrows. This will tend to put new life in the pasture. Where the soil is comparatively level and a plow can be used it is a good practice to break it up and reseed. The field may be cropped for a year or two with grain or corn to advantage.

The frequent rains this year have made the July and early August pasture better than usual. However, the grass has had a tendency to softness, resulting in the cattle being more or less washy. If a person is able to give a pasture two or three weeks' rest by alternating with another field it helps out materially. The summer silo is also a big help in supplementing the pasture and carrying the stock over the hot, dry season. When one is liable to be short of pasture, due to failure to get a catch of clover or the winter-killing of a meadow, oats alone or oats and peas may be sown in the spring and pastured early in July. If the other pastures exceed expectations, then what was sown for summer pasture may be allowed to ripen. It is a mistake to allow the pastures to be cropped too bare. However, in some instances it is rather difficult to avoid this without encroaching unduly on the hay mow or grain bin. A field that is pastured closely in the fall seldom gives as early pasture in the spring as one on which there is a fair stand of grass when winter sets in.

## Yorkshire Sale at Toronto.

A rather unique auction sale was held at the Exhibition grounds, Toronto, on Wednesday, August 18, when J. E. Brethour & Nephews offered a picked lot of their choice Yorkshires by auction. The offering included champions of past shows, and individuals which could successfully go into the keenest competition on the continent this year and win the coveted laurels. It was a splendid opportunity to purchase show stock in show condition, both males and females, of all ages, and fortunate was the breeder who took advantage of this opportunity. The splendid harvest weather detained many at home who had been planning on attending the sale; consequently the attendance was nothing like as large as was expected. Messrs. Brethour had made arrangements with the C. N. E. to permit of purchasers entering the pigs in their own names in this year's exhibition, and further agreed to leave a man in charge of the pigs in Toronto until the exhibition opened so as to save shipping.

In opening the sale Mr. Brethour intimated that he considered the present one of the best periods in regard to the bacon industry, as our bacon is in favor on the British market and there is a possibility that the present restrictions against Canadian bacon will be removed in the near future. The shortage of choice bacon in England has put the price of Irish bacon on a particularly high level, and with decontrol there is reason to believe that Canadian bacon will sell equally high. Professor Toole, of the O. A. C., in a brief address, believed that we need not fear as to the future of the bacon hog, provided a uniform, high-quality product is placed on the market. Mr. Waller, of Swift's Packing Company, said that the packers recognized certain fundamentals, as quality and breeding. "There is too much underbred stuff sold on the market," said Mr. Waller; "quality should be the watchword."

The highest-priced animal of the sale was Oak Lodge Cid, which was a particularly high-class, show individual that was first at Toronto in 1918, and first and champion at London in 1919. He went to the bid of A. Welstead, of St. Catharines, for \$400. The highest priced female was of the Princess family. She is coming two years of age, and already has to her record the red ribbon at Toronto and London in the under-one-year-old class, the championship at the Ontario Provincial Winter Fair, and the first prize at Ottawa. Last March she farrowed a litter of twelve pigs and is due to farrow again next month. She was purchased by A. Welstead for \$300. Oak Lodge Princess 422, a year-old pig, was in exceptionally good condition and will possibly be seen in A. K. Featherstone's show herd this year, as she was purchased by him for \$200. Oak Lodge Princess 377 was the second highest-priced sow of the sale. She was purchased by A. Thornburn, of Paisley, for \$260. She has several first-prize ribbons to her credit and also a championship. Another Princess sow was sold for \$230. There were a number of choice pigs of the Fame family offered which showed splendid quality and were picked up at good prices. The Pride family also brought some high prices. Engebretson Bros., of Minnesota, purchased a couple of choice sows. Among the largest purchasers at the sale were A. Welstead, of St. Catharines; J. K. Featherstone, of Streetsville, and A. D. Wallace, Toronto. March pigs of the

different families sold quite freely at from \$75 to \$90, while year-old sows carrying their first litter exceeded the \$100 mark, in some cases going close to \$200. Some March male pigs went at from \$75 to \$100; others went a little lower, depending somewhat upon their condition and quality. The males sold averaged a little over \$95 each, and the females averaged \$109. This includes a good many March and April, 1920, pigs, so that the average might be considered fairly good. Mr. Brethour was by no means dispersing his herd, but was disposing of a lot of choice show and breeding stock which he had been preparing for some time to offer to the public at auction.

### The Present Cost and Selling Price of Hogs.

When a man states that there is no money in hogs he bases his contention largely on more or less accurate records of feeding costs, and feeding costs only. If the market hog cannot even pay for his feed, what then of interest on investment, labor, risk, losses, marketing expenses, etc.?

The feed cost to produce one hundred pounds of pork may be calculated by including the cost of maintenance of the breeding stock responsible for the market hogs. Applying this method, one hundred pounds of pork would require about 600 pounds of meal. American farm survey figures indicate even a higher meal cost,—615 pounds. Valuing meal and grain at \$70 per ton, which is conservative enough, the herd feeding charges per hundred pounds of pork would amount to \$21.00 on the 6-to-1 basis. Even this does not cover all farm costs.

Figures available from herds on the Experimental Farm System compare very closely with those obtained in farm survey reports, i. e., that approximately 78 per cent. of the cost of pork production is for feeds, and the remaining 22 per cent. to cover farm costs exclusive of shipping charges. To produce 100 pounds of pork under average Canadian conditions requires from 450 to 500 pounds of grain or the equivalent. At \$70 per

The above article by G. B. Rothwell is of rather a pessimistic nature, but from the standpoint of raising pigs on a wholesale basis with the present price of feed and labor one would find it difficult to make accounts balance. However, this condition does not apply to the raising and marketing of the bulk of the hogs produced in Ontario. The main supply comes from the average farm where one or two brood sows are kept, and from two to four litters raised during the year. Individual farmers have proven that hogs can be raised and finished at a smaller cost than is usually given where the ratio of feed to gain is worked out on a large scale. Then, too, the feed grown and fed on the farm does not always cost market price to produce. If the farmer can break even by feeding his own grain and valuing it at what he would have to pay on the market, he still has the profit on the grain fed. Where pasture, roots and various by-products can be utilized the cost of producing a hundred pounds of pork is considerably reduced.

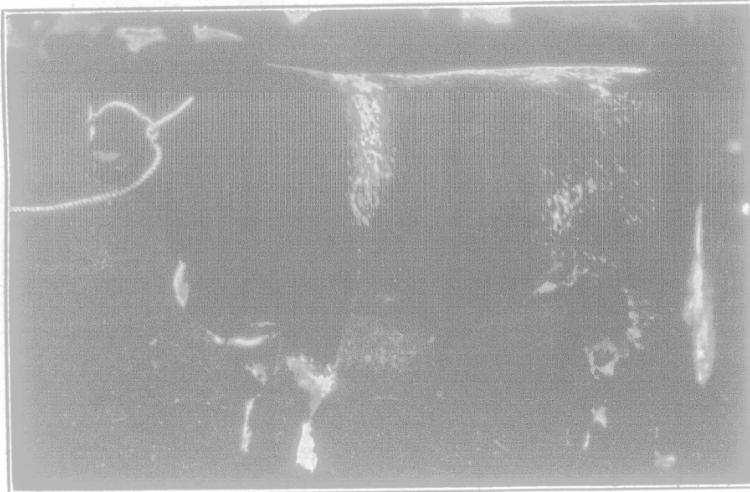
The present time may be a rather trying one for the hog feeder, in as much as prices of live hogs are not commensurate with the price of feed on the market, but what business is there that does not at one time or another pass through a period when the balance shows on the wrong side? If one went out of business at a time like the present he would not be in a position to take advantage of the situation when feed becomes more plentiful and ultimately lower in price. The in-and-outer in the hog business, as well as in other lines, is seldom as far ahead in the long run as they who consistently stay with the business and endeavor to reduce the cost of production so that there will be a minimum of loss when cost of production is high and the price of the finished article comparatively low, and then the maximum of gain when the situation is reversed. Every farmer is well advised to keep at least one brood sow. There is a good deal about the place that she will pick up and turn into pork which would otherwise be wasted.—Editor.

A set of scales at the barn is handy for weighing feed, stock, etc. It will enable the attendant to determine accurately just what he is feeding and what gains the animals under his care are making.

coming more alive to eradicating reactors from their herds, and it seems that it would be a good thing if reactors were barred from entering the show stables or rings. In order to combat this disease it is important that all interested in the live stock industry give their support. It may be more difficult to clean up the grade or commercial herds than it is the pure-breds, but ultimately something will have to be done to lessen the amount of tuberculosis in the cattle stock of this country. Some men who breed ordinary stock may be little concerned about the health of their animals when it does not touch their pockets directly. However, if animals from their herds, when sent to the abattoirs, are unfit for human consumption, there is a loss to the entire industry, and the owner of the animal suffers indirectly. There should be concerted action on the part of all cattle breeders and those interested in the industry to stamp out this infectious disease, which not only causes a direct loss but imperils the lives of humans. Why not start at the live stock shows and demand a certificate of health from the owner of every animal being shown.

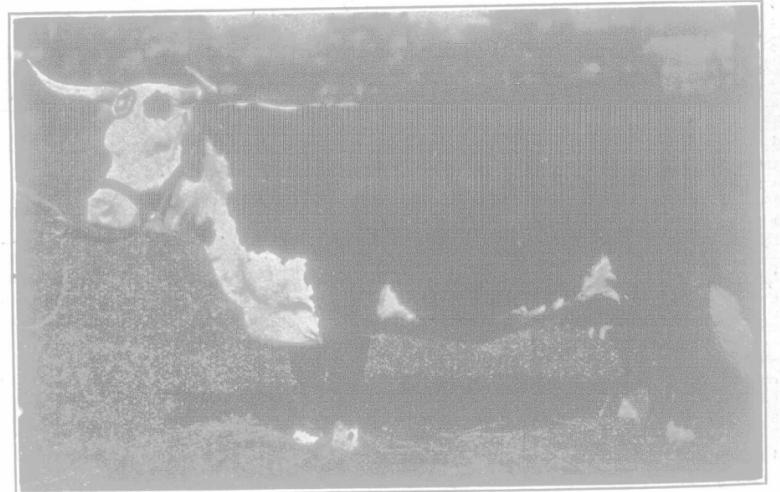
### The Flock Header.

There are some who would go entirely out of sheep because of an easing off in the market for mutton and wool; they are the in-and-outers in the business, and owing to this practice seldom make substantial headway. There is and always will be a market for wool and mutton, but it is important that the producers cater somewhat to the market demands. At this time of year sheep breeders are looking out for a flock header. It is advisable that the ram be selected a considerable time before the breeding season, so that he may become accustomed to his new surroundings. While a well-matured ram lamb may give good results with small flocks, it is generally found that a vigorous shearing, or older ram, is more satisfactory. With the older ram the breeder has an opportunity of studying the character and development of some of his progeny, and thus arrive at a more accurate estimate of his value as a flock header. The man with a pure-bred flock has the question of breed already settled, but with the man with the grade



**Diamond Butterfly.**

A winner at the Royal, and sold for 4,000 gs. at auction.



**Garland.**

Champion Hereford female at the Royal.

ton for meal this would represent a feed cost per cwt. of pork of \$16.62, which figure represents only 78 per cent. of the total cost. One hundred per cent. or the feed plus the farm charge would amount to \$21.28 per cwt.

The above figure may appear startling. There are hundreds of small feeders who can feed a litter or so of pigs on a much cheaper basis. Otherwise there would be very little pork produced. Why can a few hogs be raised comparatively cheaply on the farm? Simply because of the fact that a considerable proportion of the feed is in the nature of a by-product or perhaps home-grown. Multiply the swine activities on the farm, and it is necessary to purchase more meal and grain at market prices. The cost to produce mounts alarmingly. So with the farm flock of poultry.

What shall we feed hogs? Grain, millfeeds and by-product feeds are becoming scarcer than ever. Wheat by-products are practically off the market. The feed markets of the future are most discouraging in prospect. The wholesale price of hogs has not appreciated correspondingly. The man who can feed hogs profitably to-day, must have a comparatively cheap product or by-product to replace meal as largely as possible. Such are scarce. Milk products form the greatest of all. City and hotel refuse is another. Green feed intelligently used, soiled or under the right conditions, pastured—is a third. Barley is one of the best of Canadian hog feeds—too little appreciated. Elevator screenings, if of standard quality, must be utilized wherever available. The man who is raising young pigs, who plans to feed them almost entirely on a grain ration, who has little or no milk or green feed available, will almost certainly be forced to place a high valuation on manure and experience if he is to get an even break next fall.

G. B. ROTHWELL.

Dominion Animal Husbandman.

### Cattle at Fairs Should Have Certificate of Health.

Tuberculosis has, from all accounts, gained considerable headway among our herds of cattle and hogs. The loss each year due directly to this disease is enormous, and it is high time that an effort should be made to clean up the pure-bred and commercial herds of the country. The accredited herd system, which is under way, provides for the regular testing of the herd with an ultimate certificate of health. It stands to reason that the breeder who has such a certificate of health for his herd will have a greater opportunity of working up a trade in other provinces, or on the foreign market, than will the man who has not his herd officially tested. While there are comparatively few herds entered in the accredited herd system of Canada as yet, United States breeders have gone in for it very strongly. Breeders of pure-bred cattle are loath to pay a high price for an animal that has not a clean bill of health. Not only may the animal be a reactor, and thus an ultimate loss, but may spread disease to other members of the herd. Would it not be a good thing if cattle breeders showing at our exhibitions be required to present a health certificate with each entry? There is every opportunity for infected animals to transmit disease to other animals at the show. Then, too, there is usually considerable trade in pure-bred stock at our fairs, the breeding stock being purchased as herd headers or for herd foundation. If prizes are awarded to reactors, how is the health of our common stock to be raised to a higher standard? Demanding a certificate of health with each animal shown might be deemed a hardship by some breeders, but why should it be? If they have the interest of the breed and of the live stock industry at heart, they should be willing to do all in their power to prevent the spread of infectious disease. Many breeders are be-

ewes, or the one who is starting in the business, the breed of ram to use is of importance. All breeds have their admirers, but the beginner should be governed by the market he intends to cater to and by the nature of his soil. As a general thing the long-wooled breeds and heavier downed breeds give better results on heavier soils where the pasture is good than on hilly land where the feed is liable to be scanty at certain seasons.

Having decided on the breed, it is necessary to select a good individual of that breed. Quite a few purchase their flock headers at the shows, and while they get an exceptionally good individual, it must be remembered that careful handling and proper feeding are necessary to get the show ram into breeding condition. A good deal of importance should be attached to those characters which indicate prepotency. The ram possessing a strong, decidedly masculine head, and short, strong well-created neck is likely to be a more prepotent sire than the "ewey-looking" ram. Constitutional vigor and digestive capacity must not be neglected. A depression at the heart, and the legs set close together, indicate weakness. Well-sprung ribs are looked for by most breeders. The size of nostrils indicates whether an animal has a good respiratory system or not. The fleece should be typical of the breed, and should be dense on all parts of the body. A ram that is bare of wool underneath is not desirable. When selecting the flock header, mutton production as well as wool production must be kept in mind. It is important that a person get the proper mutton conformation, as well as good fleecing. It is a mistake to put off the selecting of the flock header until close to the breeding season.

Flies have a tendency to loiter around a sore or an abrasion in the skin of an animal. This is very aggravating and painful to the animal. Applying cod liver oil to the parts will not only keep off the flies but has a soothing effect on the wound.

## THE FARM.

### Wheat, Clover and the Hessian Fly.

EDITOR "THE FARMER'S ADVOCATE":

The article in the issue of August 12th, under the heading of "Wheat or Clover, Which?", would lead the ordinary reader to believe that in a previous article dealing with the Hessian fly, no recommendations were made with respect to young seeds. That article did not state that where a wheat field was seeded down the same should be plowed up if the wheat stubble was infested; it merely stated that wheat should not be sown in close proximity to an infested stubble. It would be ridiculous to ask a farmer to do such a thing, as a young clover crop is worth a great deal more than a crop of wheat. I might have added and perhaps it would have been much plainer if I had stated that where a field was seeded down and the stubble infested a trap crop of wheat should be sown as a bait for the flies and the same turned under before cold weather.

As Mr. Adams invites friendly criticism I trust he will take no objection to a discussion of several points he has raised. No one regrets more than myself the fact that we are unable to recommend any other practice than the time honored custom of plowing under and late sowing. After a careful study of the insect and its life history it seems to me that plowing under deeply and rolling, together with late sowing, is not only the most effective but the cheapest way of dealing with this pest. The matter of spraying is out of all consideration; the cost would be prohibitive and it is doubtful if the spray mixture could be lodged between the leaf and leaf sheath in sufficient quantities to be effective. The young maggot does not feed openly on the surface of the leaf; no feeding takes place until the maggot is between the leaf and leaf sheath. The reason that screenings should be burned is, I think, self-explanatory. An infested stem usually breaks off at the first joint and at harvesting time is left on the field and eventually raked up. Such stems contain numerous puparia and when threshed such broken pieces of straw usually come out with the screenings, hence the recommendation to burn all screenings. It is extremely doubtful if any of the flaxseeds are carried to the barn in the shock. The fly, as Mr. Adams states; is no respecter of manured or unmanured lands, but the fly almost invariably destroys weak plants, while stronger plants can resist, to a certain degree, their insect enemies. "Some of our fields were infested," he states, in spite of late planting. That is quite reasonable to suppose where neighboring farmers sowed early. The overwintering brood of flax-seeds were responsible for this; that is why several fields of spring-sown wheat were destroyed entirely. I fail to see where a farmer's problem becomes more acute because of recommendations made by entomologists. One grand thing about economic entomology in Canada is that the recommendations are practical, they have been tested out under field conditions and only such recommendations as have proved practical and efficient are given to farmers. From time to time we have had small outbreaks of the fly but the following year they have usually been controlled by their natural parasites. There are a few parasites this year, but not in sufficient numbers to control the fly. The same thing happens with the chinch bug. I have seen the ground literally covered with the dead bodies of the bug killed by a species of fungus.

If one could foretell the weather we could name a fly free date, but this is impossible. Another point about the fly is this, that the flies may be on the wing before and after the middle of the month. I collected several specimens in the vicinity of Strathroy as late as the first week in October last year. Touching on the question of fertilizers, in our experimental plots last year we found that the percentage of infestation was about the same but on account of the extra food supply we had an increased yield of grain where fertilizers were used over the plots where no fertilizers were used. The fertilizers used were agricultural-lime at the rate of two tons per acre, lime and acid-phosphate (2-8-10) the latter used at the rate of 200 lbs. per acre, acid phosphate in the same proportion by itself, and no treatment. Fertilizers increased the yield of grain but do not decrease the percentage of infestation. But we must not overlook the fact that the above recommendations, to be effective, must be faithfully carried out by all farmers growing wheat this fall. The fly must not be forgotten in the hurry to get the fall work done. In a nutshell the situation is this: The fly is too abundant to be forgotten, our opportunity is now to starve him out. Plow your stubble deeply, roll the ground firmly, sow as late as possible, put the ground in good condition, use clean selected seed. In the case of a field seeded down a trap crop of wheat should be sown and later turned down.

H. F. HUDSON.

### A Young Oat Tree.

An oat plant measuring six feet four and a half inches was recently sent to "The Farmer's Advocate" from the farm of John Waack, Carrick Township, County of Bruce. There are many heavy fields of grain this year, but such a growth as that mentioned is not common.

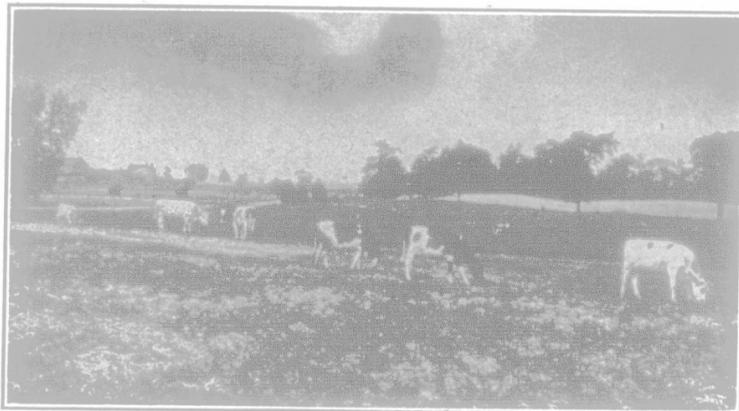
A recent visitor at the office of "The Farmer's Advocate" was J. B. Stevenson, J. P., of Dalbeattie, Scotland. Mr. Stevenson has been making an extended tour of Canada, and has not been missing any opportunities to inspect Ayrshire herds and see good Clydesdales.

