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LONDON, ONTARIO, DECEMBER 2, 1920.

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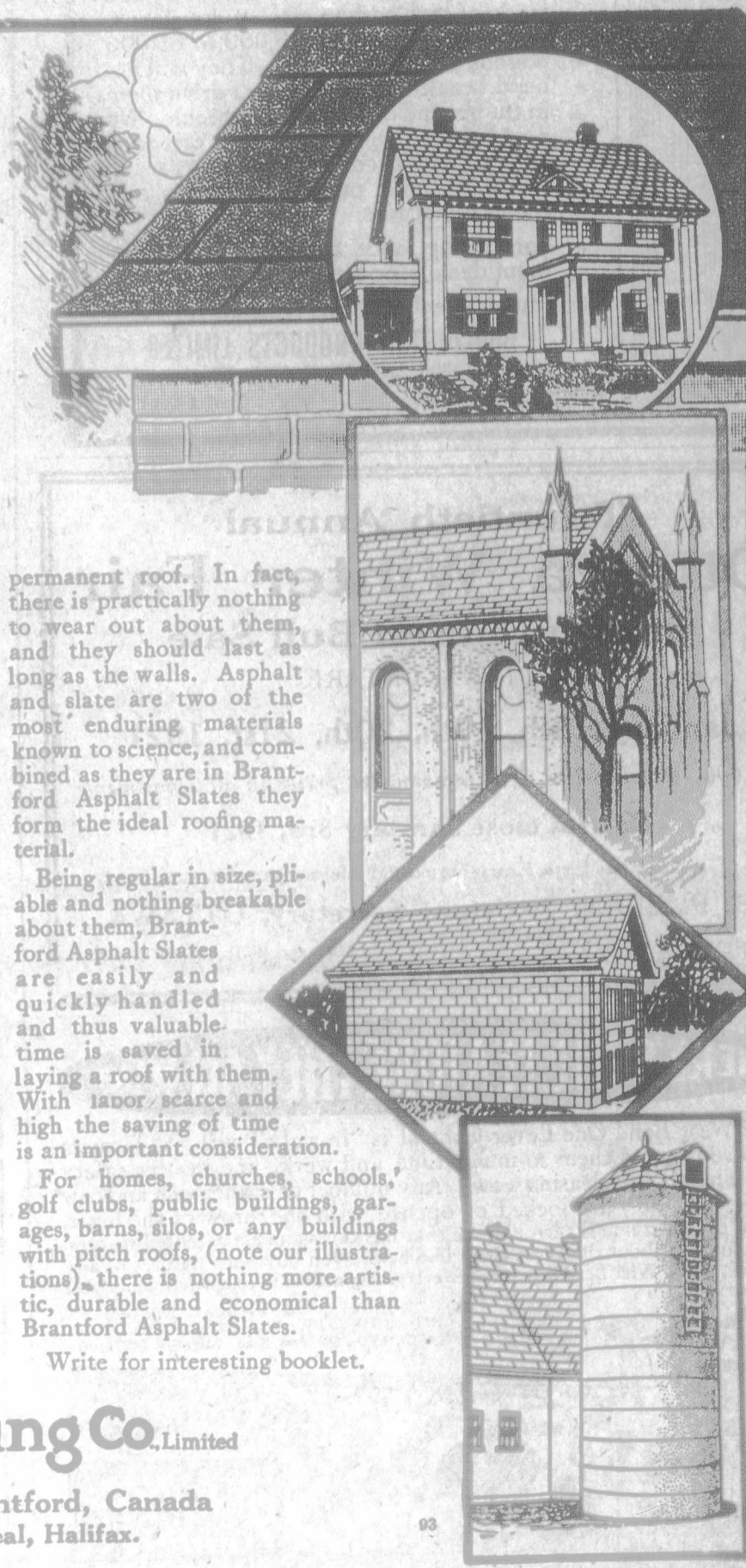
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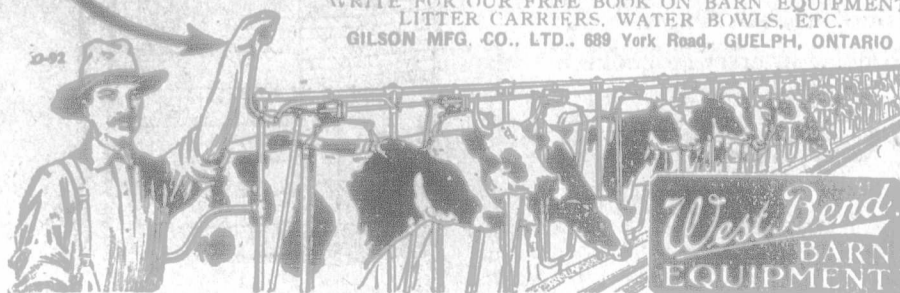
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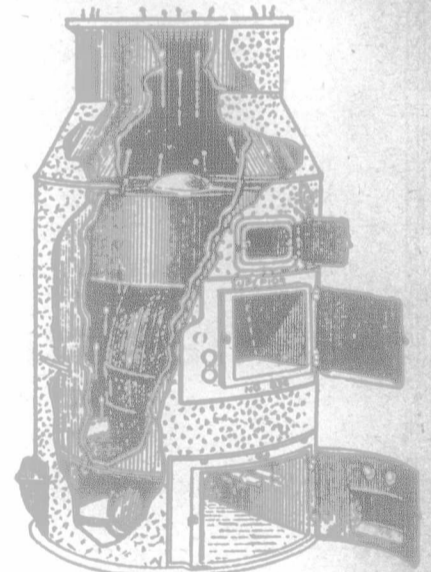
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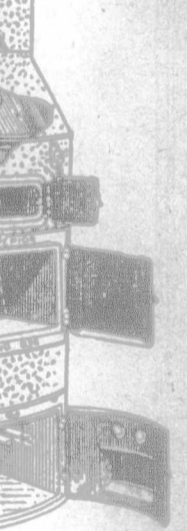
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# The Farmer's Advocate and Home Magazine