## THE DAIRY.

### Fall Freshening of Cows.

There are several reasons why it would be of advantage to the dairyman if more cows were bred so that they would freshen in the fall. At the present time there is too marked a tendency toward summer dairying, and this often reacts to the disadvantage of the dairyman. In the first place, there is the fact that a higher yield of milk per cow can generally be secured if the cows freshen in the fall, since it is well known that cows that have been milking for a few months come up in milk production to a marked extent when they go on pasture in the spring. Henry estimates that the fall fresh cow should produce from 10 to 15 per cent. more milk annually than the cow that freshens in the spring. This is due to the fact that if the cow freshens in the fall she will give a large amount of milk throughout the winter months and will reach the period when her milk production would normally drop, about the time when she goes out on new grass. The effect of new pastures has a pronounced stimulating effect on the milk flow, and the average cow will pick up to such an extent that her year's production will show a notable increase over what it otherwise would have been had she continued to milk without the stimulating effect of fresh grass and pasture conditions.

There is a strong argument in favor of fall freshening, having to do with the distribution of labor on the farm. The man who has the least trouble in securing satisfactory labor is the one who can furnish steady employment for the good men he may chance to get hold of. It is also true that labor can be hired more cheaply in the winter than in the summer, and men who are employed the year round will work for lower wages proportionately than if they can get employment for only eight or nine months. The proper distribution of labor on the farm



A Young Holstein Herd at Pasture.

has a very direct bearing on the labor income which the farmer is able to secure, and in this connection there is everything in favor of year round equalization of the farm work. Taking care of a large number of milch cows means a lot of work every day, and if the bulk of this work can be shifted to the winter months without incurring disadvantages more weighty than the advantages, it should be good business to make the change.

Another advantage of fall freshening is the fact that provided the stables are reasonably warm the calves may be put through the first six months of their lives with better results than if they are born in the spring and have to face the hot summer months. On account of the fact that work on the farm is not so pressing in the winter months the calves can be given greater attention during the winter than in the summer. This means a great deal to the owner since a good start in the life of the future cow is worth considerable in determining her worth as a producer. Not only can more time be given to the raising of the calves, but there is less danger of scours in winter than in summer. Fall dropped calves are large enough by spring to be turned out to pasture and they will be able to make good use of it. There is also the advantage that if dropped in the spring they should be stabled during the day for the first few months to avoid the heat and flies, but if dropped in the fall they are not so likely to need consideration on this score when the flies and hot weather come the following spring.

On many farms hogs and dairying go well together.

This is particularly the case where milk is produced for the cheese factory or creamery. The usual experience is, however, that the hogs do not get as much skim-milk as they should get on account of the fact that so much is needed in the spring for the calves. Spring litters of pigs bulk larger than the fall litters, and if the calves are dropped in the fall they do not need so much milk by the time the spring litters have arrived. Of course, there is this to consider that from October on, the whole milk that is fed to calves is worth more than milk fed after May 1, but with March or April calves not much whole milk is fed as a rule after the first of May.

Perhaps the greatest advantage of fall freshening is the fact that the dairyman in most instances is directly penalized where the bulk of the milk produced on the farm must be marketed during the period when there is a large surplus over the country. Milk is cheaper in the summer, of course, because it can be produced more cheaply, but this is not the only reason. It is disproportionately cheaper because the great bulk of the dairymen incline strongly toward summer dairying, and thus create a greater surplus than can always be taken care of at a profitable price. This state of affairs is particularly noticeable in the city milk trade where there is always a scarcity of milk in the winter months among the regular patrons of milk distributors, who are forced to bring in milk from cheese factory patrons. This is not always satisfactory, but it must be done to get a sufficient amount of milk to supply the populations of our towns and cities. Many distributors regard this summer surplus as one of the most serious problems with which they have to contend, and they are beginning to employ every method they can think of to get their patrons to even up the production of milk. Most of these methods take the form of some penalty in the form of lower prices for the summer surplus, and it is a very common arrangement to make contracts which call for such and such a price for a stated number of gallons daily; any amount over that quantity to be paid for at butter prices. Other methods are used for the same purpose, and it would be greatly to the advantage of dairymen generally and to the dairy industry as a whole if the production of milk were more evenly distributed over the year.

There are some dairymen who practice winter dairying very largely, and most of them find it more profitable than to produce the bulk of their milk in the summer months. Although milk can be produced more cheaply in the summer, the summer prices are never too high and with feed and labor as high as they are it pays to have the cows freshen at a time when they can produce milk that will sell for the highest price. A great many dairymen hesitate to engage in winter milk production because they feel that more feed must be purchased. This, of course, must be considered, but many of the men who supply city milk regularly, do so almost altogether on the basis of purchased feeds. They are able to make money by keeping a good type of cows and by feeding them well-balanced rations in sufficient quantity. The arguments in favor of a greater tendency toward winter dairying are too strong to be passed over lightly, and the subject is worth the most careful consideration of every dairyman who wishes to make the most out of his herd.

### Good Feeders Necessary.

One of the chief difficulties in the care of live stock on the farm is the fact that only a comparatively few men can be regarded as good feeders. This is true of all kinds of live stock, but it has greater force than usual where the feeding of dairy cows is concerned. The dairy cow properly developed through breeding to the point where she is able under proper conditions to produce milk heavily may be regarded as an animated milk machine the care of which devolves upon the feeder. Speaking generally there are four types of feeding which will apply pretty well to all kinds of live stock. These are feeding for growth, feeding for work, feeding for fattening and feeding for milk. It would probably not be correct to say that any one of these types of feeding is more important than the others, although from the fact that milk production and the manufacture of dairy products from milk constitutes such a large proportion of the revenue derived from the live stock of the country, the proper feeding of dairy cattle may be fairly regarded as a primary consideration in live stock husbandry.

The dairyman who is successful in securing profitable milk yields must be one who can bring a calf to maturity with the greatest economy of feed and with the most consistent development of the animal. He should understand the principles of growth and keep constantly in mind the purpose for which the dairy animal is being reared so as to have the heifer reach her first freshening under the most favorable conditions. It has been said frequently that the dairyman who can get his calves away to a good start when they are young and who can feed his heifers successfully at the time of their first freshening has solved two of the greatest problems in dairy cattle feeding. Once the heifer has reached the milk producing age the dairyman's job of feeding for profit really begins and from then on during every lactation period she is to be treated more or less like a machine which will only give its greatest service when it is operated by the skillful operator. During these periods the feeder has a great many things to consider, first among which is the health of the animal. The necessity for good health needs no elaboration here, but at the same time this is a factor which is too much neglected by the average live stock man. There are too few feeders who under

understand anything of the anatomy of an animal and who are not able to recognize the first symptoms of the most common ailments of cows. In many cases a cow will get off feed and perhaps remain off for some time before the average feeder will notice it, by which time the difficulty of rectifying the trouble will have been greatly increased and the milk flow decreased. Generally speaking while the majority of ailments of cows are not due directly to feeding methods, the responsibility rests upon the feeder just the same and their observance nearly always necessitates some change in feed if a quick recovery is to be made. The greatest possible knowledge of these ailments with their causes and effects on the system of the animal will often enable the experienced feeder to make some change in feed which will at least minimize the trouble.

The feeder must also pay considerable attention to the proper maintenance of the cow if she is to do her best in the way of milk production. While a cow may be allowed to run down in flesh without affecting the milk flow, for one lactation period, she cannot continue to draw upon the reserve of nutriment stored up in her body for an indefinite time without injurious results and it is up to the feeder to ascertain the amount of feed she requires in order to keep her body in good working shape. Some individuals of course, cannot be kept in the same degree of fleshing as others, but there is an optimum for every animal and the skilful feeder will find it in due time. It is probably possible to find an occasional cow that has the characteristic of milk production so pronounced in her make up that it is almost impossible to make her gain in flesh or to keep her in good flesh during a milking period. But these cows are seldom met with. More often, cows that appear to be of this type are being given a ration in which something is lacking. Careful study of the cow's health and condition during the milking period and before freshening will mean more milk per cow and a healthier herd. Perhaps a word should be said also about the necessity of feeding well before freshening so that the cow will be able to enter upon her next lactation period without any handicap in the way of low condition. Whether it is true or not that a bag of grain fed before calving is worth two bags fed after calving in maintaining a high level of milk production, it is certainly correct to say that if a cow does not calve in good condition she cannot be made to do all that she is capable of doing.

The cow in milk is a wonderful subject for the feeders skill. His is the task of providing her with a ration of the most economical kind that she can assimilate with the greatest efficiency and turn into milk. The basis of this ration must be roughage and the need for better feeders is plainly apparent here. Corn silage, clover and alfalfa hay and roots each have an important place in dairy rations and the feeder must use these in such quantities and proportions as will make the strongest basis for the completed ration. The dairy cow excels in the utilization of roughages and it is, therefore, important that the roughages that she gets should be such as will be most conducive to milk production. Those who make a specialty of milk production know pretty well that combinations of the roughages already named are the best that can be obtained, but there are some feeders who combine such feeds as timothy hay and bran and wonder why their cows do not do well.

The feeder must combine roughages and concentrates or grain feeds in such quantities as will satisfy the needs of the working cow, but at the same time the ration must show variety, palatability and succulence. Regularity will be regarded as important and from the part which water plays in the manufacture of milk its supply will need to be well looked after. The essential things are the actual nutriment contained in the feed such as protein, carbohydrates and mineral matter and the feeder must know the part each plays as well as the proportions in which they should be combined. Knowing this it is then possible to select such feeds as are available or can be purchased and to combine them so as to produce bulk, variety, succulence, and palatability as mentioned above. On top of all comes the question of economy. It costs some men twice as much to produce milk as others and while breeding undoubtedly plays a large part in this difference in most cases, ability to feed well may easily and often does mean the difference between profit and loss.

There is a marked necessity for better feeding methods among the dairymen of Eastern Canada at the present time. The actual percentage of good feeders is very small and yet the cost of production is very high. Price increases will be slow to materialize and they will never occur to the extent necessary to return the cost of production to the inefficient feeder. The live stock industry is the basis of the major portion of Eastern Canadian Agriculture and it is not far from the truth to say that farmers will prosper more or less according to the degree to which they achieve success through skill in live stock husbandry. Dairying is the most important single branch of live stock and will become increasingly important as the country becomes more thickly populated. There is first a necessity for better dairy cattle with which the feeder may carry on his art; and then a need for good feeders who will be able to get the most out of every cow.

A mixture of linseed oil one part, olive oil one-half part, turpentine one-quarter part, and coal oil one-quarter part has been used to clean the hair on pigs then prepared for show. Washing with soap and water then rubbing with olive oil and lard also helps keep the hair and skin in good condition.

## HORTICULTURE.

### To Ontario Fruit Growers, Buyers and Shippers.

EDITOR "THE FARMER'S ADVOCATE":

I have just been to Covent Garden Market and have interviewed some of the big fruit dealers there. They say that this country will have to rely upon imported fruit next winter and spring. This means that there will be a good market here for all kinds of orchard products this fall. In England only about one apple tree in ten has a crop of any kind, and what little there is, is of a very inferior grade. The information given out from the Government offices is that 5 per cent. of last year's crop is a fair estimate.

The reports from France are for a fair crop of apples, but recent severe storms have badly injured the prospects in some sections. Holland and Belgium expect a 50 per cent. crop; Portugal and Spain are well below the average.

The maximum fixed price in Great Britain for some time has been 9d. (18 cents) a pound retail. To-day (August 3) this has been lifted and there will be no prices of apples until November 15. On that date 10d. (20 cents) a pound will be the fixed price, for some time.

The Government has also fixed the maximum price which British Buyers may pay for Ontario apples, viz:—

Sixty-eight shillings (\$16.32) per barrel of not less than 120 lbs. Twenty-one shillings and sixpence (\$5.16) per box of not less than 37 lbs. Twenty-three shillings and sixpence (\$5.64) per box of not less than 40 lbs. Sixty shillings (\$14.40) per hundredweight for all other packages.

I would advise that farmers secure their barrels, boxes, etc., now, and get ready for the fall picking and packing. The buyers should also see that no orchards are overlooked and that no fruit is allowed to rot on the ground.

It is with the hope of markets like this that the Ontario fruit grower planted and has since cared for his orchard. It will be a pity if he does not reap the benefit of it now. The people of Britain are hungry for apples and are willing and able to pay for them.

It is not necessary to warn the shippers of the scarcity of space on ocean vessels. The situation is improving, but application must still be made early for accommodation at the Atlantic sea-board.

London, England. G. C. CREELMAN,  
Agent-General for Ont.

### The Express Rates Hearing.

G. E. McIntosh, In Charge Transportation, Dominion Fruit Branch, Ottawa, addresses the following letter to all interested in the matter:

"The application of the express companies operating in Canada for an increase of forty per cent. in express rates will be considered by the Board of Railway Commissioners, in Toronto, September 2, at 10 a.m. The fruit and vegetable shippers throughout Canada fear an increase, such as proposed, will be injurious to these industries, and, therefore, intend submitting arguments before the Board. If you have any suggestions to offer, same will be appreciated and will be placed before the committee which is preparing the case for the shipper and growers.

## POULTRY.

### Poultry a National Asset.

The poultry industry is now recognized as a national asset, inasmuch as eggs constitute a national necessity for which there is no suitable substitute. A good farm flock is not only an important factor in the production of a staple food, but it is also an important factor in increasing the revenue from the farm. Most farmers now appreciate the fact that a well-kept farm flock pays as well relatively as most other branches of farming. As a result there is more widespread interest in poultry raising than ever, and farmers in particular are anxious to learn of the better methods that are now yielding more satisfactory results.

The amount of revenue to be obtained from the farm flock depends upon a number of factors comprising breeding, feeding and management. A right combination of these factors makes for efficiency and efficiency makes for success. The factor of breeding might be considered as the basis for success, for no amount of good feeding and proper management will make poorly-bred hens lay many eggs. Given a well-bred flock, however, good feeding is of great importance, for it is only through good feeding that an animal can respond efficiently. Lastly, proper management, which includes incubating, rearing, housing and sanitation is of service in obtaining maximum results from a well-bred and well-fed flock.

With bred-to-lay stock under efficient management it requires about four and a half pounds of feed to produce one pound of eggs, or about seven pounds of feed to produce one dozen eggs. Under ordinary conditions a laying hen consumes annually about ninety pounds of grain, ten pounds of green feed, two pounds of oyster shells, one pound of grit and one-tenth pound of charcoal. On the average farm, however, much of the feed is secured from the fields, and thus the cost of production is reduced considerably. If the average hen produced an average of twelve eggs each month of the year, she

would be an efficient hen and would make a fair profit over present cost of feed. The basis of comparison in egg production, however, should be not only on the total number of eggs produced, but on the time of production. Ten eggs laid in December or January are worth about twenty laid in April or May. The average farm hen lays about sixty eggs per year, principally from March to June, the season of low profits, whereas on feed cost alone sixty eggs laid from November to March would pay for a hen's keep for one year, leaving the balance of the eggs laid during the year to pay other expenses and for profit-making. The number of eggs laid above that required to pay for a hen's keep for a year is of greater value now than ever, so that the heavy laying hen is relatively more profitable than ever in spite of increased feed prices. Conversely, the poor laying hen was never such an expensive boarder. It follows, therefore, that in the production of a staple article of the diet of the nation and in order to secure the most satisfactory results from his farm flock, the farmer must combine the most efficient systems of breeding, feeding and general management to secure maximum winter egg production.—M. A. Jull, Macdonald College, Quebec, in "Canadian Farm Poultry."

### Monsieur Egg.

All cookery rests on an egg. The egg is the Atlas that supports the world of gastronomy, the chef is the slave of the egg. What is the masterpiece of French cookery, the dish that outlives all other dishes, the thing that is found on His Majesty's table no less than upon the table of the bourgeoisie—the thing that is as French as a Frenchman and which expresses the spirit of our people as no other food could express it?—the omelette. Could you make an omelette without breaking eggs? Then cast your mind's eye over this extraordinary Monsieur Egg and all his antics and evolutions. Now he permits himself to be boiled plain, and even like that, without frills, naked and in a state of nature he is excellent. Now he consents to appear in all ways from poached to *perdu*, now he is the soul of a *vol-au-vent*, now of a sauce; not a picrust fit to eat, but stands by virtue of my lord the egg, and should all the hens in the world commit suicide, to-morrow every chef in France worthy of the name would fall on his spit, for fish is but a course in a dinner, whereas the egg is the cement that holds all the castle of cookery together.—Stackpole.

## FARM BULLETIN.

### Crops in Algoma.

EDITOR "THE FARMER'S ADVOCATE":

A trip by car from the Soo, east, shows a bumper crop is going to be harvested this year. The hay, which is all well saved, is the largest crop in several years. The grain crops are all promising good. Some spring wheat is showing rust, and will do much injury. There are a great many fields of oats that stand as high as the fences, and no doubt will give a big yield.

It is a grand sight to look at some of the potato patches completely covering the ground and all in bloom. If Sandy Fraser could pass this way on his return trip he would see some of the best crops of potatoes he ever looked at. Owing to the abundant rains pastures have been good, and cattle and sheep are looking fine and will soon find their way to the markets.

An event of much interest was the passing through of the Michigan Pike Associations. It would be a splendid trip for many of the farmers in Old Ontario to make next June. They would receive a hearty welcome by the citizens of Algoma, and would go away feeling Algoma is a fine country to live in.

Algoma, Ont. NORMAN S. PACE.

### Dominion Field Husbandman Appointed.

E. S. Hopkins, M. S., assumed the duties of Dominion Field Husbandman for the Dominion Experimental Farms on August 1. Soils and crops throughout the whole system will come under his charge. Mr. Hopkins began his duties by entering upon an inspection tour of the experimental farms and stations in the Western Provinces. E. S. Hopkins graduated from the Ontario Agricultural College in 1911, taking the agricultural option. In 1916 he received his M. S. degree from the University of Wisconsin, where he specialized in soils and farm crops. During the last two years Mr. Hopkins has held the position as Provincial Soil Specialist at the Agricultural School, Olds, Alta., where his work in soils, with special reference to soil moisture, was comprehensive and outstanding.

### W. J. Black Quits Soldier Settlement.

W. J. Black has resigned the chairmanship of the Soldier Settlement Board, to become Director of Organization for the National Liberal and Conservative party. Premier Meighen and some of his Ministers, Ontario Senators, and members of the House of Commons, who belong to the party in power, met in conference at Ottawa on August 18, and arranged for an executive committee to deal with organization matters in this Province. Similar measures, it was said, will be taken in other provinces, and W. J. Black is to become the Dominion organizer.

# Toronto, Montreal, Buffalo, and Other Leading Markets

Comment on week ending August 19  
Quotations on last Monday's Markets.

## Receipts and Market Tops.

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

	CATTLE						CALVES					
	Week Ending	Same Week	Week Ending	Top Price	Good Steers	Week Ending	Receipts	Week Ending	Top Price	Good Calves	Week Ending	
Toronto (U. S. Y.)	3,888	9,207	6,320	\$14.00	\$14.00	\$13.90	1,172	1,454	1,437	\$18.50	\$22.00	\$19.50
Montreal (Pt. St. Chas.)	1,044	1,718	1,640	10.50	13.75	13.75	867	808	1,389	14.50	16.00	16.00
Montreal (East End)	931	1,898	1,428	10.50	13.75	13.75	548	1,123	969	14.50	16.00	16.00
Winnipeg	6,477	8,930	7,531	12.00	13.00	12.00	735	401	689	12.00	14.00	12.00
Calgary	1,393	4,882	2,226	9.75	11.75	10.50	286	1,787	392	10.85	11.25	10.50
Edmonton	668	1,445	396	10.00	11.50	11.00	73	328	117	10.50	10.00	10.25

	HOGS						SHEEP					
	Week Ending	Same Week	Week Ending	Top Price	Good Steers	Week Ending	Receipts	Week Ending	Top Price	Good Lambs	Week Ending	
Toronto (U. S. Y.)	3,411	6,623	3,315	\$19.75	\$23.75	\$20.75	3,032	7,494	6,368	\$13.75	\$12.50	\$14.50
Montreal (Pt. St. Chas.)	1,342	1,471	1,758	20.50	22.75	20.50	2,565	3,985	3,428	12.00	16.00	13.00
Montreal (East End)	1,525	1,503	2,027	20.50	22.75	20.50	1,924	1,924	1,997	12.00	16.00	13.00
Winnipeg	1,815	3,033	2,180	20.50	22.00	21.00	1,787	1,623	1,808	13.50	16.00	14.00
Calgary	561	485	565	19.75	22.50	19.75	567	445	769	12.00	12.50	12.00
Edmonton	438	233	230	19.50	21.00	19.00	388	247	156	9.50	12.50	12.00

### Market Comments.

#### Toronto (Union Stock Yards.)

There was a marked decrease in the offerings of cattle when compared with those of the previous week, there being 3,044 cattle, and 1,176 calves weighed up. A lack of quality was again in evidence on a large percentage of the stock and this condition had a tendency to further depress the market. Trading was slow on Monday and at the close of the day approximately 1,500 cattle remained unsold. The sharpest depreciation in prices occurred in the light and common classes as these made up the largest portion of the receipts. The market for well finished butcher cattle was, however, steady throughout the week, and most of the stock of that grading moved within a range of \$11 to \$13.75. The comparatively heavy offerings of common to fair cattle were weighed up at prices ranging from \$9 to \$10. Cows of good grading while slow to move, maintained fairly steady prices, those of good quality selling up to \$11.50. Cannery and cutters were about steady with the previous week's quotations while bulls of good grading met with a fair inquiry at prices from \$9 to \$10.50 per hundred. There was a much better market for feeder cattle than during the previous week and choice feeders moved fairly readily from \$10 to \$12. There were a number of western feeding cattle on the market, the quality of which was only fair. Good stocker cattle sold readily from \$8 to \$9.50. While demand was good, there would have been much heavier shipments back to the country if the excellent weather conditions prevailing throughout the Province had not kept many prospective buyers busy with the harvest. Calves sold generally at slightly shaded prices. Choice veal calves moved from \$17.50 to \$18.50 and up to \$19; the majority, however, were only of fair quality and sold around the lowest figure.

The market for sheep and lambs maintained a fairly steady tone until Thursday when packers made bids ranging from \$1 to \$2 per hundred lower on sheep. The lamb market, however, held steady at the previous week's prices; the top of the market was about \$14 although sales at \$14.25 were reported. It is felt that heavy shipments will cause a decline in the market.

The run of hogs was again light. On Monday selects sold at \$19.75 on a fed and watered basis, although it was stated that some shipments were contracted for at the closing price of the previous week.

#### Montreal.

There were 268 cattle, 402 calves, 2,496 sheep and lambs, and 926 hogs shipped off the yards during the week. Of these amounts 184 cattle, and all the hogs were shipped to Toronto, most of the sheep and lambs and all the calves to Boston. There was practically only one market during the week and that was on Monday as prices on that day were so much reduced from those prevailing at the close of the previous week, that shipments to the yards were reduced to a few loads. Prices were fully \$2 per hundred lower than those paid during the first of the month. While the reasons given for the cut in prices

TORONTO					MONTREAL				
CLASSIFICATION	No.	Avrge. Price	Price Range	Top Price	No.	Avrge. Price	Price Range	Top Price	
STEERS									
heavy finished									
STEERS good	241	\$12.50	\$12.00-\$13.25	\$14.00	12	\$10.40	\$10.00-\$10.50	\$10.50	
1,000-1,200 common	90	10.00	9.50-10.50	12.00	19	9.25	9.00-10.00	10.00	
STEERS good	344	12.00	11.50-12.50	13.00	92	9.75	9.50-10.50	10.50	
700-1,000 common	227	10.00	9.00-10.75	10.75	189	8.25	7.00-9.00	9.50	
HEIFERS good	349	12.50	12.00-13.00	13.25	33	9.50	9.00-10.50	10.50	
fair	270	10.50	9.50-11.50	12.00	99	8.00	7.50-8.50	8.50	
common	167	8.50	8.00-9.00	9.00	133	6.25	5.75-7.00	7.50	
COWS good	509	10.00	9.00-11.00	11.50	38	8.50	8.50	9.00	
common	572	8.00	7.00-9.00	9.50	232	6.50	6.00-7.50	8.00	
BULLS good	19	8.50	7.75-9.25	9.75	4	8.00	8.00	8.00	
common	122	6.50	5.75-7.25	8.00	159	5.50	4.75-5.75	6.50	
CANNERS & CUTTERS	141	4.25	3.25-5.25	5.25	25	4.00	3.00-4.50	4.50	
OXEN	1								
CALVES veal	1,250	16.75	16.00-17.50	18.50	383	11.00	9.00-12.00	14.50	
grass	25				484	6.75	6.50-8.00	8.00	
STOCKERS good	522	9.00	8.50-9.50	10.00					
450-800 fair	105	8.00	7.50-8.50	8.50					
FEEDERS good	209	11.50	11.00-12.00	12.50					
800-1,100 fair									
HOGS selects	1,640	19.75	19.75	19.75	767	20.10	20.00	20.50	
heavy	2			18.75	82	18.00	17.00-18.50	18.50	
(Fed and lights	376	17.75	17.75	17.75	236				
watered) sows	175	15.75	14.75	16.75	246	15.75	15.00-16.00	16.50	
stags	3				11				
LAMBS good	1,955	13.10	13.00-13.75	13.75	1,281	12.00	12.00	12.00	
common	144	11.00	11.00-11.50	11.50	1,119	9.50	9.00-10.00	11.00	
SHEEP heavy									
light	641	7.50	7.00-8.00	8.00	61	6.60	6.50	7.00	
common	292	6.00	6.00-6.50	6.50	104	6.00	6.00	6.50	

during the previous week were that hot weather and the absence of people from the city combined to make it hard to dispose of any liberal supplies, the reason given this week was that the packers are getting prices down in preparation for the fall run. There were no really good steers offered and this condition coupled with the cut in prices produced a top sale at only \$10.50. A few fairly good steers and heifers sold at \$10.37, but most of the steers moved at \$9.50 or under. Light poorly bred steers sold as low as \$6 to \$7. Good fat cows moved at \$8.50, and sales of smaller lots of fairly heavy cows were made at that figure while one carload of cows which averaged 1,050 pounds moved at a similar price; the common price for poorer cows was from \$6.50 to \$7, while canners sold from \$3 up. Poor light, yearling heifers sold at \$4.50, and up while a few choice heifers moved up to \$10.50 along with steers. Yearling bulls sold as low as \$4.50, heavier bulls around \$5.75, while one animal was weighed up at \$8. A few odd lots of calves sold from \$14 to \$14.50. On account of calves being sold in mixed lots as shipped, the quotations on good calves were lower than if the calves were graded. Fairly good lots of calves were sold up to \$13, while \$12 was the general figure. Good grass calves or drinkers sold from \$8 to \$9, thin half-starved calves from \$5.50 up, and numerous lots of grass calves at \$6.50.

Lambs were quoted at steady prices throughout the week, those of good quality moved at \$12 per hundred, if weighing seventy pounds or over, and common lambs from \$8 to \$11. Buyers recommended the holding and fattening of sheep until late in the fall. Sheep sold during the week at \$5 to \$7, the best sales being made at about \$6.50.

The quotations on hogs were lower, but as with calves a large percentage of lights and other grades than selects were included in the sales. A few drafts were made at \$20.50 off cars, for selects, these having been largely contracted for during the previous week. The best lots weighed off cars sold at \$20 per hundred, sows moved from \$15 to \$16 and rough lots from \$16 to \$18.50.

#### Wool Market Report.

The market for graded Canadian wool remained unchanged. Canadian Co-operative Wool Growers, Ltd., report the sale of 40,000 lbs. of reject wools at twenty cents a pound, and the sale of tags at nine cents a pound. The order placed with Canadian mills by the Roumanian Government has not affected the sale of Canadian wools to date, although it is expected to create a demand for clothing wools. Canadian dealers have done very little buying or selling of this year's clip except where they have orders placed ahead. Dealers are now showing a tendency to speculate on graded

wools. Prices for the grades are as follows:

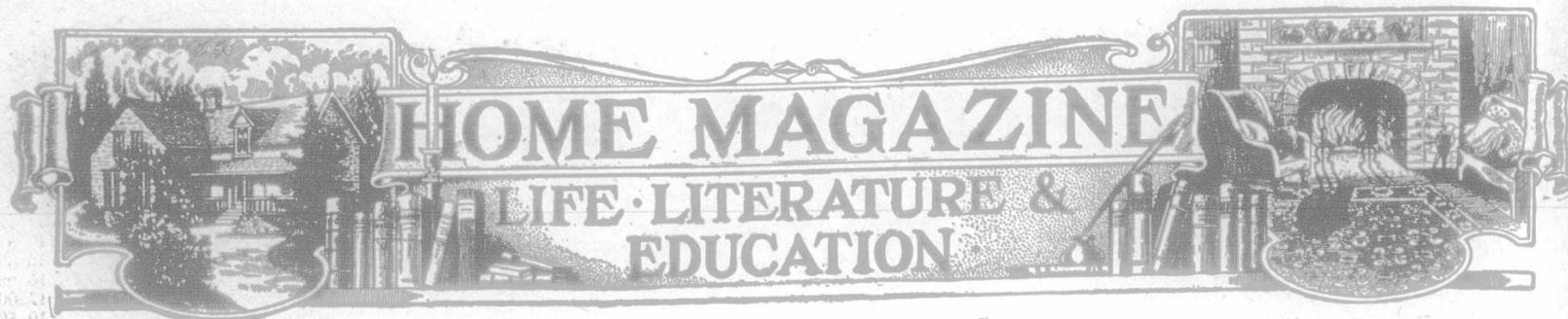
Canadian Western wool: Fine staple, 55c. to 59c.; fine clothing, 48c. to 52c.; fine medium staple, 56c. to 60c.; fine medium clothing, 53c. to 57c.; medium staple, 45c. to 48c.; medium clothing, 37c. to 42c.; low medium clothing, 33c. to 35c.; low staple, 25c. to 30c.; coarse, 20c. to 22c.

Canadian Eastern wool: Medium combing, 50c. to 55c.; low medium combing, 42c. to 45c.; low combing, 30c. to 34c.; coarse, 23c. to 25c.

#### Cheese Markets.

Cheese had a firming tendency last week. Quotations at Montreal were: Cheese, finest easterns, 25c. At the London board, on Saturday last, 285 boxes were offered; 26c. was bid but there were no sales. At Madoc a quantity sold at 26 1/2c., and some at 26 3/4c.; the balance was refused at 26 3/4c. At Belleville, 947 boxes of colored and 129 boxes of white were offered. All sold at 26 15-16 cents. The result of last Friday's auction by the United Dairymen Co-operative, in Montreal, was as follows: 296 No. 1 white at 26 3/4c.; 241 No. 2 white at 25 1/2c.; 30 special colored at 26 3/4c.; 1,151 No. 1 colored at 26 1/2c.; 509 No. 2 colored at 26 1/2c.

Continued on page 1495.



### The Optimist's Feast.

Bring me a bowl of sunshine, lass,  
From a fount of a rosy dawn;  
A frozen rainbow for my glass  
Ere the sparkle of it is gone;  
The silver lining of a cloud  
As a cloth for my table here,  
And sing me a merry song aloud  
With a voice that is sweet and clear.

Bring me the blue of a sunny sky  
And cast it overhead,  
Lay me a rug of clover by  
Like a wave of velvet spread;  
Shower me over with cherry flowers  
Just bursting to full bloom,  
To freshen this perfect day of ours  
With spice of their sweet perfume.

Drape me the black of a midnight sky,  
And stud it with stars of white,  
To hang my walls with a tapestry  
Rare as the peace of night;  
Stretch me a frieze of clouds that lie  
Over the sunlit hills,  
Where the bowl of sunshine, brimming  
high,  
Just overflows and spills.

And my cloth shall be soft as the rose's  
cheek,  
And my heart strings shall be atune,  
All, all of my bidden guests shall speak  
With tongues of the birds in June;  
So—a bowl of the sun from a rifted cloud,  
And set it before me here,  
And sing me a merry song aloud  
With a voice that is sweet and clear.  
—J. W. Foley, in Collier's Weekly.

### The Dream of Possession.

[An address delivered by President Reynolds, of the Agricultural College, Guelph, to the Summer School for Rural Leadership.]

EVERY man who wishes to till the soil and is able to till it well, should have the right to do so, and no private ownership should interfere with that right.

Possession of land should imply tillage. So long as a man, or his family, continues to till a farm, he should have possession. When he ceases to farm, he should cease to own.

I would have no bidding for absolute private ownership, but bidding for the right to till the land.

Under the feudal system the king owned all the land, and leased it for certain consideration of service. The modern equivalent of that idea is, that the people should own the land, and lease it to those who are able to give payment for its use. The land of Canada was once public property. It should have remained so, and every one wishing to occupy land should be allowed to do so, either free or for an annual rent. But an unalterable condition should be that he or his family should work it.

The speculator in land is a hindrance to the progress of the country, for by his absolute ownership he is debarring someone from the rightful use of the land, or taking unlawful toll from the labor of other men.

The tiller of the soil, instead of investing his savings in procuring absolute ownership of the land he tills, should return part of the products of his labor to the state for the use of the land, and save the rest to keep him in his old age.

As this is only a dream, practical details must not be expected or asked for.

*A Dream of Mastery:* No wise person will embark upon a career in which he is pretty sure to suffer distinct defeat. A sense of mastery is essential to happiness and self-respect. Not just to win, but to be confident of winning, is the inspiration of the daily task. Lacking that confidence, lacking the power and

the opportunity to conquer, life is drab and hopeless.

The farmer is in constant conflict with the powers of nature. Natural laws and natural phenomena, the wind and the rain, heat and frost, cloud, fog, and sunshine, are the atmosphere in which he labors and the forces with which he is engaged. These are largely uncontrollable factors, and yet the problem of the farmer is to secure a measure of control, or so manage that he can be indifferent to or independent of them. Drainage, irrigation, tillage, crop rotation, diversified farming, are the varied means by which the farmer gains mastery over the unfriendly forces of nature.

Man has learned to make use of only a few plants and animals. The rest he considers useless or harmful. Those he has learned to use he has developed and improved according to his own ideas. The useless and the harmful he seeks to destroy.

But here nature and the farmer are at variance. In deciding what is useful and what is useless, in propagating the one and destroying the other, the farmer has defied natural environment, natural selection, and the law of survival of the fittest. For natural environment the farmer has substituted an artificial environment, and his pure-bred live stock must be housed. For natural selection he has substituted human selection. Human selection has produced the Shorthorn and the Angus and the Hereford. Natural selection produced the moose. For the law of survival of the fittest the farmer has substituted the law of survival of the most useful. He has ordained life to the sheep and to the wheat plant, and death to the wolf and the thistle.

For these defiances of nature's decrees, the farmer suffers the penalty of nature's hostility. It is war. Indeed, agriculture is the moral equivalent of war. By skill in breeding and selection, by protection and fostering care, the farmer has produced his improved live stock his cereals, grasses, vegetables and fruits. Nature unaided never has and never would produce the plump berry of the wheat,

search, experiment, and propagandism, the technologist helps the farmer either to enlist nature in a co-operative effort, or by knowing her intentions and her methods to combat her successfully.

It has been remarked that agriculture is the moral equivalent of war. When men have learned to live peaceably with one another, they will then be able to turn their attention to an important branch of the real business of civilization, which is, to obtain mastery over the powers of nature. How much farther on the road to the mastery we should now be, if the science, the energy, and the wealth that have been expended in war since 1914 had been expended in exploring and mastering the secrets of nature.

Mastery in the realm of nature; and mastery in the world of men. For the farmer is not only an agriculturist—a tiller of the soil. He is also, if not by choice then by compulsion, a business man, a dealer, buying and selling in the markets of the world.

The merchant is a trader only. He buys and sells, but does not produce. And in the buying and the selling there is usually one who buys and another who sells. There is a separation of function and a division of labor. The manufacturer buys his raw material, produces, and sells. But in this business also there is separation of function and division of labor. One buys, another produces, a third sells.

Generally in Canada, the farm business does not permit this division of labor. The farmer is his own buyer, his own operator, his own salesman. Thus his attention is divided. Nor has the syndicate farm been successful. The small farm seems to be the type. The problem is, how can the farmer of 100 to 300 acres best combine the two functions of business man and agriculturist?

There is a double aspect to farming as a business undertaking,—the internal business of the farm, what we call farm management, and the external relations, or marketing. To determine what the farm is best fitted to produce is one problem, taking into account climate and soil and available markets. The

more than the revenue provides. As a matter of fact, no one branch of the farming business is profitable by itself. Each is a bye-product. If the farmer charges his live stock with the market value of the grain and hay they consume, his live stock business is liable to show a deficit. If he charges his upkeep, the repairs to buildings and implements, with the market value of the labor expended upon them, upkeep makes an alarming inroad upon revenue. If he charges his revenue with the interest on capital invested, his labor income often vanishes. All is a compromise. Much that he feeds his live stock has no market value. They must live for the most part on roughage and waste products. The hen is required to scratch her own living, and the cow forages for herself along the fences. Much of the farmer's labor is given free, after he has done a full day's work, not to mention the work done by the family, which is nearly all free. On the principle of bye-products alone can the farm be made to show a profit. Yet it is desirable that every farmer give his mind to the question of cost of production. If he does so, persistently and intelligently, his rewards will be greater and his satisfaction and contentment increased.

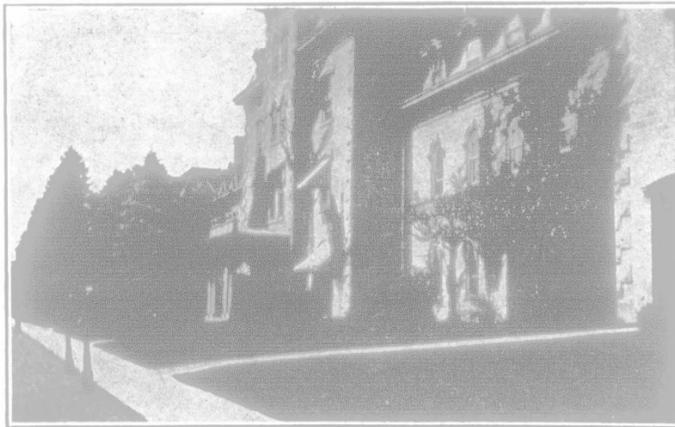
In conducting the external affairs of the farm, the farmer to-day finds himself confronted with what looks like huge combines and conspiracies to rob him of the results of his labor. Trade, transportation, and tariff, all seem to be against him. How can the farmer singly combat this system? How can he secure a living and at the same time attend to the main business of his calling, production?

I see no answer to that question except in the word "organize". Organize for economic reasons, to buy and sell. Organize for political reasons if necessary, to compel government to give attention to the farmer's claims.

The joint stock company is the favored method of organization in city industries. It has never fitted into rural conditions, or suited the rural mind. The dollar is the unit of power in the joint stock company. The farmer is too much of an individualist to subordinate his soul to the shekel. He requires some type of organization in which his individuality counts, regardless of the number of dollars he can bring. And so the co-operative society has been devised, with its principle of "one man one vote." In the co-operative society probably lies the solution of conducting successfully the affairs of the individual farmer. Even in his co-operative society the farmer learns that he must subordinate some of his individuality to the common good. He must acquire trust, learn to pledge his word and to keep it though seemingly to his hurt, and be willing to adopt the social idea of majority rule.

*A Dream of Service.*—The farmer is the only creator of wealth. The miner, the lumberman, the fisherman extract wealth already provided in the reservoirs of nature. The manufacturer transforms, the merchant and the railroad man transport. The miner, the lumberman, the fisherman, the manufacturer, divide and subtract and diminish the potential wealth of the world by their labors. The farmer adds and multiplies and creates, some thirty, some sixty and some a hundred fold. The farmer is one with the Creator in the great enterprise of providing food for the world. As one of the ancient poets has said, "These wait all upon thee, that thou mayst give them their meat in due season." And as a certain one of our own poets has said "Godlike, he makes provision for mankind."

The farmer performs a great service for mankind. And my dream is that more and more he shall be enabled to do his work in the spirit of service and not



The "Old Building," O. A. C., Guelph.

Photo shows the original farm house in centre, the nucleus of the O. A. C.

the full-flavored Northern Spy, or the full udder of the Holstein. If left to nature these would speedily degenerate. Eternal vigilance is the price of success. Let the farmer withdraw his protecting care, or relax his studied vigilance, and nature will speedily avenge herself against the farmer's partiality.

In this warfare, a knowledge of the conditions is essential to mastery. He is half prepared for the fight who knows the enemy's intentions. My dream is that every farmer shall be a student of natural science. Here is the field of the agricultural technologist. By re-

next is to lay out a system of rotation or a method of fertilizing whereby the revenue is secured and the capital—the soil fertility—left unimpaired. The relation between capital, overhead expenses, and revenue is another problem. How are the annual charges of interest or rent, maintenance, labor, and living expenses to be met? Bookkeeping on the farm is a most disheartening business. A good many farmers when they keep books become alarmed at what the books reveal. They seem to be going behind every year. Interest, depreciation, labor, maintenance costs, consume apparently

for reward. Farming is not so much a business as a calling and a way of life. He only is the true farmer who loves his work, who feels impelled to his calling, who is drawn to it by invisible cords of destiny. "Woe is me," cried the apostle, "if I preach not the gospel!" "Woe is me," cries the true farmer, "if I till not the soil!" Each, the apostle and the farmer, receives a call. Each embarks with joy and confidence upon his great adventure. He can do no other.