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1866

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LV.

LONDON, ONTARIO, DECEMBER 2, 1920.

1471

## EDITORIAL.

Save out a little skim-milk for the hens daily; they will make good use of it.

There is no use for any implements on the farm now except plows; the other machinery should be under cover.

The U. F. O. demonstrated in East Elgin that the farmers' party is a factor in Federal as well as Provincial politics.

Make a final inspection of the drain outlets. A drain clogged at the mouth may be less than 50 per cent. efficient.

The apples stored in the cellar should be inspected occasionally, and the bad ones removed. Apples do not seem to be keeping well this year.

One thing is certain, this game of politics has got to be learned all over again. The old rules don't apply any more, and the old tactics don't bring results.

The season of winter fairs, annual meetings, and conventions is approaching. Arrange the work so as to attend some of these; they will help you and you can help them.

Come to think about it, we have never seen or heard anything definite regarding the source of funds which are used to conduct election campaigns. When these are not raised openly in the various ridings, whence are they?

The Christmas Number of The Farmer's Advocate and Home Magazine is mailed just as carefully as any other issue, and you should receive it without fail. If you do not receive it on time, make enquiries at your post office and of the courier.

Attempts are being made to make bitterness a feature of the forthcoming Dominion election fight. We may rant and rave till we are black in the face, but if we don't vote calmly, intelligently, and conscientiously as citizens of Canada, we will still be floundering hopelessly in a political quagmire.

The downward trend in the values of market live stock is accompanied by a similar decline in grain prices. The selling of grain and stocking lightly apparently offers no escape for there is abundance of roughage which must be fed, and to derive full value from it as feed it should be supplemented with grain or millfeeds. A persistent adherence to the doctrine of a well-stocked farm will bring farmers through the period of readjustment most successfully. Out at the bottom and in at the top is always a disappointing policy.

A great many farmers are feeling pessimistic at the present time, and not without reason. They are doing more real work every day—the kind of work that whitens the hair and stiffens the limbs—than the bulk of the city workers do in two. Their cost of production, labor, implements, transportation charges, threshing charges, etc., are abnormally high, and their markets are in a state of flux. Pessimism, however, will not ameliorate these conditions, but will only make them appear more serious than they are. We should face our problems with composure, looking forward to the future hopefully. When we allow pessimism to overcome us, the future always looks as black as Erebus. Nobody really looks forward to conditions that are bad, but if we cast a shadow on the future we should not complain if the shadow remains.