Necessity compels the farmer to be two men in one. He must be a business man. He prefers to be husbandman. When the cares of business do not press too heavily upon him, he can yield to the joys of creation. He can do this work for the work's sake, for the love of growing things. He is a free man, conscious of partnership with the Divine in providing for humanity's first need.

This world cannot be redeemed from its present pain and unrest until men are willing to do with their might what their hands find to do, in the spirit of service. Agriculture must lead the way.

up her varied fruits, and high up the vines have ripened on the sunny rocks.

"Meanwhile sweet infants hang upon his lips, his pure home guards the modesty of his children; the udders of his cows give down the milk, and the fat lambs have played in the rich pasture.

"Formerly this life the ancient Sabines followed, and the founders of Rome; Thus Etruria grew great, and Rome became the greatest city on earth, and surrounded her seven hills with a rampart. Even before the rule of Jupiter and before an impious race had feasted on the sacred oxen, golden Saturn lived this life; nor had men heard the blast of the trumpet, nor the swords clatter upon the anvil."

**The Conference takes Action.**

ALTHOUGH the "Resolutions," following the usual order, were not brought in until the end of the Summer School for Rural Leadership, it may be apropos to give them to you at this juncture. Notwithstanding the "whereases" and "therefores" of the legal

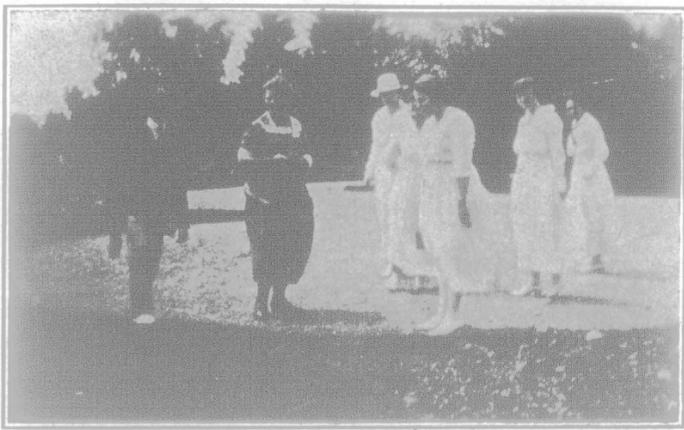
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external affairs of the ay finds himself con-ooks like huge com- to rob him of the re-ade, transportation, to be against him. er singly combat he secure a living e attend to the main g, production? that question except ize". Organize for buy and sell. Orga-ns if necessary, to to give attention to

pany is the favored on in city industries. o rural conditions, or l. The dollar is the oint stock company. ch of an individualist soul to the shekel. ype of organization ality counts, regard- dollars he can bring. ive society has been n-iple of "one man co-operative society ution of conducting rs of the individual co-operative society at he must subor- ividuality to the must acquire trust, word and to keep it o his hurt, and be ocial idea of majority

—The farmer is the ealth. The miner, e fisherman extract ded in the reservoirs aufacturer transforms, e railroad man trans- he lumberman, the aufacturer, divide and nish the potential d by their labors. nd multiplies and some sixty and some e farmer is one with great enterprise of e world. As one of s said, "These wait ou mayst give them eason." And as a own poets has said provision for man-

ms a great service my dream is that all be enabled to do t of service and not



**Mr. Bythell, Granton, Ont., and Some of the Girls at the Summer School.**

Rev. Mr. Bythell was formerly a missionary in the Yukon, and is the hero of H. A. Cody's novel, "The Frontiersman."

A great Latin poet thus dreams of the life of the farmer: "Some vex the blind bays with their oars, and crowd the thresholds and the halls of kings. One threatens the city and the homes of the wretched with destruction, that he may drink from jewelled cups and lie upon Tyrian purple. Another secretes wealth and broods upon buried treasure. One is amazed at the rostrum, and is carried away by the applause of the people and the fathers echoing along the benches. One gloats over the blood of his brethren, changes the home and the precious hearth for exile, and seeks a country lying under an alien sky.

"The farmer turns over the soil with his curved plow. Hence is the labor of the year and hence he sustains his country and his little children, his herds of cattle and his deserving oxen. Nor is there rest, until the year abounds with the young of cattle and the harvest of cereals, and the furrows are laden with produce and his barns are filled with plenty.

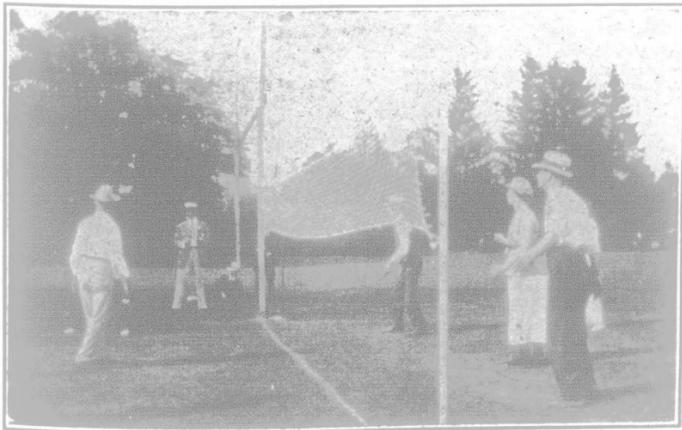
"Comes the winter; the olive berry is ground in the mill, the swine return fat with the acorn, and the bushes have yielded their berries. Autumn has given

phrasing of such matters, the reading of the "gist of the Conference", as so summed up, may enlighten you in part at least, as to what it was all about," of which further elaboration is to be made in subsequent issues of this magazine.

On the last day of the Conference, at a joint meeting of the School for Rural Leadership and the Summer School for Rural School Teachers, the following Resolutions were read:

1. (Introduced by Mrs. Todd, Orillia) —Whereas the report of the investigation recently made by the Hon. Justice Hodgins and the information brought to us in the addresses of Dr. Eric Clark on "Mental Defectives in Ontario" show the menace to rural Ontario as well as to urban centres, sufficiently great to call for immediate action.

Therefore, we the members of the School of Rural Leadership, in sixth annual session, and the Summer School for Teachers, at the O. A. C., recommend that the constructive policies now being worked out, such as segregation, colony settlements, institutions, auxiliary classes, whether the policies be preventive or remedial in character, should be Province



**Volley Ball—An Excellent Game.**

Rev. Mr. Bridgman and Mrs. Bridgman were at home in this, as they had often played the game in West China.



**A Snug, Comfortable Suit.**

When you slip into a suit of Watson's Spring Needle underwear, you feel "fitted" and comfortable. The action of the body is unhampered by a Watson garment which gives freely when the limbs are active.

All styles, all sizes and in various fabrics for men, women and children.

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**SHERLOCK-MANNING**  
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True to tone and produced from the best materials by expert workmen, it is rightly named "Canada's Biggest Piano Value."

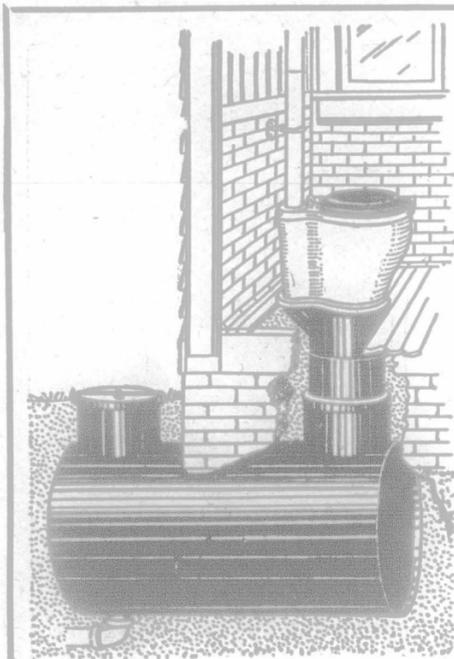
**The Sherlock - Manning Piano Company**  
LONDON, CANADA

**ONTARIO LADIES' COLLEGE**

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Public School to Second-Year University, Household Science, Music—Instrumental and Vocal; Commercial, Elocution, Art, Civic and Parliamentary Studies, Gymnasium Work and Swimming.

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The first principle of health is proper sanitation. No home, school or public building can be healthy unless there is an efficient indoor toilet.

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wide in scope, and that knowledge of these conditions, both as to the incidence of mental defect and the treatment, be more widely diffused throughout the Province as a preparation for necessary surveys.—*Carried.*

2. After a lively discussion as to whether there should not be but one issuer of marriage licenses in each township, and a law to make it compulsory for a man to obtain a license where he is known, also a doctor's certificate of the fitness of contracting parties for marriage, a Resolution brought in by W. S. Irwin was laid on the table and a committee was appointed to consider the whole question and report at the next annual meeting. Similar disposition was made of a Resolution considering the status and care of the illegitimate child.

3. Representatives were also made to President Reynolds by Rev. Mr. Segsworth, Rev. Mr. Foley, and Rev. Mr. Honey, requesting that he use his influence with the Minister to secure the foundation of a Chain of Rural Sociology at the O. A. C. and recommending that Mr. Maclaren be appointed as head of that department.

The officers elected for the Summer School of Rural Leadership were: President,—Rev. Mr. Segsworth, Cheltenham, Ont., Sec.-Treas., Mr. Maclaren, Guelph; Secretary for Summer School in Session, Rev. Mr. Atkins, Parry Sound.

### The Need of Play in Life.

**T**HE need of play as a character-builder, especially for young people, was emphasized throughout the Conference, upholding the theory so strongly advocated by "Medicus" in these pages, that young people are better physically and sometimes morally also, if given opportunity for a fair proportion of play—an opportunity to come together in games and athletic exercises. Every day, on the campus, the members of the Summer Schools met to play base ball, volley ball and a number of other games, including a few "folk" or peasant dances, which gave a chance for the development of grace and rhythm of motion.

The lectures on this subject were given by Mr. Maclaren. "Get every body into the games when you go home," he advised; "There is no place for the professional champion in community sport." Athletics, field sports, aquatics ("the old swimming hole") group games, "hikes", relay races, and excursions, all have their place, also such winter recreations as skating, skeeing and snow-shoeing. It is as necessary for girls as for boys to play games; women need strong healthy bodies, and a movement for the rationalization of girls' clothes should be welcomed. The speaker thought the ordinary gymnasium suit a good model for sports wear. One way in which the community idea has been worked out is to have a regular athletic meet, which may be inter-class, inter-school, or inter-Sunday School. The new method for such meets calls for use of the weight classification for the various events—the 80-lb. class, 80 to 95, 95 to 110, 110 to 125, then unlimited. Standards are established for every event. Space is not given here for an enumeration of these as they can be obtained from any Y. M. C. A. Secretary. The outstanding idea in all games, on the part of the "leaders" at least, should be to develop a spirit of honor and fairness. Even in the meets the aim held up should be—not to beat such and such a boy, but to beat a certain standard. This plan gives even the little school, where there are few boys and girls, a chance to enter. Everyone is tested and scored, and it is easy to make comparisons with the budding athletes in adjoining, or even in far distant sections.

In case of a question of honor it is wise to accept the boy's word every time, almost invariably if a boy tries to play a trick and his word is accepted he will confess afterwards. You "get him" that way.

Another advantage of games is that through them latent leadership is discovered. The boy discovers himself to himself, and the realization that he can do things leads to bigger things in life.

Another branch of recreation is important, though less active physically. In this class come wisely selected moving-pictures, story telling for children, summer camps (great training centres), the community singing school, and the drama.



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It contains 48 pages, over 300 illustrations from actual photographs of beautiful furs, showing the furs as they really appear. It is full of real bargains from cover to cover, showing the latest models in fashionable Fur coats and sets—every garment fully guaranteed, and the prices are the same to everybody—everywhere in Canada. Send for your copy to-day. We will gladly mail it to you free of charge.

Scarf as illustrated above is extra large and of finest Silky Black Wolf, about 35 inches long and 9 inches wide. Silk lined and silk frill around edge, trimmed with head and tail.  
M349. Price, delivered to you... \$28.75  
Muff to match, measuring about 13 inches in width and about 30 inches in circumference, trimmed with heads, tails and paws, lined with velvet and soft bed, complete with wrist cord and ring.  
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The above scarf or muff will be promptly mailed to you on receipt of money.

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The largest in our line in Canada

## PEACHES

remain firm in thick heavy syrup made with 1/2 Sugar and 1/2

## LILY WHITE SYRUP



DEPARTMENT OF MILITIA AND DEFENCE.

Notice to ex-members of the Canadian Expeditionary Force.

**N**OTICE is hereby given to all concerned that ex-members of the Canadian Expeditionary Force who are entitled to and who require post-discharge dental treatment must submit their applications to the District Dental Officer at the Headquarters of the District in which they reside on or before 1st September, 1920. Applications for dental treatment received after 1st September, 1920, will not be considered.

(Sgd) EUGENE FISET,  
Major-General.

Deputy Minister, Militia and Defence

Ottawa, August 3, 1920.



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the furs as they  
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the latest  
fur coats and sets  
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**STITCHES**  
Firm in thick  
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**EUGENE FISET,**  
Major-General.  
Minister of Militia and Defence

Pageants showing the history of the place have been shown in many localities and have proved a wonderful stimulus and source of interest. For help in getting up local dramatics Mr. Maclaren recommended two booklets: *Drama, Pageants and Masques*, which can be obtained from the Y. W. C. A., 600 Lexington Ave., New York; and *Guide and Index to Masques and Plays*, published by Harper Pub. Co., New York. Mr. Maclaren considered *Bancrofts*, the best book on straight games that one can get. It is extensively used by the Y. M. C. A.

Mr. Maclaren referred to the new demand for the Y. M. C. A. in small and rural places, and pointed out that such an association can be easily carried on with very little equipment—a plan originated by Robt. Weidensall of Illinois. Always the emphasis should be placed upon the *Association itself*, not upon the building. The Y. M. C. A. is non-denominational and international. Its aim is to unite all forces among young men for the up-building of Christian character; it supplements all other influences. In the rural districts the county is taken as the unit. In the rural districts don't let "the town dominant" policy control—get a secretary who is rural-minded. This county secretary goes into the communities and organizes local organizations, putting leaders in charge of groups of boys. These leaders are given the Canadian Standard Efficiency Course, to be passed on to the boys.

The principles that underlie rural Y. M. C. A. work are:

1. A community task for every man and boy. Each should be getting the vision of something bigger than himself.
  2. A social vision of the Kingdom of God. A day is coming when "Jesus shall reign."
  3. Recognition of resident forces to redeem the community.
  4. The recognition of the inherent value of country life for itself.
  5. Deliverance from city paternalism.
  6. Better home and community sanitation.
  7. A different type of education. It is believed that the consolidated school plan, rightly carried out, is the best.
- Always recognize that it is *personality* that counts, not equipment. Get farmer leaders, with the clergymen and teachers assisting.

Next week our report will begin with an account of a demonstration regarding the value of lightning rods, given by Prof. Moffat.

**Your Health.**

BY "MEDICUS."

**The Dangers of Middle Life.**

At a recent meeting in Toronto a prominent physician gave this advice, "Reduce your belt line and increase your life line," and this applies especially to all who have reached middle life. It is highly undesirable to get stout after forty.

It is a regrettable fact, and one that certainly reflects on your intelligence, that, while there has been such a decided reduction in infant mortality and the mortality from communicable diseases, the Life Extension Institute of New York City should find after a very careful survey, that in the past 30 years the death rate from degenerative diseases of the heart, arteries and kidneys have increased practically 100 per cent on this continent, while in European countries the rate has remained unchanged. In one group of men of an average age of 30 years, who were carefully studied, 36 per cent. showed evidences of disease or disorders of the kidneys or bladder, 20 per cent. had abnormal blood pressure, and 13 per cent. had hardened arteries, and not one of those examined ever suspected he was not in perfect health.

If the farmer were to look after his job in the same slipshod sort of way that men look after their health, how long would he own the farm? If you were to run your motor car month in month out without having an expert overhaul it occasionally, how long would it last? If you were to run it as long as it would go, and then send for an expert (or specialist) who, on careful examination, would tell you irreparable damage had been done and it could only be sold for junk, imagine your disappointment. Is not your health worth more attention than your motor car? Why not take a lesson from the Chinese,

who pay their doctor only when they are well? Why not be examined thoroughly by your family doctor every 6 or 12 months. (You usually send in your car once a year for a general overhauling.) Ask him to go over you carefully and give you a report of his findings so that you can compare your weight, blood pressure, urinalysis, etc., when you go back again in 6 or 12 months. It is wise to prevent these degenerative diseases rather than try to cure them. Remember most of these diseases have no symptoms that can be detected by the patient until they are far advanced. How many men have discovered for the first time that they had a heart murmur, or diabetes, or Bright's disease, or hardening of the arteries when they were examined for life insurance. A cousin of mine never suspected he was not in perfect health until he was rejected for life insurance on account of diabetes.

Cancer kills in Canada approximately 8,000 people every year, usually patients of middle life. If these persons had been examined every 6 or 12 months, the abnormal growth which subsequently developed into cancer would have been discovered in the pre-cancer stage, at which time they are practically all curable.

How can these conditions be prevented and our lives prolonged? *Causes: First*, over-eating, and especially meat, after middle life. So "Decrease your belt line." Eat less, especially meat. *Second*, Insufficient exercise, or too much or too strenuous exercise. In other words, the farmer should only work 8 hours a day, and he should have some holidays too. Scientific investigations indicate that better work can be done in 8 hours than in longer periods of work. *Third*, Social diseases—syphilis and gonorrhoea.

*Fourth*, The use of alcohol to excess. *Fifth*, Over worry—the mad rush for the mighty dollar, the undue worry and anxiety. Have you ever asked yourself if you have gained anything by worry? If you think and analyze you will answer in the negative: but you have done yourself irreparable damage by needless worry. Over-worry, or even just plain worry, is ten times more disastrous than over-work. Cultivate a cheerful disposition. Develop a sense of humor, — see the funny side of the situation. Don't neglect to get your quota of sunshine; it is a good stimulant to your "trouble-forgetter" and a splendid tonic to chase away "the blues."

**SUMMARY.**

Be temperate in all things—in your work (8 hours), your pleasures. Be an optimist. Don't worry. Why worry?

Have a careful, systematic examination every 6 or 12 months by your family doctor. Keep the records he gives you for your own information.—People go to the dentist even though they haven't a toothache just to make sure their teeth are alright. Why not find out if your heart, or lungs or kidneys are in perfect condition?

**The Children's Poem.**

Her Sampler.

BY ROSE MILLS POWERS.

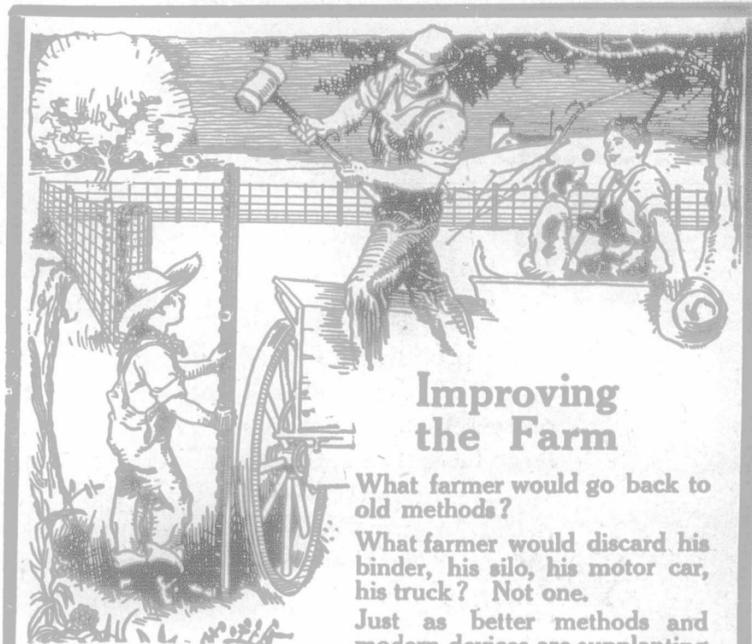
The sampler hanging on the wall  
Great-grandma made when she was small,  
And worked her name upon it here,  
"Mehitabel, in her eighth year."

In stitches straight and neat she set  
The letters of the alphabet,  
All twined about with vines and flowers,  
Mute witness to long, busy hours.

Her little hands, I have no doubt,  
Guiding the needle in and out,  
Were eager oft to glean, instead,  
Real flowers not wrought in colored thread.

She never dreamed her work would last  
After a hundred years had passed,  
A tale of patient care to tell—  
Dear little maid, Mehitabel!

"For Tansy like weed, I must needs make proclamation that he that can tell the destruction of it, shall show a very acceptable service; and for myself I should be very thankful for the communication thereof, for I can say no more than this; never plough your land too long, nor out of heart or strength by no means, for this occasioneth it to grow thick and fruitfully."—WALTER BLITH, 1652.



**Improving the Farm**

What farmer would go back to old methods?

What farmer would discard his binder, his silo, his motor car, his truck? Not one.

Just as better methods and modern devices are supplanting the old, so

**BURLINGTON STEEL FENCE POSTS**

are replacing the costly methods of fence building. Burlington Steel Fence Posts can be driven into the ground in a few minutes. The special "U" shape insures permanent anchorage and prevents sagging or bending. They are rust-proof, decay-proof, fire-proof and last a lifetime. No post holes to dig—no staples to drive. They withstand any farm strain.

For sale by all good fence, hardware and implement dealers, or write us direct. Immediate shipment.

Send for book which tells all about these posts. It's FREE

**BURLINGTON PRODUCTS LIMITED**

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**The Macartney Machine Milker Is Fool Proof**

There is no complicated machinery to the Macartney Machine Milker, in fact it is a *marvel of simplicity*. It only needs ordinary care and it will not get out of order.



The Cow's Adopted Child

Besides being so simple, the Macartney Milker is perfectly natural in operation, there is nothing about it to irritate the cow, in fact its use is greatly preferable to the old method. Hand milking at best is only poor imitation of the calf's way of taking the milk. The Macartney Machine milks exactly as the calf sucks—that's why it is called "The Cow's adopted child."

**Increase Your Milk Production**

More milk per cow is invariably the result where the Macartney Milker is installed. It is not a matter of great expense and the Macartney soon pays for itself for it does the work in half the time and effects a great saving in Labor cost.

Fill in the attached coupon and let us send you full particulars. Get this information anyway for future use and don't buy a milker without investigating the exclusive features of the Macartney.

**The Macartney Milking Machine Co. Limited**  
316 Catherine St., Ottawa

**The Macartney Milking Machine Co. Limited**  
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Please send me full particulars about the Macartney Milker.

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## New Rates to Meet Increased Costs

**N**O one can better appreciate the problems with which the Bell Telephone Company is confronted than the farmer.

As a producer of foodstuffs, he is fully aware of the causes responsible for the present high cost of living. He knows how large have been the wage increases which all fair employers have felt themselves compelled to grant in order to counteract the shrinkage in the purchasing power of the dollar.

The average wage of our employees has been increased 95.1% in the last five years, and there is no present prospect of any decrease.

This added burden of increased wages, together with the steadily advancing cost of all commodities used in telephone operation, has rendered our revenues inadequate to provide for the unprecedented demand for telephone service.

If we are to deal fairly with both employees and public alike, new rates are imperative.

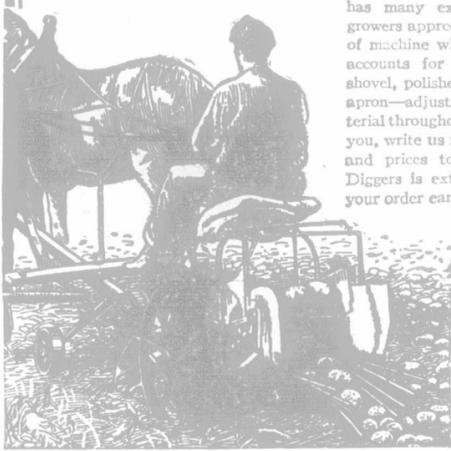


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The O.K. Canadian Potato Digger lifts all the potatoes, out of any kind of soil, without bruising or splitting them. It places them in a compact row free from dirt where they may be easily picked up. The

## O-K CANADIAN Potato Digger



has many exclusive features which potato growers appreciate—a throat wider than body of machine which gives quick separation and accounts for its light draft—crucible steel shovel, polishes in any soil—effective shaking apron—adjustable fork rower—superior material throughout. If your dealer cannot supply you, write us for full information, testimonials and prices to-day. The demand for O.K. Diggers is extra heavy this season, so place your order early.

**Canadian Potato Machinery Co., Ltd.**

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## Hope's Quiet Hour.

### On Special Duty.

These twelve Jesus sent forth, and commanded them, saying, Go not into the way of the Gentiles, and into any city of the Samaritans enter ye not: But go rather to the lost sheep of the house of Israel.—S. Matt. 10: 5, 6.

He answered, and said, I am not sent but unto the lost sheep of the house of Israel.—S. Matt. 15: 24.

I am sitting on the slope of a hill facing the beautiful Kawartha Lakes. Looking up from the foolscap on my knee to the blue water and sky, seen through a gap in the green trees which cover the hill and shade me from the hot sun (it really is hot to-day, after our strangely cool summer) I find it hard to realize that millions of people are missing the sweetness and beauty of this room of the Father's house which we call "Earth". The birds are singing around me, as if life were nothing but gladness. And yet I know there is a great deal of misery in the world, and Christians are called to be fellow-workers with Christ—Who went about doing good. We have no right to spend life on a hillside of ease, drinking in beauty and sweetness, when the need of the world is great and we are called to a life of service.

But it was God who hung the lovely pictures of earth and sky and water on the walls of His children's schoolroom. Will He be pleased if we never look at them? Did not our Lord tell us to "consider" the lilies? If we haven't time to do all the work which needs doing, shall we please His loving heart by working like slaves and refusing to look at the feast of good things He has provided? I don't think so.

Our Leader had the care of the whole world resting upon Him, and yet He often slipped away to spend restful hours on a mountain or floating over the blue waters of the lake. His earthly life was not a long one. All the duties of that life had to be compressed into a little more than thirty years; yet, when the needy multitudes crowded around Him so that He had hardly time to eat necessary food, He chose that busiest of times to take a holiday, and invited the hard-worked disciples to come apart with Him and rest a while.

Because the Church was given the great commission to win the whole world for Christ. I must not make the mistake of thinking that the whole weight of the undertaking rests upon me. Our first text shows that the apostles were first sent out on special duty. The Gentiles and Samaritans were dear to the Father's heart, as the Chinese and Africans are dear; yet the order was definite. "Go not into the way of the Gentiles, and into any city of the Samaritans enter ye not." Their special duty, on that occasion, was to minister only to the lost sheep of "Israel."

Each soldier of the Empire—yes, and each son and daughter of the Empire was called to the great task of winning the War. But no one could do it all, and so each was called to some special and limited duty. It is the only possible way for men to accomplish any great task. David might go out in single combat against a giant; but no David could destroy singlehanded all the guns of Germany.

The needs of mankind, both physical and spiritual, are so great that we are apt to grow hopeless if we try to look at too much at once. There is so much to be done and anything we can do is so trifling that it seems like a drop in the ocean of the world's pain and need, that—like the clock in the old story—we grow weary at the very thought of tackling such a tremendous job. Besides, most people have their hands full to overflowing already with home duties—God-given duties—which it would be a sin to neglect.

Our Leader has blazed the trail for us. Though He came to earth charged with the gigantic mission of saving all mankind, yet He spent nearly the whole of the precious years of His life on earth working as a poor day-laborer in a little country village. Probably He was needed there to support His mother, and so "those mighty hands which rule the sky" were work-hardened with common toil. His business on earth was to do the Will of

His Father; and it would have been very easy for the Creator of earth's riches to provide Mary and her family with all earthly needs, and leave her great Son free to heal and teach the multitudes who needed Him so greatly.

We often think we know better than God what is the best and wisest thing to do. When He says "No," or "Wait," in answer to our ignorant prayers, we lose faith in the value of prayer. When He says "Yes," we delightedly exclaim that He has "answered" our prayers. If the young Carpenter had asked for wealth for His mother, so that His own hands might be free to do "greater" work than earning daily wages in a village shop, the world would have missed more than we can estimate. As it is, the "workingman" knows that the Prince is his Comrade. The soldier in a front line trench (or in the deadly monotony of a trench far behind the front) knows that Jesus understands by experience all he is expected to endure.

When the Carpenter of Nazareth was thirty He was, at last, free to reach out in eager service to the world. But, even then, He found Himself on "special" duty. He was called to minister only to a little country less than 150 miles long. His mission was particularly to His own people—though His love embraced all mankind. If that rule was broken once or twice, it was only the exception that proved the rule, according to His own emphatic declaration to the woman who pleaded passionately for her daughter's healing. She was not an Israelite, though she lived on the border, and He did not hesitate to refuse her unselfish prayer on that ground, saying gravely: "I am not sent but unto the lost sheep of the house of Israel." That strange answer must have been a true one, for it came from Him who is the Truth, but it was not final. The woman's faith and determined love won the blessing in spite of apparent refusal. Her daughter was healed, she received the Master's glad commendation, and she has helped many millions to pray on, in spite of perplexing delay and discouraging silence. Though she did not know it, the discouragement which was so hard to understand was Christ's way of helping her in her special duty. He helped her to help the world in a different way from the mothers of Israel, who found ready answers to their appeals for help.

If the Saviour of the world accepted cheerfully the restrictions laid upon Him, and devoted all His energy to His own people Israel, has any man or woman a right to complain of his mission seems a small one? You may be called especially to work for your own family—though, like Christ, you sometimes find an exception coming as a new call from the Commander-in-Chief. We must be like our own Canadian soldiers—ready for an emergency. We are human beings, not iron machines.

And it often happens that the borderline of a mission expands in marvellous fashion. The Apostles, in obedience to orders went (at first) on a mission to the people of Israel only. Very soon that order was changed and they were sent out on a mission to the whole world.

Yesterday I was reading about Clara Barton, "the Florence Nightingale of the American Civil War." When she had just stepped out of her teens she felt called to start a school in a place where boys and girls played on the streets and grew up in ignorance and vice. Men had tried, and failed, but Miss Barton felt that what ought to be done could be done. She persisted, in spite of indifference and discouragement on the part of the community. She started a school with six pupils, and devoted herself to the work so loyally that in a short time there were 600 on the roll of her school. When the war began she soon won the confidence of the country. Supplies poured in for her work among the wounded, so that she usually had on hand a store of five tons. After almost superhuman labors in America, she found a new mission with the Red Cross in Europe during the Franco-Prussian War. There she helped to feed war-refugees, cared for the wounded on both sides, and won many honors from rich and poor. Years afterwards this wonderful woman was in charge of Red Cross expeditions to relieve sufferers from flood, fire and famine in America. Then she crossed the sea again, giving herself in whole-hearted service for the tortured Armenians. Advancing age and a frail

and been very of earth's riches her family with leave her great ch the multitudes eatly.

know better than d wisest thing to "No," or "Wait," morant prayers, value of prayer. we delightedly "answered" our Carpenter had a mother, so that be free to do ning daily wages rld would have an estimate. As knows that the The soldier in a e deadly front- behind the front) erstands by ex- tended to endure.

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body could not hinder that brave woman when she heard the call to go "over the top."

Let us thank God for such splendid lives, which prove that He is always able to supply needed power to those who draw constantly on His infinite resources. We may always—if we will—be fellow-workers with our mighty Commander.

"Is thy labor very lowly?  
Brother, see! at Nazareth He  
Swept the floor for Mary."

## 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.

### Making One's Own Clothes.

THE other day, in one of the capacious cupboards of my den, in which things are sometimes swallowed up for ever so long, I came on some old *Harper's Bazaars* of ten years ago, and we had a jolly half hour looking at the old styles for dresses. I suppose that at that time we thought them beautiful; now the women of the cuts look considerably like kangaroos,—for those were the days of the waist-line dipped very low in front, with the blouse pouching thereto. The skirts, also, were tight and long, and flared at the foot in a wonderful "swirl." Certainly they were troublesome and most unsanitary.—Ugh! Just to think of the germs and dust swept up from wherever one walked!

I do think, however, that just of late we have come to a time of real common sense and a good deal of beauty in regard to clothes. At last we have learned that the nearer we approach to the *natural* the more artistic we become, and so we "don't like any more" the unnaturally small waist, sleeves unnaturally distended at the shoulders, or shoes with high heels. "Straight-line" effects are very much in evidence, and are usually becoming to either thin or stout people. Put a tightly-fitted waist or coat on a very thin person and she looks like a lath, and on a very fat person and she looks like a stuffed pillow; but give each of them a well-made, semi-fitted garment and she looks very well indeed. None but a person of goddess-like form should ever try to wear a tightly-fitted garment.

To continue: The skirts just now are reasonably short and fairly straight and narrow, but with plenty of stepping room. The sleeves are just comfortably close-fitting, with no waste of material, and for hot weather may be as short as one chooses. The bodice may be anything one likes that is becoming—loose or fairly tight, high or low in the neck, while the hats have the least possible amount of trimming, depending on becomingness of line and color, rather than on decoration, for effect; in France, at present, no trimming at all is used for many of the hats, but there is a facing, and a fancy hat-pin. Even the colors, too, are artistic.

Seldom indeed do we see flaring stripes in gaudy pinks and greens for skirts, or crude yellows and reds and blues for hats and coats. If pink is used, it must be a soft rose—real "rose" for the very young, "old rose" for the more mature; yellow may be pale canary for the "teen age," but must be a Chinese tint, just a little brighter than chamois, after that, except for evening dresses and sweater coats, in either of which one may blossom forth in daffodil, if one's soul secretly delights in bright colors. So the list goes on: pale or turquoise blue for the very young—"Alice," "Delft," "Copenhagen," "midnight blue" or our old friend "navy" for the rest of us; "Paddy" green for the very young, if they choose, a beautiful soft reseda for older folk; while black, white, brown, sand, gray, mauve and prune, hold places of high honor. Of course there are many shadings of all these last. Take gray, for instance; you can have anything from the daintiest "pearl" shade, to "battleship," "taupe," or "smoke." In brown you can have "mouse," "nigger," "elephant-hide," and half a dozen other shades, all pretty.

True the prices are high—dreadfully high; a dollar seems to vanish off in thin

smoke almost before one has touched it. But much of the expense of clothes may be saved by getting a good pattern and making up the material oneself. Really working with the patterns nowadays seems easy as rolling off a log compared with the long-ago, when waists were boned and skirts cut into a multitude of gores. For instance, what skirt could be more easily made—or prettier—than the modern two-piece one, cut on the straight, with a little fullness across the back?"

After getting a pattern one must follow the directions implicitly. This is the only way to ensure a good fit. Cut all the "nicks" and pay attention to them and to the perforations. Read the directions very carefully, over and over as you go if necessary. Be sure to lay the pattern on "the right way of the goods" and pin it down carefully before you cut. Then baste and fit until the effect is right before stitching on the machine. Every house should have a full-length mirror, were it for dress-making purposes alone.

There is just one thing that you can't do very well "all by yourself," and that is evening up your skirt. I heard of one enterprising woman who chalks the edge of a table very thickly, puts on the skirt, squeezes herself up against the table-edge and then turns around, afterwards measuring from the mark downwards for the required length. That should work very well, since inequalities are all in the hips; but it is better, if possible, to get someone to "even up" for you from the floor, using a ruler or yard-stick. Don't let her tug at your skirt as that will make it uneven; the ruler should just rest lightly against the skirt.

Use a tape-line and chalk, or lead pencil, very frequently,—for spacing buttons, keeping facings and hems the same width throughout, and so on. Just a dot with the chalk or pencil here and there will be sufficient to act as a guide when cutting. Last of all, finish the inside neatly. For transparent material French seams are absolutely necessary, for thicker material the raw edges of the seams may be turned back and bound or simply run along very neatly.

Pressing also is very important. Usually it is advisable to do considerable of it as you go, and always at the last a good pressing is needed to put the gown in shipshape for wearing.

A word about trimming. As a rule it is better—much better—to have too little trimming rather than too much. "Lines" of a gown are much more important than trimming or anything else; get lines that suit you and the success of your gown is pretty well assured, a pretty collar or necklace, and perhaps a soft lacy cuff, being all that is really needed to complete the effect.

Often, however, a little "touch" of something adds greatly to the effect—provided one knows just where to put it on. Some people do, some don't, and the latter will find it wise to follow exactly the adornment shown on the picture illustrating the pattern. Among these "touches" may be mentioned: the little vest of lace, net or other material; embroidery or braiding; sash or girle with ends; beading; and buttons.

Beading is scarcely to be recommended for any material but Georgette crepe, on which it looks very well, especially if the Georgette is dull in color, as navy, taupe, etc., when a touch of beads of bright, well-chosen shades will serve to brighten and relieve. Braiding also is sometimes very effective on Georgette, and so is embroidery. Either braiding or embroidery may be used for silk or wool goods on certain styles, but usually just a touch is needed; it is safer to underdo than overdo. Buttons are used on suits and dresses of all kinds, and, of course, the effect depends greatly on the kind of buttons used, and just where they are put on. For silk and cloth dresses button-moulds covered with the same material are usually best; Georgette crepe calls for very tiny silk buttons; wash goods need pearl or crochet buttons. If pearl buttons are used on white dresses remove them every time the dress has to be boiled, as if you don't they will soon lose their lustre. Wash buttons covered with worked wash material or crochet may be bought, or you can make them as follows. Buy flat wooden moulds of the right size and boil them so the color will not come out afterwards, let get thoroughly dry, then cover

SWAY THE HESSIAN FLY



With the Fertilizer Bag.

## Avoid the Ravages of the Hessian Fly

The Hessian Fly makes its chief havoc on early-sown Fall wheat.

Consequently, if you sow your wheat during September, you can avoid the ravages of this destructive insect.

BY THE USE OF

## Harab - Davies Fertilizers

You can sow late and still be certain of a strong and sturdy fall growth.

Director Charles E. Thorne, of the Ohio Experiment Station, said: "In the disastrous attack of 1900 at the Ohio Experiment Station, unfertilized land yielded only a little more than one bushel to the acre, while land receiving 160 lbs. of fertilizer produced nearly 12 bushels. Fertilizer starts the wheat growing quickly, so that it is able to get out of the way of the fly. Fertilizer hastens early growth and advances maturity. The wheat may be sown several days later if fertilizer is used, and yet reach harvest on time."

From Director Thorne's remarks it is clear that even in a season when the Hessian Fly was more than usually destructive, fertilized land did comparatively well. In ordinary seasons fertilized land ALWAYS makes a tremendously better showing than unfertilized.

Why take unnecessary risks? Better play safe! Order your HARAB-DAVIES FERTILIZER now and plan to sow Fall Wheat after most of the danger is past. By using HARAB-DAVIES FERTILIZERS you not only "put it over" the Hessian Fly, but avoid the risk of winter killing, and assure rapid, luxurious growth in the Spring.

Write for Price List and Illustrated Folder.  
Agents wanted for some desirable localities.

### Ontario Fertilizers Limited

Dept. L.F.

West Toronto, Ont.

## Manor Farm Holsteins

AT THE OTTAWA CLUB SALE

Sept. 16-17

Our offering in this, Eastern Ontario's greatest annual sale, includes many of our best moderately-priced cows. We are not selling any of our 30-lb. cows in any sale, but the records on these young cows we are sending to Ottawa run from 20 to nearly 29 lbs., and many are well forward in calf to the service of one or the other of our great sons of Lulu Keyes, who was probably one, if not the greatest individual, of all of Canada's high-record cows.

We will tell you more about this offering in these columns next week. We are selling twenty-three head, whose individuality will speak for themselves.

### Gordon S. Gooderham

MANOR FARM

CLARKSON, ONT.

## Earn and Save

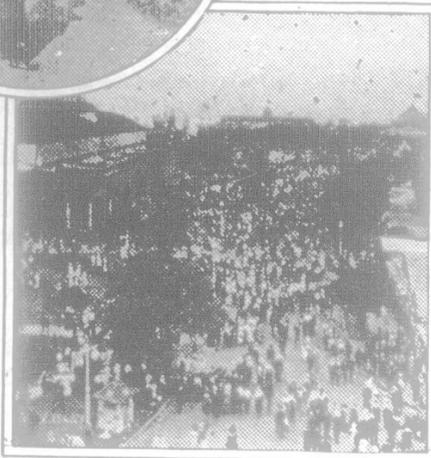
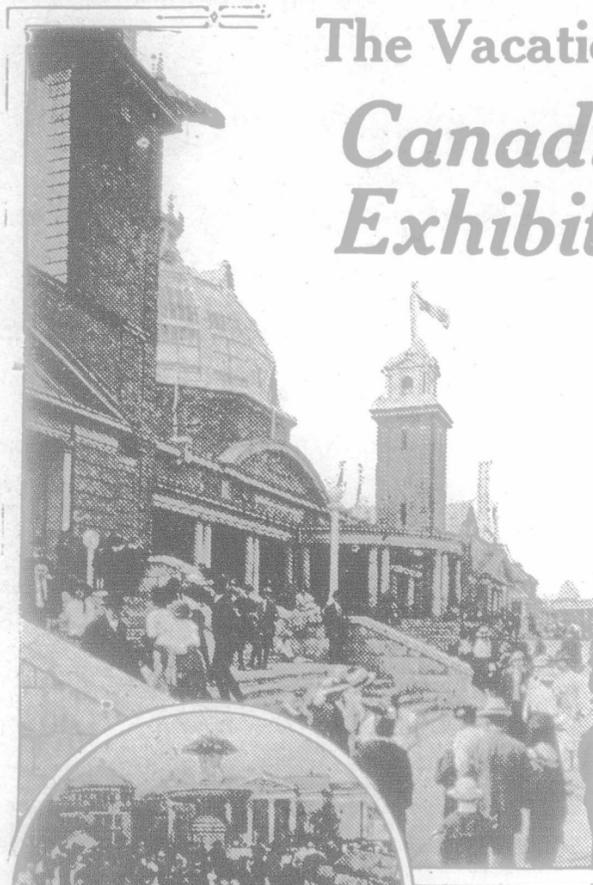
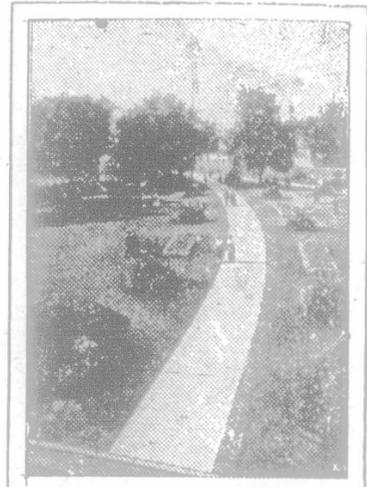
—You can do it by securing NEW SUBSCRIBERS to THE FARMER'S ADVOCATE AND HOME MAGAZINE. You can work in your spare time or give all your time to the work. Write for instructions.