### The Annual Christmas Number.

This is simply to warn our readers that the next issue will be the Christmas Number of The Farmer's Advocate and Home Magazine. It has been under preparation for weeks, and we can say, with all modesty, that our readers will be presented with a real treat in agricultural journalism, for the text has been prepared by some of the best writers and thinkers in Canada. The illustrations have been selected with great care, and the articles have been purposely varied so as to afford entertainment and enlightenment in generous measure.

We do not intend to describe in detail all the good things that will appear in next week's issue, for that would detract from the pleasures incident to expectancy, just as that happy sensation enjoyed when opening a Christmas box is partly destroyed when one has been previously acquainted with the contents. Owing to the fact that fifty-one issues carrying a liberal amount of downright, practical information are put out each year we can afford to make the Christmas Number a little lighter and more entertaining. There will be some good, sound agricultural gospel included in this special issue, but a portion of the space is given over to story, rural sociology, reminiscences, and other interesting matter, in addition to live stock and farm topics treated in a popular way. The Home Magazine will, as usual, be replete with interesting Christmassy articles, and the stories in it will appeal to old and young.

We are making this mention of our forthcoming Christmas Number only that subscribers may be on the look-out and not miss this special Christmas issue of "The Farmer's Advocate."

### More Milk Per Cow.

During a period when price levels are changing, such as has occurred during the last few years and is now a matter of serious moment to all classes of the farming community, dairymen are, in one sense at least, placed in an unfortunate position. Milk is one of the last commodities to rise in price, and it has happened in this instance that no sooner had milk reached a price fairly proportionate with the cost of production than prices of nearly all other commodities took a downward turn. Naturally this general tendency toward lower prices is having its effect on the dairy industry and the price of milk, so that the dairyman is faced on a rising market, with a condition whereby his costs increase faster than the price of his product, while when prices are falling he must be ever tugging against a common inclination to depress values. In other words, no one is concerned about him so long as his product advances in price more slowly than other commodities, but once other products quicker to respond to price-tendencies begin to go down every eye is turned toward the dairyman who is expected to follow suit after a very limited enjoyment of higher values.

At the same time the dairy industry has many compensations for its followers, not the least of which is the fact that it is possible to increase production per cow, per acre or per farm to a greater extent than in almost any other branch of agriculture. It is generally recognized that there is a great deal of room for improvement in the average quantity of milk produced per cow, and investigations have shown with the most conclusive proof that increased production per cow means an increased labor income for the owner under anything like reasonable care and feeding. This is one of the avenues of escape open to the dairymen from the disadvantage of declining prices, and it is one which it will pay well to take advantage of. The margin of practicability for increased milk yield per cow in dairying is very wide, and in almost every herd there is a level of production that could be materially raised either by better feeding or better cows. Too many dairymen believe that they possess herds as good as the average

and are content to let it go at that. Many do possess such herds, but are poor feeders so that the returns from the herd are lower than the average. Others are good feeders but are wasting their skill on inferior individuals, one or two of which in a herd may entirely dissipate the advantages of unusual ability to feed economically for milk.

Fortunately there is available this fall a comparative abundance of rough feeds which the dairy cow can utilize more economically than any other kind of live stock. Farm grown grains are also more plentiful at lower values, while purchased concentrates have declined considerably. These factors lend a greater element of feasibility to the advantages to be gained from liberal and more careful feeding, and it certainly behooves each feeder to feed as economically as he can. The milk scales and Babcock test are too seldom used, and we believe that greater stress placed upon their value and usefulness would inevitably result in large profits from more milk per cow.

### Agriculture in the Rural School.

The Departments of Education throughout Canada have made an heroic and, on the whole, a laudable effort to introduce agriculture into the curricula of the public schools. Whether they took this step voluntarily and in the interests of education, or in response to a public clamor, is of little concern at present. However, it is well to bear in mind that laws and regulations more often are, and should be, simply a statutory expression of public opinion, and so far as Ontario is concerned no steps were taken, that we know of, to make agriculture a subject of study in rural schools until it became what was construed to be a popular demand. Intermittently for the past twenty-five years the cry has gone out to "keep the boy on the farm," and the origin of this slogan could probably be traced to the very centres of population, sky-scrapers and big business. Farmers have, unthinkingly, in some cases, taken up the cry and heralded it abroad, but, generally speaking, rural people have desired an all-round education for their children that would equip them for citizenship in any field of endeavor and qualify them to select any profession or occupation toward which their own peculiar temperaments and abilities inclined them. We are not opposed to any effort of an economic or educational nature that will make farm life more enjoyable and farming more remunerative, thus attracting youth and holding it in the country, but treating agriculture as a vocational subject in the rural schools with the object of chaining young people to the farm, even if they do not care for and are not fitted for the life, is a crime against society.