THE WILLIAM WELD CO., LIMITED, LONDON, ONTARIO

The Vacation Supreme—Rest, Recreation and Inspiration

## Canadian National Exhibition, Toronto

AUGUST 28—  
THE ANNUAL  
WORLD'S FAIR  
-SEPT. 11



Consult  
Railways  
for Fares  
and  
Information

Where the nation shows its best finished product of the mine, fisheries, forest, factory, studio and laboratory for exhibition, comparison, instruction and encouragement.

An institution unique in the exposition world combining international industrial exhibits, manufactures and agricultural products with amusements.

42d Consecutive Year—1,201,000 Visitors  
in 1919

1 Mile of Waterfront

100 Buildings, 264 Acres of Beautiful Grounds

"The Empire Triumphant"—Evening Spectacle—700-Foot Stage  
Glorious pageant of kaleidoscopic movement light and color on a massive scale. | 1500 performers—A well-spring of patriotic inspiration—1500 performers.

Incomparable music—Two-score bands—Fine Arts, Graphic and Applied Arts—International Photographic Salon.

Daily demonstrations by Northwest Mounted Police, the men who tamed the west and conquered the Arctic wastes.

Automobile racing—Daily aeroplane flights by world war pilots—Minute motorboats and water sports.

Electrical show—National Motor show—America's best live stock, poultry, tractor, farm machinery, dog and cat shows—Government exhibits and demonstrations—Child welfare and educational displays.

"The Greatest Annual Event on Earth"



with tiny embroidered caps you have made to fit, or else first with thin material and then with crocheted caps. Of course, your work must be very neat.

I know a girl who wanted to brighten up a taupe Georgette waist. First she worked on it a few touches of colored beading. The next thing was to find buttons that "went with" the beads, for the pattern called for small buttons at the back of the sleeve, from the wrist to the elbow. She could not find any in the city that would do, so, nothing daunted, set out to invent some. First she got small cloth-covered buttons in plain taupe, then some colored embroidery silk

of the shade of the beads. With the silk—coral, and amber, and sea-green—she worked stripes across the buttons, crossing at the centre, and the effect was exactly what she wanted. The result was with very little trouble and comparatively little expense, a very pretty waist that would have cost her, had she bought it ready-made, about \$30.00. So much for inventiveness. It's the old story about "using one's head," isn't it? JUNIA.

### Worth Thinking Over.

"A dead hand on a throttle means wreckage; no less in education than

in a locomotive."—*Journal of Education.*

"My faith is with the sane, reasoning mind, aided and abetted by the Divine spark, the evolutionary instinct."—*Reconstruction.*

### Autumn Recipes.

**Baked Tomatoes.**—Scald 4 large red tomatoes, peel and cut with a sharp knife into thin slices. Sprinkle in a pudding dish a layer of breadcrumbs. Next put on a layer of tomatoes and sprinkle with salt, pepper, little bits of butter, and chopped onion. Continue the layers until the last of the tomato is on top. Now

beat 2 eggs with a little salt to season and pour over. Last put a quarter inch of breadcrumbs over the top, dot with butter and bake 25 minutes.

**Gingered Pears.**—Peel 24 ripe Bartlett pears and cut in thin strips lengthwise. To every 4 lbs. allow 3 lbs. sugar, 3 lemons, and 2 or more ounces of green ginger-root scraped and shredded (or use dry root). Cut off the thin yellow rind of the lemons in small bits, boil until tender, drain and stir the liquid into the juice of the lemon. Put a half cup of water in the preserving kettle, then a layer of pears, with the sugar, lemon and ginger sprinkled over. Keep on the layers until all are used, cover the

kettle and push to the back of the stove until the sugar is melted; then cook slowly until the pears are clear and tender, and the syrup thick. Pack in hot jars and seal.

**Corn Roast.**—One cup corn, 1 cup breadcrumbs, ½ cup chopped cooked carrots, 2 beaten eggs, 2 tablesps. melted fat or butter, 1 tablesp. chopped parsley, salt and pepper. Mix together in the order named, omitting 1 tablesp. fat. Shape into a loaf on a greased baking sheet, brush over with the remaining fat and bake 25 minutes in a moderate oven. Serve at once with white sauce or brown gravy.

**Green Tomato Mincemeat.**—One pound tomatoes, ½ cup suet or shredded coconut, ½ cup brown sugar, ¼ cup vinegar, ¼ teasp. ground cinnamon, ¼ lb. chopped apples, ¾ cup molasses, ½ lb. raisins, ¼ teasp. ground cloves, ¼ teasp. ground allspice, ¼ teasp. ground nutmeg. Soak the tomatoes in brine for 3 hours. Chop fine and add the rest of the ingredients. Cook until thick. This may be used at once, or may be sterilized just as for ordinary canning, sealed and stored.

**Cold Tomato Catsup.**—One peck ripe tomatoes, 1 cup grated horseradish, 2 cups salt, 1 cup black mustard seed, 4 celery roots, 2 cups brown sugar, 4 tablesps. black pepper, 4 whole red peppers, 4 teasp. celery seed, 4 tablesps. ground cloves, 4 teasp. ground allspice, 2 teasp. ground cinnamon, 2 teasp. ground mace, 2 cups chopped nasturtium seed, 2 quarts vinegar. Peel and chop tomatoes fine, drain in a colander, add other ingredients, mix well and seal without cooking.

**Markets**

Continued from page 1487.

**Monday's Live Stock Markets.**

**Montreal, August 23.** Cattle.—Receipts, 1,200. There were very few cattle on the markets Monday morning, evidently due to the lowering of prices on last week's market. Sales of butcher cattle moved slowly at an advance of 75 cents or more per hundred. Bulls and common thin cows about 25 cents higher. There were no good cattle offered; \$9.75 was paid for a load of fat cows and common steers averaging in all 935 pounds per head. The manager of the West End Yards states that 50 Holstein cows are being shipped from his yards on Wednesday for Belgium. He has been authorized to offer space to Belgium at \$60 per head, this price to include feed and attendance. Quotations: Butcher steers, medium, \$8.50 to \$10; common, \$6.50 to \$8.50. Butcher heifers, medium, \$8 to \$9.25; common \$5 to \$7.75. Butcher cows, choice, \$8.50 to \$9; medium, \$5.50 to \$8.50. Canners, \$3 to \$4. Cutters, \$4 to \$5. Butcher bulls, common, \$5 to \$6.

Calves.—Receipts, 616. The best lots of calves sold up to \$13, and demand was fairly good. Quotations: Good veal, \$12 to \$13; medium, \$9 to \$11; grass, \$6 to \$8.

Sheep.—Receipts, 2,854. Lambs have been sold in car lots at \$13, a few selected young ewes up to \$8. Quotations: Ewes, \$5.50 to \$7.50; lambs, good, \$12 to \$13; common, \$8 to \$12.

Hogs. Receipts, 1,409. Local butchers were paying 50 cents over last week's prices. The most general price was \$20.50. Hogs being offered are too light. Quotations off car weights: Selected, \$20.50; sows, \$15 to \$16.50.

**Buffalo, August 23.** Cattle.—Receipts 3,300. The market was strong on choice grades, and steady on others. Best native steers were \$15.75; best Canadian \$14.25. No choice kinds offered.

Hogs.—Receipts, 8,000. Mediums and heavies were \$15.50 to \$16; lights, \$16.25 to \$16.50.

Sheep.—Receipts, 3,000. Best lambs were \$14, and a few at \$14.50; best ewes, \$6.50 to \$7.

There were 1,700 calves on the market Monday morning and tops went at \$20.

In sending in a change of advertisement, Mr. Jenkins of Cedarbrook Farm, Inglewood, Ont., states that his young Holstein bulls advertised, are three of the choicest calves he has ever offered, and the price quoted in the advertisement is much lower than he has previously been asking. He mentions that his herd at present is not large and he would be pleased to exchange any one of these bulls for heifers of equal value.

**"Galt" Galvanized Steel Shingles**



The "GALT" Shingle locks together in such a way that there is no weak point in its entire construction, and it is ornamental as well. It is, therefore, the Ideal Shingle for Dwellings, Churches, Schools, Public Buildings, Barns, etc.

We also manufacture

Corrugated Sheets      Barn Ventilators  
Silo Roofs              Barn Roof Lights

**THE GALT ART METAL COMPANY, LIMITED**

Galt, Ontario

**You Need What We Can Provide**

You want to improve your stock, and increase your herds, but perhaps you lack the necessary capital.

It is our business to make advances to responsible, progressive farmers.

Consult the manager.

**THE DOMINION BANK**

**Do Your Banking by R. F. D.**

Make the mail your messenger; and save yourself the long rides to town.

Deposits may be made—butter and cheese cheques cashed—money withdrawn—just as easily and safely by mail as in person.

Write the manager to tell you all about this convenient plan of *Banking By Mail*—or call in and have it explained, the next time you are town.



14

**THE MERCHANTS BANK**

Head Office: Montreal OF CANADA Established 1864.

With its 149 branches in Ontario, 47 branches in Quebec, 1 branch in New Brunswick, 3 branches in Nova Scotia, 44 branches in Manitoba, 44 branches in Saskatchewan, 17 branches in Alberta and 11 branches in British Columbia, serves rural Canada most effectively.

WRITE OR CALL AT NEAREST BRANCH.

Watch these columns next week for particulars regarding

**THE GREAT TWO-DAY Holstein Sale**

To be held under the auspices of the Ottawa Valley Holstein Breeders' Club, at the Central Canada Exhibition Grounds

**Ottawa, Sept. 16-17**

One Hundred Head of "Canada's Best"

W. R. CUMMINGS, Secretary, Cummings' Bridge, Ont.

**Toronto Produce.**

**Breadstuffs.**

Manitoba Wheat (in store, Ft. William).—No. 1 northern, \$2.73½; No. 2 northern, \$2.70½; No. 3 northern, \$2.66½.

Manitoba Oats (in store, Ft. William).—No. 2 C. W., 96¾c.; No. 3 C. W., 94¾c.; extra No. 1 feeds, 94¾c.; No. 1 feed, 90¾c.; No. 2 feed, 87¾c.

Manitoba Barley (in store, Ft. William).—No. 3 C. W., \$1.44½; No. 4 C. W., rejected, \$1.17½; feed, \$1.17½.

American Corn (track, Toronto, prompt shipment).—No. 3 yellow, \$2, nominal.

Ontario Oats (according to freights outside).—No. 3 white, 80c. to 85c.

Ontario Wheat (f. o. b. shipping points, according to freights).—No. 2 winter, per car lot, \$2.30 to \$2.40.

Barley.—(according to freights outside)—malting, \$1.35 to \$1.40.

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

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

Rye (according to freights outside).—No. 2, \$1.75, nominal.

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

Ontario Flour (prompt shipment).—Government standard, \$12, nominal, in jute bags, Montreal; nominal, in jute bags, Toronto; \$10.40 to \$10.50 seaboard.

Millfeed (car lots, delivered, Montreal, freights, bags included).—Bran, per ton, \$52; shorts, per ton, \$61; good feed flour, per bag, \$3.75 to \$4.

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**Farm Produce.**

Butter.—The wholesale market showed a slightly lower tendency this past week. Fresh-made creamery squares selling at 60c. per lb.; cut solids at 59c. per lb.; solids at 58c. per lb., and choice dairy at 50c. per lb.

Eggs.—New-laid eggs kept about stationary at last week's slightly firmer prices, No. 1's selling at 62c. per doz.; selects at 65c. to 66c. per doz., and selects in cartons at 69c. per doz., wholesale.

Cheese.—New cheese has been lower in price, selling at 29c. per lb.; the very limited quantity of old offered remaining firm at unchanged prices, and selling at 36c. per lb., wholesale.

Poultry.—With the exception of live ducklings, which declined 5c. per lb., poultry has kept stationary in price. The following being quoted as being paid to the producer: Chickens, spring, live weight, 35c. per lb., dressed, 40c. per lb.; ducklings, live weight, 25c. per lb.,

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Butter.—The wholesale market showed a slightly lower tendency this past week. Fresh-made creamery squares selling at 60c. per lb.; cut solids at 59c. per lb.; solids at 58c. per lb., and choice dairy at 50c. per lb.

Eggs.—New-laid eggs kept about stationary at last week's slightly firmer prices, No. 1's selling at 62c. per doz.; selects at 65c. to 66c. per doz., and selects in cartons at 69c. per doz., wholesale.

Cheese.—New cheese has been lower in price, selling at 29c. per lb.; the very limited quantity of old offered remaining firm at unchanged prices, and selling at 36c. per lb., wholesale.

Poultry.—With the exception of live ducklings, which declined 5c. per lb., poultry has kept stationary in price. The following being quoted as being paid to the producer: Chickens, spring, live weight, 35c. per lb., dressed, 40c. per lb.; ducklings, live weight, 25c. per lb.,

## THE MOLSONS BANK

Incorporated in 1855  
Capital and Reserve \$9,000,000  
Over 130 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 Departments  
at all Branches



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.

CAPABLE WORKING MANAGER (MARRIED) wants position taking charge stock or dairy farm. Box 47, Farmer's Advocate, London, Ont.

C. P. R. LANDS IN WESTERN CANADA—The rich prairies of Alberta, Saskatchewan and Manitoba are especially suited for mixed farming. Land that will produce big crops of grain and fodder, and well adapted for dairying or live-stock raising, can still be had at prices averaging about \$18.00 an acre, with twenty years to pay if you wish. Only 10 per cent. down. No further payment on the principal until the end of the fourth year; then sixteen payments. Interest 6 per cent. Write for illustrated booklet to D. A. La Due Norwood, C. P. R. Land Agent, Windsor Station, Montreal, Quebec.

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

FARM FOR SALE—98 ACRES—GOOD SOIL, bank barn and buildings, Natco-silo, spring water, natural gas and well drained. Near school, church and cheese factory. Easy terms. Apply 343 Maitland St., London, Ont.

SINGLE MAN TO WORK ON WELWOOD Farm. Must be experienced. Apply Farmer's Advocate Office, London, Ont.

SCOTCH COLLIE PUPS FOR SALE—GUARANTEED heelers and workers. Price \$10.00 each. A. T. MacPherson, R.R. 1, Wilton Grove, Ont.

WANTED—ONE OR TWO MEN FOR erecting wood tanks and steel towers. Young men with framing or carpentering experience preferred. Single, active men, willing to travel all over Canada. Good wages and expenses. Steady work. Write Gould Shapley & Muir Co., Tank Department, Brantford, Ont.

WANTED—MAN AND FAMILY TO RUN good stock farm in Ontario, near town and good market. Will pay good wages to right people, or would consider a share proposition. Possession about Oct. 18th. Box 45, Farmer's Advocate, London, Ont.

WANTED—TO HEAR FROM OWNER OF farm for sale. Mrs. W. Booth, Hipark, Des Moines, Iowa.



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.

I HAVE 1,000 WHITE LEGHORNS FOR sale that were in the laying pens last winter as pullets. They are proven producers and will make good for you. Price \$2.25 each. Hind, Baby Chick Specialist, 222 Greenwood Ave., Toronto.

Poultry Wanted—We require large quantities of live poultry every week, and can pay top prices for any number of birds of good quality. If you want the best market for your poultry sell to

C. A. MANN & CO.  
78 King St., London, Ont.  
Phone 1577.

FARMERS!

## Baled Shavings

Ask for delivered price your station.  
BUY NOW.

John B. Smith & Sons Limited, Toronto  
Established 1851

Fall Wheat Seed for Sale, "Abundance"

A heavy yielder. Grown from selected seed and clean; \$3.30 per bush. Bags free.

G. PEAL  
Rockwood, Ontario

dressed, 35c. per lb.; hens, under 4 lbs., live weight, 28c. per lb., dressed, 28c. per lb.; hens, 4 to 5 lbs., live weight, 30c., dressed, 30c. per lb.; hens, over 5 lbs., live weight, 32c. per lb., dressed, 32c. per lb.; roosters, live weight, 23c. per lb., dressed, 25c. per lb.; turkeys, live weight, 40c. per lb.; dressed, 45c. per lb.

### Wholesale Fruits and Vegetables.

Receipts have generally been very heavy this past week, and trade draggy, the poor quality of the bulk of the offerings making it difficult for the wholesalers to effect a clean-up each day, which is very necessary in hot weather, unless they accepted very low figures. Therefore, there has been a very wide range of prices.

Apples.—Apples came in freely and the general run has been of very poor quality, selling at 20c. to 30c. per six-quart basket; 25c. to 50c. per 11-qt. basket, and \$3 to \$4 per bbl.; the few choice bringing 40c. to 50c. per 6 qts., 70c. to 90c. per 11 qts., and \$5 to \$6 per bbl.

Blueberries.—Blueberries continued to come in quite freely, but the majority of the baskets have been very poorly filled, some not being even half full—the prices ranging from \$1.75 to \$3 per 11-qt. basket; a few really choice, well-filled baskets bringing \$3.50 per 11 qts.

Cantaloupes.—Cantaloupes were shipped in in small quantities, but were of ordinary variety, selling at \$1 to \$1.50 per 16-qt. basket.

Cherries.—Sour cherries still came in in small quantities, choice quality bringing \$1.50 to \$2 per 11-qt. basket; wasty ones going as low as 80c. per 11 qts.

Currants.—Red currants also continued to come in, and there were some really choice ones which brought 20c. to 22c. per box, and \$1.25 per 6 qts.; some not quite so good going at \$1.50 per 11 qts., while poor ones went as low as \$1 per 11 qts., and some had to be sold for almost nothing.

Blacks have decreased, the few shipped in selling at \$2 per 6 qts., and \$3.50 to \$3.75 per 11 qts.

Gooseberries.—Gooseberries have been practically off the market, only a few over-ripe ones being shipped in, which sold at 12c. per box.

Lawton berries came in more freely, but a lot of them were quite soft, selling at 10c. to 30c. per box.

Pears.—The demand for pears has been fairly good, with the supply not exceeding it, so though they have not been of the best variety, prices kept nearly stationary at 40c. to 60c. per 6 qts., and 75c. to \$1.25 per 11 qts.

Plums.—Plums continued to be shipped in heavily, and as the most of them were poor varieties, prices declined, ranging from 25c. to 65c. per 6 qts., and 40c. to \$1.15 per 11 qts.

Peaches.—Peaches came in more freely, and as they, too, were mostly poor varieties, they were difficult to sell at lower prices, selling at 25c. to 85c. per 6 qts., and 30c. to \$1 per 11 qts.

Tomatoes.—Tomatoes were shipped in heavily, and declined in price daily until they nearly became a glut on the market, ranging from 25c. to 35c. per 6 qts., and 30c. to 60c. per 11 qts.; the bulk going at 30c. to 40c. per 11 qts., with some left-overs from the day before selling as low as 20c. per 11 qts.

Beans, beets and carrots have been a very slow sale; beans selling at 25c. to 40c. per 11-qt. basket; carrots and beets at 20c. to 25c. per doz. bunches.

Cabbage.—Cabbage though of especially choice quality and extra large this season, cabbage is so plentiful it is still difficult to sell at 40c. to 50c. per doz., and \$1 per bbl.

Cauliflower has mostly been of very poor quality this past week, selling at 50c. to \$1.50 per doz., and \$1 to \$2.50 per case.

Corn came in in larger quantities and declined in price, ranging from 15c. to 30c. per doz.