The teaching of agriculture is still in the experimental stage, and, no doubt, departments of education throughout Canada will evolve and perfect systems far superior to those under which the work was begun. Educationalists, like the general run of people, are only human, and must learn by experience, so we do not feel inclined to condemn anyone because of the present and past attempts to brighten up the public school curriculum with something that may get us into a little closer touch with life itself.

Canada is primarily an agricultural country; farming is the basic industry, and it is only reasonable that our public school system should be so modelled as to recognize this fact. Reading, writing and arithmetic are the corner-stones of education, but these and other listed subjects should be so related and correlated as to give due recognition to our natural industries, with emphasis on agriculture. This is fair to the urban and rural child alike; it creates no class consciousness; it raises no class barriers. After all, the science of agriculture is based on a knowledge of Nature's laws. Farming more than any other occupation is a partnership with

## The Farmer's Advocate AND HOME MAGAZINE.

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

1. **THE FARMER'S ADVOCATE AND HOME MAGAZINE** is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers of any publication in Canada.
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Nature. Nature study should be emphasized in the rural school, and when it is related to agriculture in an intelligent manner the subject of agriculture in the rural school has been carried far enough. Greater production, the care and handling of live stock, and purely farm topics such as these, are vocational in the extreme; they have no place in the public school curriculum, and teachers, as a rule, are not qualified to handle them.

It is unfortunate that the term "Elementary Agriculture" was ever chosen as a subject for the school curriculum. It would have been better to use the term "Rural Science," as adopted in other countries, and direct the study along nature study lines. The time is drawing near when the nature of the course should be definitely decided on in Ontario, so the ordinary training of teachers will equip them to handle the subject. Then it can be made compulsory, bonuses to teachers and inspectors can be done away with, or included in their salaries, and this teaching of agriculture, so-called will not be such a hit-and-miss affair.

### Co-Operations and Progress.

BY ALLAN MCDIARMID.

Is the civilized human being in any respect better off than the savage? Would we rather live and work and get paid for that work in Canada than in one of the South Sea Islands, where men are only a short step removed from the beasts in their forests? It wouldn't take us long to get back to such a state of existence, from which we have risen with so much pain and effort. All we would have to do would be to give up trying. Throw up our hands and let ourselves slide. Hundreds of thousands of years it has taken us to reach our present height, such as it is. It might not take more than a century or two to hit the bottom again.

Taking it for granted that we still have the instinct within us that has made us the struggling, progressive creatures that we are, it isn't likely that there is anyone living in this country that would be ready to trade home, job and prospects with the African savage, or any of his kind, wherever they might have their habitation.

This being the case it might be worth while finding out just what agency was at work, in the ages of the past, to cause us to get on to the track that has led us up to civilization and comparative happiness. (For, say what

you like, the more knowledge man has acquired the more pain and misery he has been able to overcome.) Also it is pretty certain that whatever it was that raised us from a lower existence to a higher will continue the good work, or at least hold us at our present level, if we make use of it.

However, the conclusion I have been forced to come to in this matter of what it is that has put us where we are and, at the same time is helping us to stay there, is Co-operation—nothing more—and nothing less.

We have reason to believe that, long before history was written in any way but on the walls of a cave, perhaps, mankind had found out the value of co-operation. For purposes of hunting, raiding his enemies and self-defence, the principle of working together was found to be useful and even necessary. The steps by which this primitive idea worked itself out we haven't the time for, or the means of, following up. It was a gradual growth and development, like everything else in ocean, earth or sky.

But coming down to a time that is of more interest to us, because it is more recent, we are able to deal with facts that have been put on record by men who wrote of the times in which they lived.

It was about the beginning of the last century that co-operation began to be a thing talked about in Great Britain. As in all new movements some one man was responsible. Robert Owen was this man's name. The British co-operative movement acknowledges him as its leader. He was an employer of labor and he saw that the conditions under which the laboring-man was compelled to exist were far from what might have been expected in a civilized country. Extreme competition brought with it long hours, women and children's labor, high-priced and adulterated food and dirty, badly-kept homes.

Owen saw the waste of effort and human life in all this and he reasoned that since it paid the manufacturer to have the best machinery, not to overdrive it, to look after it well and keep it in repair, so it would pay to look after the human machines that worked for him and see that they were kept at the highest point of efficiency by proper housing, food and rest. And it would pay the nation even better than it could pay any individual. The idea of that time was that the country would be best served by each man looking out for the interests of himself and his own family. But Robert Owen maintained that the highest welfare of society could only be brought about through the combined effort of all men, with that object in view. A co-operative effort for the benefit of the people as a whole.

Owen's idea seemed to be that a man's surroundings had more influence in developing his character than anything else. He believed in the effect of environment on humanity rather than in that of heredity. Consequently he did all he could to bring about an improvement in the surroundings of those in his employ and to accomplish this partly through their own efforts. It was a case of "each for all and all for each." The essence of co-operation.

Owen was managing-partner in the cotton-mills at New Lanark and the results of the carrying out of his ideals in that place can best be given in his own words. "For twenty-nine years," he wrote, "we did without magistrates or lawyers; without a single legal punishment; without any money having to be raised for the support of the poor, and without any intemperance or religious animosities. We reduced the hours of labor, educated all the children from infancy; improved the condition of the towns-people, cut down their daily labor, paid interest on capital and cleared over three hundred thousand pounds in the way of profit.

So well did the co-operative plan work out that New Lanark became known all over England and it was visited by thousands of tourists and business-men. Other co-operative plans and societies followed in the wake of this first one and at the present time there are about two and a quarter million members of these societies in Great Britain alone. Their stores have a capital of \$150,000,000 and their sales amount to \$300,000,000 every year.

And the best of it is that the co-operative idea has spread to almost every other country in the civilized parts of the earth and it is hoped and expected that it will stop at nothing short of the millennium.

We know something of it in this country and in the Republic to the south of us. Here co-operative societies have had their support from the farmers, principally, and we have known them under such names as the Grange, the Patrons of Industry and the United Farmers. This last organization is apparently exerting more influence in both Canada and the United States, from a political standpoint, than anything of the kind in the past. And the end is not yet.

Co-operation is right in principle and will rule the world some day. In its narrowest sense it may mean only a group of men who economized by buying in common, or who increase their profits by selling in common. But in its widest usage it means the creed that life may best be ordered, not by the competition of individuals, where each seeks the interest of himself and his family, but by mutual help; by each individual working for the good of the social body of which he forms a part, and the social body, in return, caring for each individual. It proposes to replace humanity's desperate struggle for existence by a voluntary combination for life. Life as it was intended we should live it.

Never neglect the young growing stock. The young things now will constitute the herd in two or three years, and the character of the herd to-morrow depends on the treatment it receives to-day.

### Nature's Diary.

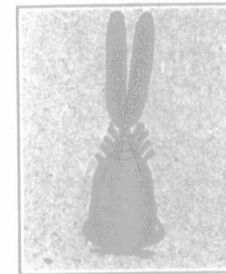
BY A. BROOKER KLUGH, M. A.

"Large fleas have little fleas  
Upon their backs to bite 'em,  
These fleas have lesser fleas  
And so ad infinitum."

We are so used to the idea of mammals, birds and other terrestrial forms of life having external parasites, such as fleas, lice, ticks, etc., on them, that we naturally expect to find every species provided with its own special form of insect inhabitant. But when it comes to fishes, the facts are not so generally known.