Cucumbers have become a glut on the market, at 20c. to 40c. per 11-qt. basket.

Egg plant shipments have increased slightly and are now selling at \$1.25 to \$1.50 per 11-qt., and \$1.75 to \$2 per 16-qt. baskets.

Gherkins.—There is practically no market for Gherkins, as apparently it is not "pickling time," so prices have been quite low, ranging from 40c. to \$1.25 per 11-qt. basket, according to size.

Onions.—Leamington dried onions are beginning to come in freely, selling at \$3.50 to \$4.50 per cwt.

Peppers.—Both hot and sweet green

## BRUCE'S RECLEANED SEED WHEATS

We offer for early orders, cash to accompany same.  
Send order in good time. Freight rates are low on Wheat and Rye.

WHEAT—BRUCE'S NEW CLIMAX—Grain large red, straw bright and strong heads large and bald, chaff white; hardy and a heavy yielder. The best red variety. Price, 35c. lb., 5 lbs. \$1.50, postpaid. By express or freight at purchaser's expense. Peck \$1.25, 1/2 bushel \$2.00, bushel \$3.75, 5 bushels \$18.00. Bags extra.

WHEAT—BRUCE'S GREAT LEADER—Grain white, large and plump, straw strong, heads large and bald, chaff white; hardy and heavy yielder. The best white variety. Price (by express or freight at the purchaser's expense) peck \$1.00, 1/2 bushel \$1.75, bushel \$3.25, 5 bushels \$15.75, 10 bushels \$30.00. Bags extra.

DAWSON'S GOLDEN CHAFF—ABUNDANCE AND RED CLAWSON—Price (by express or freight at purchaser's expense) peck \$1.00, 1/2 bushel \$1.75, bushel \$3.25, 5 bushels \$15.75, 10 bushels \$30.00. Bags extra.

RYE, FALL—NEW ROSEN—Introduced by Michigan Agricultural College lately. Much better variety and considerably heavier yielder than Common Sort. Price (by express or freight at purchaser's expense) peck 85c., 1/2 bushel \$1.60, bushel \$3.00, 5 bushels \$14.00, 10 bushels \$27.00. Bags extra.

COMMON FALL RYE—Price, peck 85c., 1/2 bushel \$1.60, bushel \$3.25, 5 bushels \$13.00, 10 bushels \$25.00, here. Bags extra.

TIMOTHY—No. 1 G. S., \$9.00; No. 2 G. S., \$8.50; No. 2 G. S., \$7.50 per bushel. By freight at purchaser's expense. Bags extra.

PRICE OF BAGS—1 1/2 bushels, jute, 30c. each; 2 1/2 bushels, cotton, 65c. each.

Write for our Wheat Circular, containing prices of Wheats, Timothy, Poultry Foods and Supplies, FREE.

John A. Bruce & Co., Limited  
Seed Merchants HAMILTON, ONT.

# HINMAN

CANADA'S STANDARD MILKER

H.F. BAILEY & SON, MFRS., GALT, ONT.

THE Milker Your Friends have used for Years, because it runs when they need it most.

TORONTO, OTTAWA and LONDON FAIRS

Afford splendid opportunities for you to see this most Reliable Milker demonstrated. When attending the Fairs

LOOK FOR THE HINMAN EXHIBIT

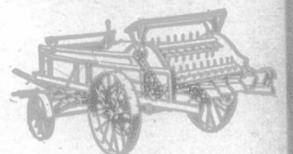
## A Simpler, More Effective Drive

THE old fashioned idea was a complicated "nest of gears." The new idea is direct chain drive—simple as a, b, c.—powerful and trouble proof. When not spreading the driving mechanism is at rest, thus adding to the life of the machine. The chain can't get off the wheel when you hit a bump. This is



one of the many "different" and up-to-date features that enables the T.A. Spreader to give you extra years of thorough service. Proper spreading is made a certainty by double (instead of old fashioned single) cylinders and further certainty of good work in assured by our special design distributor. Learn all about this "different" spreader from our Catalogue. Write for it now.

Tudhope-Anderson  
MANURE SPREADER



The Narrow Spreader With the Wide Spread

Tudhope-Anderson Co., Limited  
ORILLIA ONTARIO

Western Distributing Houses: Winnipeg, Regina, Saskatoon, Calgary, Edmonton. Eastern Distributing Houses: London, Ont.; Smiths Falls, Ont.; J. Clarke & Son, Ltd., Fredericton, N.B.; Lounsbury Co., Ltd., New Castle, N.B.

I WILL PAY YOU

# 26 Cents

a pound for live hens over 4 1/2 pounds, under 4 1/2 pounds 24 cents a pound. Pullets, any size, 4 months old or under, 40 cents a pound. Ducks 26 cents a pound, any size. No deduction for shrinkage. I pay express within 300 miles of Toronto. Ship in boxes made of any rough boards if you don't have crates. Crates loaned free. New poultry crates \$2.50 each, delivered. Eggs 56 cents, case count, F.O.B. your station. This price good for 15 days from date of this Advocate

ALBERT LEWIS

666 Dundas, West :: Toronto, Ontario

peppers declined materially, the hot selling at 25c. to 40c. per 11 qts., and sweet at 50c. to 75c.; a few bringing 85c. per 11 qts. Potatoes.—Potatoes also declined and are now mostly selling at \$2 per bag; a few bringing \$2.25, while some are offered at \$1.75 per bag.

### Sale Dates.

Sept. 16-17—Ottawa Valley Holstein Club Sale, Exhibition Grounds, Ottawa.  
Sept. 29, 1920—Pettit-Elliott sale, Freeman, Ont.—Shorthorns.  
Oct. 7—Curry-Bowes & Bowes, Markdale, Ont.; Scotch Shorthorns.  
Oct. 20—Canadian Aberdeen-Angus Association, Western Fair Grounds, London, Ont.; Jas. Bowman, Guelph, Sec'y.

HEATS

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The best red variety  
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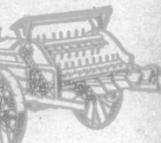
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# Overland

TRADE MARK REG.



## Atlantic to Pacific Economy Record

32.64 Miles Per Gallon—3,442 Miles—25 Drivers

**F**ORWARD, day and night, over mountains and plains, roads well-nigh impassable, an Overland stock car sped on its record run from New York to San Francisco.

The only stops were made to exchange drivers.

Twenty-five men who had never seen the car before piloted it over the course.

—And at the end, the wonderful showing—32.64 miles per gallon (Imperial gallons)—

a record which has never been equaled.

This new accomplishment forges another link in the chain of extraordinary performance records of the Overland.

It proves positively that economy is inherent in Overland construction.

It shows how *Triplex* Springs make possible light weight, staunchness and economy—how they preserve every part of the mechanism from damage.

### At the Canadian National Exhibition and the Western Fair

Overland touring cars, roadsters, sedans and coupes will be shown at the exhibitions at Toronto and London. Be sure to visit one or both displays and see the chassis with its *Triplex* Springs—the secret of the Overland's riding qualities.

Your nearest Overland dealer will be glad to demonstrate this car over the roughest road in the vicinity.

Or write for set of illustrated "farm folders" showing the advantages of the Overland to the Canadian farmer!

#### WILLYS-OVERLAND LIMITED

Sedans, Coupes, Touring Cars and Roadsters

Head Office and Factories: Toronto, Canada

Branches: Toronto, Montreal, Winnipeg and Regina

## Better BARNs at Better PRICES

Such prices as we quote on complete Barns and other farm buildings would be tempting values for ordinary buildings. But when you consider the superior kind of buildings you get from us, you will have to admit our quotations are remarkable. That's because we buy in huge quantities the materials that enter into

## PRESTON STEEL TRUSS BARNs

The lumber for these Barns comes from our own timber limits and our own saw mills. We ship these Barns in sections direct from our factory to your farm; the buildings are so fabricated that they are easily and quickly put together by a small gang

of workmen—thus doing away with the necessity of boarding a small army of barn builders for the long period of time that was required before the Preston Steel Truss Barn came into use. Why not have a perfect barn—protected

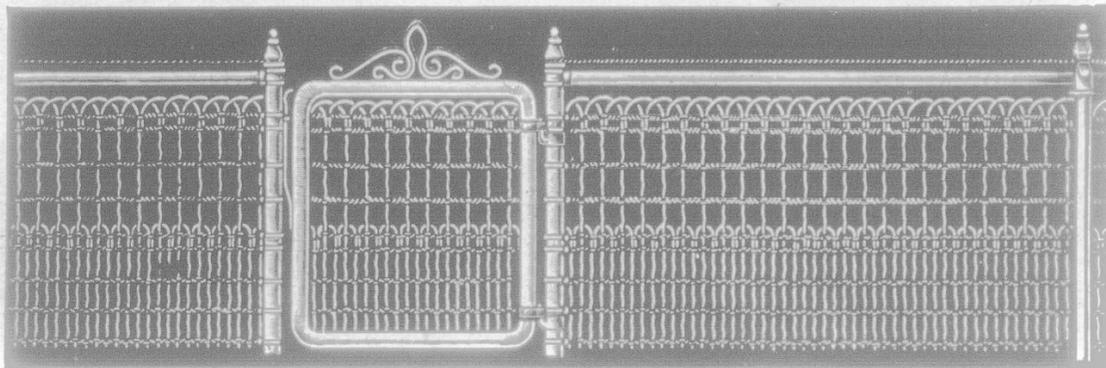
by the Preston System of lightning protection and further protected by its metal roof and sides against fire from without. Why not have a barn that enables you to store crops with ease—a barn so well-planned that there's no waste space.



**THE MS AND S G LIMITED**  
 METAL SHINGLE AND SIDING COMPANY  
 ASSOCIATED WITH THE A. S. GREENE CO. LIMITED  
 PRESTON—MONTREAL—TORONTO  
 WINNIPEG—SASKATOON—CALGARY

A Preston Barn erected for Mr. W. C. Scott, of Limehouse, Ont.

Write for our book—address Head Office, Preston, Ontario.



## Order Your New Fence Now

This is the newest pattern in fence designing, and embodies the lines and proportions approved by architects and fence experts. It is strong, all steel, and is just as durable and serviceable as if it cost twice as much. Supplied in 36-in., 42-in. and 48-in. height. It is suitable for city or suburban or rural homes, and we offer it with our strongest recommendation. We are the leading fence builders in Ontario, and can supply any and all kinds, from the simplest flower-bed paling to the most expensive fences for private parks, factories or public institutions.

Get our prices on Farm Fence, Gates, Ornamental Fence, etc.

See Our Exhibit at the National Exhibition

**A. R. LUNDY, 251 King Street West, Toronto**

MANUFACTURER OF STEEL AND WIRE FENCES

We contract for the erection of Fences when desired. Quotations on request.

### Montreal.

Dressed Hogs.—Trade continued quiet in the provision market, and prices were somewhat easier with abattoir-dressed, fresh-killed hogs quoted at 29c. to 29½c. per lb.

Potatoes.—Offerings of potatoes con-

tinued large and prices were inclined towards easiness. Sales of wagon loads took place at \$1.90 to \$2 per bag of 80 lbs., and in a wholesale jobbing way transactions have taken place at \$2.10 to \$2.15 per bag of 90 lbs.

Eggs.—There continued to be a good

demand for eggs, and prices were firm with the prospect that higher levels will be reached in view of the fact that dealers are paying 60c. per dozen for straight-gathered stock, f. o. b. country points. Quotations: Strictly new-laid eggs, 72c. per dozen; selected eggs, 66c.; straight-

candled eggs, 64c.; No. 1 candled, 58c., and No. 2 candled eggs, 50c.

Butter.—The tone of the market for butter was steady with a moderate amount of business passing for local account. Quotations were: Pasteurized creamery, 59½c. to 60c.; finest creamery, 58½c. to 59c.; fine creamery, 57½c. to 58c., and dairy butter, 50c. to 51c. per lb.

Winter wheat flour was quoted at \$12.25 per barrel, ex-track in car lots, in new cotton bags and in broken lots at \$12.50 in second-hand jute bags.

White corn flour was easier, being quoted at \$12 in broken lots for shipment to country points, and at \$21.10 per barrel in jute bags to city buyers.

Millfeed.—Prices were maintaining a firm tone with broken lots of bran quoted at \$60, and shorts at \$64 per ton, including bags, delivered to the trade. Millers, however, still quoted car lots of bran at \$54.25 and shorts at \$61.25 per ton, including bags, ex-track, less 25c. per ton for spot cash.

Baled Hay.—No. 2 timothy hay was quoted at \$31; ordinary No. 2 at \$28 to \$29, and No. 3 timothy at \$26 to \$27 per ton, ex-track.

Hides.—The market for hides was easier, with steer and cow hides at 16c. per lb.; bull hides at 12c.; calf skins, 18c. to 20c., and kips 14c. per lb. Lamb skins were 60c. each, as compared with \$3.30 a year ago, and horse hides were \$5 to \$6 each.

### Buffalo.

Cattle.—Cattle trade was somewhat uneven at Buffalo last week, some few choice native shipping steers and top-quality Canadians sold at about steady prices, compared with the previous week but generally prices looked a big quarter lower, while on the general run of medium and common, grassy butchering grades prices were off a big half dollar, the week closing up bad. About as bad sale as any kind of cattle offered at the present time is a feeder flesh kind of steers, averaging from eight to nine hundred pounds, which show a very poor quality of beef and which is plentiful in all of the coolers and very hard to move. Fat cows and heifers generally ruled a quarter lower, canners dropping down to \$4 and \$4.25 for the very best. Bulls are at the lowest point for many months past, sellers report that ten and eleven hundred pound sausage grades selling from \$6 to \$7, very few bringing above \$6.50. Stocker and feeder trade remains very weak, it being the lightest season Buffalo has had in this division for many years past. On dairy cows the large, good quality ones are bringing about steady prices with the medium and common kinds selling at slaughter prices. Offerings for the week totalled 3,825 head, as against 5,550 for the previous week and as compared with 5,450 head for the corresponding week a year ago. Quotations:

Steers—Canadians—Best \$14 to \$15; fair to good, \$13 to \$13.50; common and plain, \$11.50 to \$12.

Butchering Steers—Yearlings, good to prime \$16 to \$16.50; choice heavy, \$14.50 to \$15; 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 \$12.50; best butchering heifers, \$11 to \$11.50; good butcher heifers, \$10 to \$10.50; fair butchering heifers, \$8 to \$9.50; light, common, \$6 to \$6.50; very fancy fat cows, \$9.50 to \$10; best heavy fat cows, \$8.50 to \$9; medium to good, \$7.75 to \$8.25; cutters, \$4.75 to \$5.50; canners, good, \$4 to \$4.25.

Sheep and Lambs.—Lamb trade was slow the first half of last week, but after Wednesday the trade was more active and higher. Monday, Tuesday and Wednesday tops sold at \$13, with culls \$8.50 down, Thursday best brought \$13.25 and \$13.40 and Friday choice lots landed at \$13.50, with culls selling up to \$9.25. Sheep were slow all week, prices on these being 50 cents to a dollar lower than the week before. Wethers were quoted from \$7.50 to \$8, best ewes sold from \$6 to \$6.50, few handy weights up to \$7 and cull sheep ranged from \$2 to \$4.

Calves.—The first three days of last week showed top veals selling largely at \$17.50. Thursday best natives moved at \$18.25 and \$18.50, with best Canadians selling at \$17.75 and \$18. Friday top natives sold up to \$19.50 and \$20, with best Canadians \$19.50 to \$19.50.

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**DON'T CUT OUT  
A Shoe Boil, Capped  
Hock or Bursitis**



**FOR  
ABSORBINE**  
will reduce them and leave no blemishes. Stops lameness promptly. Does not blister or remove the hair, and horse can be worked. \$2.50 a bottle delivered. Book 6 R free

**ABSORBINE JR.**, for mankind, the antiseptic liniment for Boils, Bruises, Sores, Swellings, Varicose Veins, Allays Pain and Inflammation. Price \$1.25 a bottle at drugists or delivered. Will tell you more if you write.  
W. F. YOUNG, Inc., 258 Lyman Bldg., Montreal, Can.



The four essential points are here  
**Strength and Looks—Price and Wear**  
Johnson Ideal Halter Co., Sarnia, Ontario

**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

**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.

**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.

**SCOTCH SHORTHORNS**

My herd is stronger than ever, and I have cows with calves at foot, heifers in calf, younger heifers, young bulls fit for service soon, for sale in any number at reasonable prices. Augusta Sultan—93092—, one of the greatest living sires, at head of herd. Write me, and, if possible, come and see me, it is worth while. Post Office, Telephone, Telegraph and Station is Stouffville, Ont. I pay the freight.

**ROBERT MILLER** STOUFFVILLE, ONTARIO

**Dual-Purpose Shorthorns**

Bulls from 3 to 7 months old for sale, also several cows. Inspection of herd solicited.  
**WELWOOD FARM, Farmer's Advocate** LONDON, ONTARIO

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

**Puslinch Plains Shorthorns**—Bulls for Sale—Royal Signet—134979—, red; born Oct. 7th, 1919. Sire, Royal Ramsden—123067—, Dam, Roan Lady 50th—143772—. Price \$300. Goldale—138966—, roan; born Dec. 15th, 1919. Sire, Browndale Reserve—116615—. Dam, Roan Bessie 11th—140322—. Price \$200.  
**A. G. AULD, R. 2, Guelph, Ont.**

**BLAIRGOWRIE SHORTHORNS!**

Three imported bulls. Ten imported females in calf or calf by side. Two Scotch-bred bulls. Five Scotch-bred cows with calves by side.  
**JOHN MILLER** ASHBURN, ONTARIO  
(Myrtle C. P. R. and G. T. R.)

**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.  
**A. A. COLWILL, R.R. No. 2, Newcastle.**

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

**Shorthorn Bulls and Females**—Herd headed by Ruby Marquis, a son of 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**

**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.**

**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.**

**Morrison Shorthorn Herd Bulls**—We have at present several six and seven-month bulls, sired by our own herd sire, Augusta Mascott, that are extra individuals, and all are from good milking dams. Call and see us; also for bred heifers or young cows. We never had a stronger lot of Tamworth sows than those we have on hand at present.  
**CHAS. CURRIE, (Puslinch Sta., C.P.R.) Morrison, Ont.**

**SHORTHORNS—CLYDESDALES**

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

**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.**

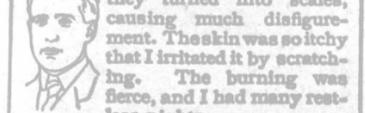
**Spring Valley Shorthorns**—Herd headed by Sea Gem's Pride 96365. We have a number of good bulls for sale, including the Champion Ivanhoe 122780, and his full brother also, an extra well-bred Rosewood, and others. Write for particulars.  
**KYLE BROS., Drumbo, Ont.**

**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.**

**PIMPLES ON FACE  
CUTICURA HEALS**

Caused Disfigurement. Itchy and Burning. Had Restless Nights.

"My face came out in little pimples that were sore, and I scratched them constantly, and then they turned into scales, causing much disfigurement. The skin was so itchy that I irritated it by scratching. The burning was fierce, and I had many restless nights."



"This trouble lasted about a year before I used Cuticura Soap and Ointment, and after using three cakes of Soap and two boxes of Ointment I was healed." (Signed) W. Byrns, St. Basile, Que., Nov. 23, 1918.

Make Cuticura Soap, Ointment and Talcum your daily toilet preparations.

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

**Maple Shade SHORTHORNS**

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

**W. A. DRYDEN**  
Brooklin - Ontario

**English Dual-Purpose Shorthorns**

We offer a grand choice of young bulls and bull calves from imported dams and sire, bred on the English system for milk and beef. They will add value to any herd. The dual characteristics have been impressed by scientific treatment for continuous years. Prices moderate.

Always on hand, sows and boars of the most satisfactory breed of pigs, English Large Blacks.

**F. W. COCKSHUTT**  
Lynnore Stock Farm, Brantford, Ont.

**Mardella Dual-Purpose SHORTHORNS**

Eight choice young bulls, 30 females, cows and heifers. All of good size, type and breeding. Herd headed by The Duke; dam gave 13,599 lbs. milk, 474 lbs. butterfat. He is one of the greatest living combinations of beef, milk and Shorthorn character. All priced to sell. Write, call or 'phone.

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

**Balmedie Aberdeen-Angus**

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

**THOS. B. BROADFOOT, FERGUS, 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

**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.**

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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.

**Sunny Acres Aberdeen - Angus**

Present offering—A few young bulls ready for service.  
**G. C. CHANNON, Oakwood, Ontario**  
Telephone—Oakwood. Railway—Lindsay, G. T. R. and C. P. R.

**Aberdeen - Angus**

**Meadowdale Farm**  
Forest, Ontario

**Alonzo Mathews** H. Fraleigh  
Manager Proprietor

**ALLOWAY LODGE STOCK FARM**

Angus--Southdowns--Collies  
Recent addition of Imp. Idealist of Maise more 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.**

**Aberdeen-Angus**

For immediate sale: Choice 2-year-old heifers and cows 4 years and older. All guaranteed in calf to Elm Park Pat 8220, grand champion and winner of gold medal, Toronto, 1917. Prices very reasonable. Write **JAMES G. SHARP, Terra Cotta, Ont.** Long-distance 'phone via Erin.

**"Advocate" Advs. Pay.**

**MILKING SHORTHORNS**

Young stock for sale, from Record of Performance cows, by imported sires.  
**G. L. SMITH, Credit Grange Farm** MEADOWVALE, ONTARIO

**Three Choice Scotch Shorthorn Bulls for Sale**—A rare opportunity to secure a high-class herd sire of the best quality and breeding, sired by Gainford Eclipse 103055. Red and two roans. Make it a point to see these bulls at Toronto and London Exhibitions.  
**DUNCAN BROWN & SONS, Props., Walnut Grove Stock Farm, Shedden, Ont.** M.C.R., P.M. Railways.

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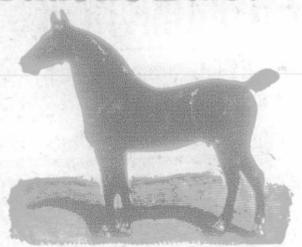
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**Gombault's**  
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**Has Imitators But No Competitors.**  
**A Safe, Speedy and Positive Cure for**  
**Orb, Splint, Sweeny, Capoe Hook,**  
**Strained Tendons, Founders, Wind**  
**Puffs, and all lameness from Spavin,**  
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**Cures all skin diseases or Parasites,**  
**Thrush, Diphtheria. Removes all**  
**Bunches from Horses or Cattle.**

**As a Human Remedy for Rheumatism,**  
**Sprains, Sore Throat, etc., it is invaluable.**  
**Every bottle of Gaustic Balsam sold is**  
**warranted to give satisfaction. Price \$1.75**  
**per bottle. Sold by druggists or sent by ex-**  
**press, charges paid, with full directions for**  
**its use. Send for descriptive circulars,**  
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**The Lawrence-Williams Co., Toronto, Ont.**

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The only reliable treatment for Lump Jaw in Cattle.  
**Fleming's Lump Jaw Cure**  
 Price \$2.50 a bottle. Sold under a positive guarantee since 1896. Your money back if it fails. Write for Fleming's Vest-Pocket Veterinary Adviser 96 pages and illustrated. It is Free. Fleming's Chemical Horn Stop. A small quantity applied when calves are young will prevent growth of Horns. A 50c tube sent postpaid is enough for 25 calves.  
**FLEMING BROS., Chemists,**  
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Ship your cream to us. We pay all express charges. We supply cans. We remit daily. We guarantee highest market price.

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**DOG DISEASES,**  
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America's Pioneer Dog Remedies

**RAYMONDALE HOLSTEIN SIRE**

We have for immediate sale a 24 months bull sired by King Segis Alcartra Spofford and from Princess Echo De Kol 2nd, who has the following record—

Butter—	7 days	35.32 lbs.
"	30 "	146.42 lbs.
"	60 "	281.12 lbs.
"	90 "	398.92 lbs.
Milk—	7 "	708.9 lbs.
"	30 "	2,904.3 lbs.
"	60 "	5,829.0 lbs.
"	90 "	8,448.9 lbs.

This young bull is a good individual and is guaranteed right in every way. Write quick or come and see him.

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

**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.C.P. **R. HONEY & SONS, Dartford, Ont.**

**Questions and Answers.**  
**Veterinary.**

**Mouth Trouble.**

Cow's head and jaw became swollen, then her neck, then it came back to the jaw and formed an abscess. We got it lanced and kept it cleaned out. She ate nothing for a week. The wound is healing, but she is not much better. She coughs and salivates a great deal, and cannot chew properly. J. L. S.

Ans.—The symptoms indicate a decaying tooth, which will have to be extracted. There may be some other trouble in the mouth. It is not possible to diagnose definitely without a personal examination. This is a case in which the services of a veterinarian are necessary. V.

**Very Lame Mare.**

Mare was sick all spring. Now her feet are very sore. She leans back on her heels when standing or walking. We can see raw flesh inside her hoofs on soles. J. A. M.

Ans.—The symptoms indicate descent of the bones of the feet, due to separation of the sensitive parts. If this be the case she will never be useful except for slow work on soft ground. All that you can do is keep her as quiet as possible in a comfortable box stall, dress the raw surfaces 3 times daily with 1 part carbolic acid to 25 parts raw linseed oil, pack the sole with batting and put on a boot to keep it there. As our diagnosis may not be correct, it would be well to have her examined by a veterinarian. V.

**Chronic Leg Trouble.**

For several years my horse has itchininess and scruffiness of hind leg, and now there are raw surfaces. Twice his leg has swollen badly from foot to body, and now between the hock and foot it remains enlarged. H. T. B.

Ans.—This has become so chronic a cure is not probable. The enlarged leg called "Elephantitis" is a sequel to the attacks of lymphangitis, and is considered incurable. Purge him with 8 drams aloes and 2 drams ginger, and after the bowels become normal give 1½ oz. Fowler's solution of arsenic twice daily for 10 days. Make a solution of corrosive ointment, 30 grains to a quart of water, and rub some well into the skin of the leg every evening, also make a lotion of 1 oz. each of acetate of lead and sulphate of zinc to a pint of water and rub well with this mornings and noons, and as soon as itchininess ceases use it 3 or 4 times daily and discontinue the use of corrosive sublimate. The administration of 1 dram iodide of potassium 3 times daily is supposed to reduce the chronic swellings, but usually has little or no effect. Give him regular exercise, and when not at regular work feed little grain. Watch closely and upon any symptoms of return of the itchininess repeat treatment. V.

**Questions and Answers.**  
**Miscellaneous.**

**Raspberries.**

1. What are the best kinds of tame raspberries to grow in this locality, and when is the best time to set them out. What cultivation and winter care should they get?

2. What time of year should strawberry plants be set out and what distance apart should they be planted? I would like some general information about them regarding winter care, manuring and cultivation. Would they be all right among raspberry bushes? A. P.

Ans.—1. Cuthberts and Marlboros are two varieties which give good results. They may be set about 18 inches apart in rows 5 or 6 feet apart. The spring is the best time to set them out, although they may be set out in the fall. It is customary to plow the soil towards the plants in the fall and turn it away from them in the spring. They should be kept cultivated to keep down the weeds.

2. The spring is also the best time to plant strawberries, but good stands have been obtained from September planting. The plants may be set from 15 to 18 inches apart in rows 3 or 4 feet apart. They require ordinary cultivation to keep the soil in good tilth, and the weeds suppressed. They should not be set among raspberry bushes. You may be able to get the bulletin on raspberry and strawberry growing by writing the Ontario Department of Agriculture, Toronto.

**FEEDS FEEDS FEEDS**

We are supplying feed for use in the various live stock barns at the Exhibition this year, and would invite your inspection and attention to the high standard and quality of each commodity used.

A cordial invitation is extended to you to visit our warehouse during your visit to Toronto for the Exhibition.

We carry complete and large stocks of the following, and are in a position to fill all orders immediately:

- Linseed Oil Cake Meal
- Cotton Seed Meal
- Gluten Feed (25% protein)
- Shorts
- Feeding Cane Molasses (in bbls.)
- Feed Corn and Corn Meal
- Dairy Feeds
- Hog Feeds
- Poultry Feeds and Supplies
- Car Lots or Less

**Kelley Feed and Seed Company**  
 780 Dovercourt Rd., TORONTO

**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 31 lbs. of butter for 7 days. If you are interested in a good calf, write or see them now—they can be purchased at considerably less than we will be pricing them next winter.

**D. B. TRACY - All Railways - COBourg, Ont.**  
 Bell Phone

**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.

**HOLSTEIN BULLS FROM 30-lb. DAMS**

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

**R. M. HOLTBY, Manchester G.T.R., Myrtle C.P.R., PORT PERRY, Ont.**

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

**"Premier" Holstein Bulls** ready for service—I have several young bulls from dams with 7-day records up to 32.66 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**

**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**

**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 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.**

**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 Jerseys** London, Ontario **NO. PRINGLE, Prop.**  
**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 tests 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**

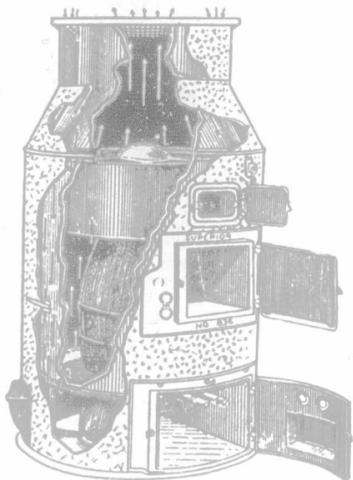
**Ayrshires—Yorkshires**—If you want a few large and well-developed Ayrshire heifers good enough to win in the show ring, we would like to have you call and see our present offering. From R.O.P. dams and sired by Snow King, the great show bull. Write us also for Yorkshire litters.  
**JAS. B. ROSS, Streetsville C.P.R., Stop 38, Guelph Radial, Meadowdale, Ont.**

**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, ONTARIO**

Watch for this space in the Exhibition Number of Sept. 2nd.  
**W. FRED. FALLIS - R.R. 3, Millbrook, Ont.**

### Pilot Superior Safety



THE PILOT SUPERIOR PIPELESS FURNACE is a safe heating system, because no heated part can come in contact with the inflammable materials of the buildings where Pilot Superiors are installed. The point at which the outer casing touches the floor is insulated from the warm air passages of the furnace by the large return air chamber, which prevents the radiation of heat to the wood. This is a positive protection, and the danger of fire from this cause, so common to other types of furnaces, is entirely overcome in the Pilot Superior construction. There are no heated pipes in the walls of Pilot Superior-heated buildings, and consequent cause is entirely eliminated. A Pilot Superior Pipeless Furnace can be installed in six hours.

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The Hall Zryd Foundry Company, Limited  
Hespeler, Ontario

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### Oxford Down Sheep

Choice breeding ewes,  
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### COTSWOLDS

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

Chas. J. Shore, - Glanworth, Ont.

**Kent or Romney Marsh Sheep**—The hard-  
iest and best  
grazing mutton and wool sheep of Great Britain.  
Successfully acclimated wherever they are required.

Annual Ram Show and Sale—350 specially se-  
lected Rams at ASHFORD, Kent, on September  
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BOURNE, Kent, on October 13th, 1920, and  
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Descriptive pamphlet, list of breeders and all  
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#### Cotswolds and Yorkshires

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

R. HONEY & SONS, - Dartford, 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.

### YORKSHIRES

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

#### WELDWOOD FARM

Farmer's Advocate, London, Ontario

### 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 "Vol-  
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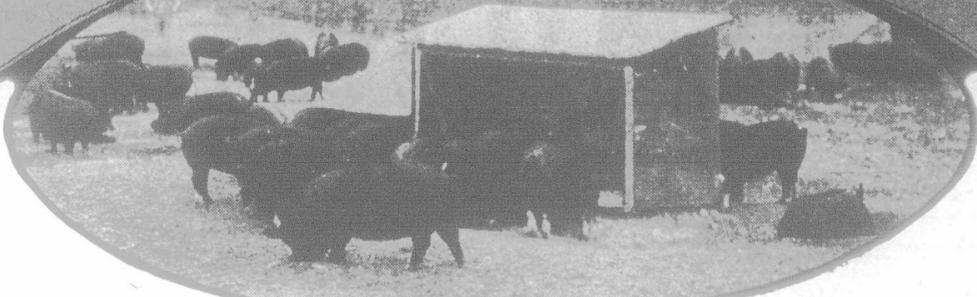
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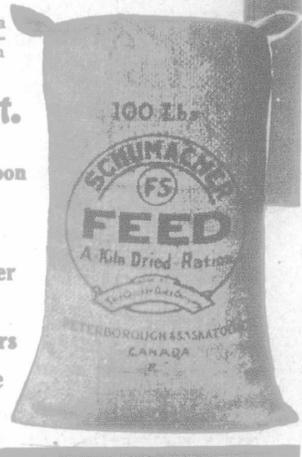
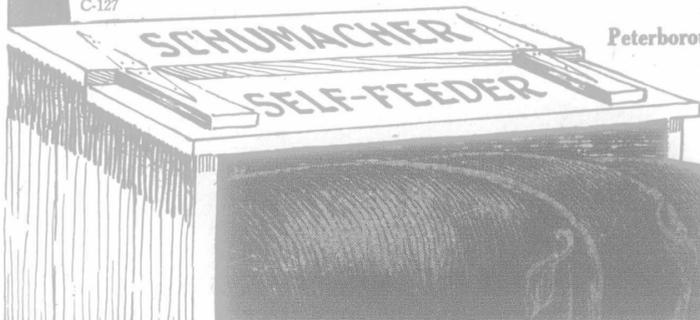
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### The Story of Wool.

BY PROFESSOR G. E. DAY, IN "STORIES IN AGRICULTURE."

The next time you visit a fall fair, be sure you do not come away without going to see the sheep. If you are fortunate enough to visit one of our large fairs, such as Toronto, London, or Ottawa, you will find the sheep pens a very interesting place. Here you will see many different kinds of sheep; some large, some medium size, and some small; some with white faces, some with brown or grey faces, and some with black faces; some with their faces so covered with wool that they can scarcely see out through it, and some with no wool at all on their faces; some with horns, and many with no horns—in fact, the longer you look at these beautiful creatures the more you will find to interest you. There is one thing about sheep that makes them look very different from all other farm animals, and that is the warm coat which they wear. This coat is so thick and so warm that the sheep can stay outside in the coldest weather without minding the cold in the least, while a horse, or a cow, or a pig, will shiver and look very uncomfortable indeed. Now, the horse, cow and pig have coats, too; but their coats are made of hair, while the sheep's coat is made of wool, and wool makes a much warmer coat than hair.

Did you ever think of what is the difference between wool and hair? If you part a sheep's wool with your hands you will find that it is made up of a great number of very fine wool hairs, or fibres, which grow out from the skin of the sheep so close together, and so long, that they form a coat which the wind cannot blow through. After handling the wool you will find that your hands are quite greasy. This grease, or oil, comes from the skin of the sheep, and is called "yolk." It keeps the wool fibres soft and smooth, and keeps them from tangling or matting together. It also helps to keep out water, so that a sheep can stay out in quite a heavy shower of rain without getting its coat wet through. Then, again, if you look at these wool fibres closely, you will see that they are not perfectly straight, but that they have a wavy appearance. In some kinds of wool these waves, or bends, in the fibre are much closer together than in other kinds. Study samples of long and short wool. In the first there are very few waves in the fibre, while in the second the waves are close together. The finer the fibre is the more waves it has, while wool with coarse fibre has very few waves. These waves, or bends, are called the "crimp" of the wool. When the waves are very close together, the crimp is said to be fine, so that fine wool has fine crimp and coarse wool has coarse crimp.

But there is another difference between wool and hair. If you take a single fibre of wool, and take hold of the end that grew next to the body of the sheep, and then draw the fibre between the finger and thumb of the other hand, you will find that it slips through very smoothly. But if you take hold of the other end of the fibre, and then draw it between the finger and thumb as before, you will find that it seems to catch, and does not slip between the fingers nearly so easily. Why is this? It is because every wool fibre has hundreds of very, very small scales on it, something like the scales on a fish, only so small that they cannot be seen without looking at the wool with a microscope, which makes the wool fibre appear many times larger than it really is. These tiny scales all point towards the outer end of the wool fibre, so that when you took hold of the outer end of the fibre and tried to draw it between the fingers of the other hand, the points of these little scales caught on your fingers

and made it hard to pull. Hair also has scales upon it, but the points of the scales on the hair are rounded and they lie so close to the hair that they do not catch hold of anything they rub against; while the scales on the wool fibre have sharp points and rough edges, so that they catch and cling to everything they touch. This difference in the kind of scales is the most important difference between wool and hair.

Now, when the weather grows warm in the spring, the sheep does not need its warm winter coat, and so the farmer clips it all off, or shears the sheep, as we say. The wool is then sold, and is sent to the large factories, where it is made into all sorts of clothing, blankets, yarn and other goods.

Before it is made into cloth the wool is twisted, or spun into yarn. If the wool fibres had no crimp, they would not stay tightly twisted together, and the yarn would be of very poor quality. Then the yarn is woven into cloth by machines, and the way the wool is handled in spinning and weaving causes the little scales, which we have described, to catch into one another and the wool fibres become all tightly matted, or felted together, making a firm, strong piece of cloth. From what has been said you will see the use of the crimp and the scales of the wool. The crimp makes it possible to twist the wool into yarn which will not easily untwist again, and the scales cause the wool fibres to stick together, or felt.

It would take too long to describe all the different things that can be made out of wool; so we shall mention only a few of the principal classes of goods. Wool that is very long, strong and coarse in fibre is often called "braid" wool, because it is from such wool as this that braid is made. Then there is other wool, not quite so coarse as the braid wool, but still quite long and very strong in fibre; this is made into what are called "worsted" goods. Worsteds are used very commonly in making men's clothing. Some sheep produce wool that is quite long and yet very fine in fibre. Wool that is between two and three inches long and very fine in fibre usually sells for a higher price per pound than other kinds. It is used very largely for making ladies' dress goods, such as delaines, and is often called "delaine" wool. Wool that is short and fine in fibre is used for making such goods as broadcloth, fine underclothing, tweeds and other goods of that kind. Some wool that is long and coarse has weak spots in its fibres; and any wool that has weak fibres cannot be used for delaines, worsteds, or braid, but is made into cheap tweeds, blankets, coarse underclothing, carpets, coarse stocking yarn, and such like. Thus, you see, there are many kinds of tweed, underclothing, blankets and such goods depending upon the quality of the wool that is used in making them.

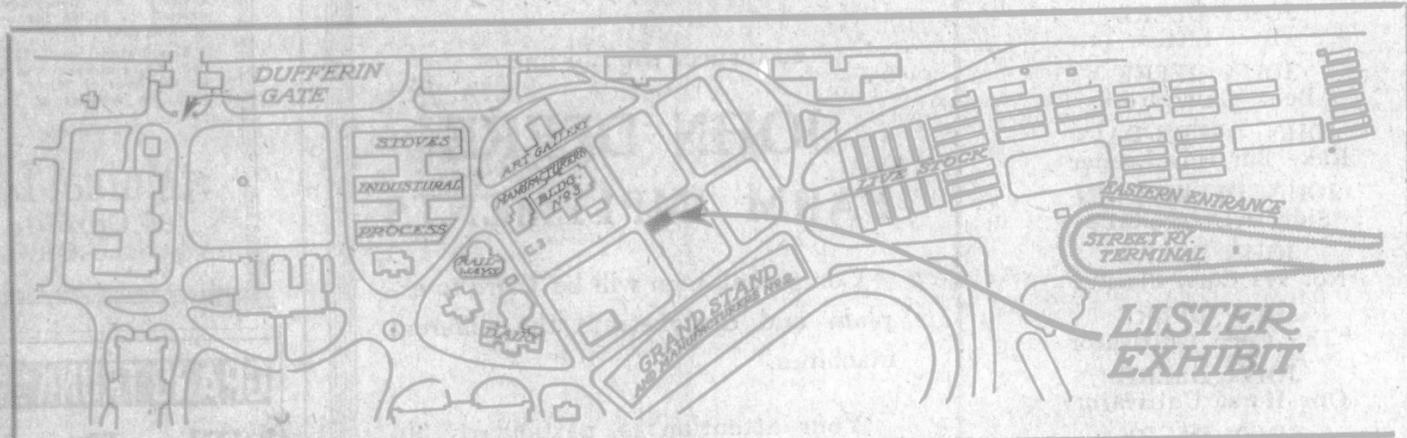
Such goods as delaines and worsteds have a smooth surface. This is because the wool is put through machinery which stretches the wool fibres out straight, and they are then twisted together in such a way that all their ends are tucked in out of sight. This stretching is called "combing," and the wool fibres must be sound and strong in order that they may not break during the operation. But if you examine a piece of tweed or blanket, you will see the ends of the wool fibres standing out from the surface, making the material look rough. This is because the wool has not been combed, but has been put through a process called "carding," in which the wool is rolled up in such a way that when it is spun the ends of the wool fibres stand out from the yarn and give a rough appearance to the cloth after it is woven. As a rule, wool that is less than two inches long is not combed, but is used for carding; and wool that is weak in fibre will not stand combing, and, therefore, must also be carded. There are many other interesting things which might be said about wool, but I simply ask that whenever you see a sheep, you will think of what you have learned about the wonderful coat it wears, and remember that we should always be kind to these gentle and timid animals, because we owe them for much of the most beautiful and most comfortable clothing which we wear.



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