The fishes, too, have their external parasites, but they are not insects but crustaceans. That large group of aquatic animals, the Crustacea, to which the crayfishes, lobsters, crabs, shrimps, etc., belong, play much the same role in the waters, both fresh and salt, that insects play on land. There are, of course, a very large number of insects which pass the larval, or the nymph stage of their existence in the water, and some which pass their juvenile stage in the water and their adult stage on the water, but as a group the insects are essentially terrestrial. It is quite otherwise with the crustaceans. There are only a few species, such as the sow-bugs, which are terrestrial, but in the waters they are ubiquitous. There are large species which prey on other aquatic animals, smaller species which prey on still smaller kinds or which feed on vegetation, there are species which are free-swimming, species which are sedentary, species which are so minute that there are hundreds of them in a single drop of water, and there are species which are parasitic on other aquatic animals.

Most of the external parasites of fishes belong to a group known as the Copepods. Many of the Copepods are free-swimming, and these species are very important as the food of small fishes. The parasitic Copepods are more or less degenerate, a fact which is in accordance with the general law that as soon as an organism begins



A Parasitic Copepod (Enlarged).

to rob another, so soon does it begin to lose some of its original powers, while the organs in which these powers were located degenerate and finally disappear. One of the first parts to be affected in parasitic animals are those concerned with locomotion, and we consequently find the majority of these parasitic Copepods incapable of moving about in their adult state. They are firmly fixed in one position upon the fishes body, and there they must remain all their lives. When first hatched they could swim about freely, and during this period they seek out the fish and fasten themselves to it. Then as development proceeds they lose their ability to swim and the swimming organs disappear. Other parasitic Copepods retain their ability to crawl about throughout life and can move over the fishes body.

Naturally enough, all these forms, the fixed as well as the free, seek those places on the fishes body where the blood can be most easily obtained. Such places are the gills, the gill-cavities, the mouth and the fins. The females of these parasitic Copepods have two egg-strings at the posterior end of the body, (see Fig. 1), and the females are much more abundant than the males.

The parasitic Copepods cling with great tenacity to their hosts. This is rendered necessary by the fact that water is a much denser medium than air. In many species some of the mouth-parts are modified into sucking discs, in other species the basal joints of the antennae have sucking discs, while in most of the fixed forms there is one or more pairs of stout claws for burying in the fish's flesh. Of course, the hooks and claws which they bury in the flesh produce considerable irritation, and there is nearly always a swelling where these claws lacerate the fish. But the parasites also have mouth-parts adapted for causing a flow of blood, and their upper and under lips are fused together into the form of a tube through which the blood is drawn up. In fishes whose body is protected by scales the parasites either fasten on the gills, fins, etc., where there are no scales, or burrow under the free edge of the scale until they reach the underlying skin.

The constant withdrawal of blood is certain to weaken the fish's vitality. Usually the parasites are not present in sufficient numbers to threaten the life of the fish, but if a fish becomes weakened or diseased in any way, even a few parasites may prevent it from recuperating, and thus cause its death.

Where many fish are kept in rather confined quarters, as in artificial ponds, the number of parasites often increases to a dangerous extent. In such cases it is necessary to catch and examine carefully all the fish, and to reject those which are heavily parasitized.

The relation between the fish and the parasitic Copepods is not altogether a one-sided one, as most fishes in their young stages, and the smaller fishes throughout their lives, feed very largely on Copepods and the free-swimming young of the parasitic Copepods furnish part of their diet. Minnows, shiners and sticklebacks are particularly fond of Copepods, and hence are useful fish to have in a pond to keep down the numbers of the parasitic species.

## THE HORSE.

### Stable Clothing and Bedding for the Work Horse.

BY DR. G. H. CONN.

During the winter months blankets are usually employed, when animals have been clipped. It is also the custom to blanket most farm animals that are used for the farm work. There is not much doubt but that blankets are of much value, inasmuch as feed may be saved, or at least energy that goes to produce heat, will be saved by the use of a blanket. No one would hardly dispute this latter fact. It also adds to the appearance of the animal by producing a better coat of hair, and it materially adds to the comfort of the animal. While we have determined that the animal really does not need a blanket to keep in good health, yet the saving in feed, the improvement in the appearance, and the comfort it gives the animal, are reasons enough to influence the common use of the blanket upon work horses during the winter months.

The blanket first of all must be of material that will be warm, that is strong and will not be easily torn, and material that can be kept reasonably clean. Two common materials for stable blankets are ordinary woolen blanketing and jute sacking lined with stout woolen collar check. Probably a better blanket than this is one made of an extra heavy white canvass or ducking; a blanket of this kind will not permit of any cold winds striking the animal, and are very easily kept clean owing to their hard, smooth surface. A blanket or cover of this kind lined with the ordinary woolen blanketing would be much warmer than the average blanket, and no doubt quite a little more expensive as well.

The blanket used on work or draft horses consists of the body blanket only. In fancy show horses a pad and roller are used to fasten the blanket in place and a hood is used for the head and neck. The common type of blanket fastens directly in front on the breast, by a strap and buckle, or a snap and ring; two surcingles are sewed on to keep the blanket in place, and they are either buckled or fastened with a special fastener on the order of a snap or hook. To facilitate the keeping of the blanket on the animal, a "fillet string" may be placed around the quarters; this is nothing more or less than a string extending from one side of the blanket to the other, around the quarters, much the same as the breeching, only being placed a little higher upon the quarters.

The blanket should fit the neck very much the same as a collar; if it is too large in the neck, the blanket does not retain its shape and is very difficult to keep in place. It should extend well down to the elbows and backward to the dock, fitting the animal rather loosely. Both the fillet string and the surcingle should be adjustable, and in fastening the surcingle, the fastener should be placed high enough that the animal will not lie on it when lying down.

The blankets should be shaken quite often, and brushed occasionally to remove the loose hair and the dirt, that collects on them. If it becomes necessary to wash them use cold water and just as little as possible. It sometimes becomes necessary, due to contagious diseases and skin ailments, to disinfect the blankets; cold disinfectant solutions should be used, and the blanket stretched at intervals during the time that it is drying.

Blankets should not be used in the fall until the temperature requires them for the comfort of the animal, and then only for warmth. It is a very common mistake made by some horsemen to keep the barn very tight and close, and then blanket their horses very heavily to induce the accumulation of excessive fat and to make them exceedingly sleek. This lowers the vitality of the animals and renders them quite liable to diseases induced by exposure to inclement weather. The ventilation in the barn should always be ample to keep the air pure and eliminate the moisture. Horses never suffer from cold in a well-ventilated barn, as the moisture is always removed before it has become cold enough to make its influence felt upon the animals. The use of a blanket under the harness, or on the outside, during very cold weather should never be permitted while the animal is working. This is a common practice, but one to be condemned under all conditions.

When the animal is brought to the stable excessively sweaty or wet, it should be dried with rubbers or handfuls of straw, until the excess of moisture has been eliminated; the animal must not be blanketed while in an extremely wet condition, but should be allowed to dry somewhat, first. It should be blanketed, however, before it gets cold enough to show a reaction to the temperature by shivering. If the blanket is placed on the animal while the coat is excessively wet, it will absorb a quantity of the moisture and the dampness of the blanket will only make the animal more uncomfortable and add to the possibilities of producing a reaction that will be detrimental to the animal.

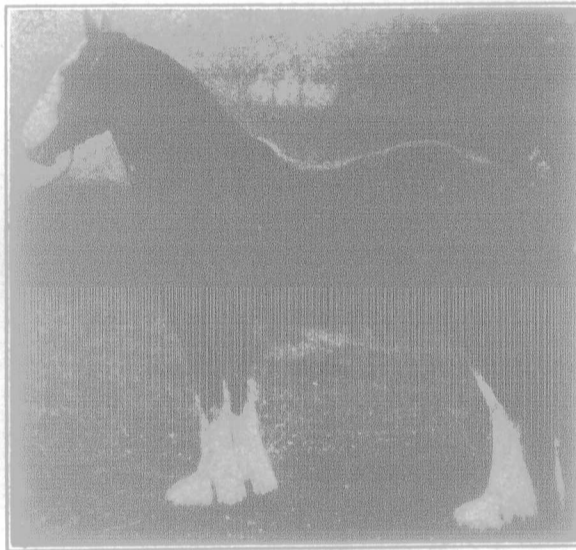
#### THE PURPOSES OF BEDDING.

By providing a good bed for the work horse, we are but practicing economy in his management. While it is true that most horses take much of their rest while standing, and that there are others that rarely lie down, yet providing a good, comfortable bed, may do much toward inducing them to take some rest at least, lying down. We are very positive that with most horses, a good bed influences them to rest much of the time lying down, even in the day time. This serves to save their legs, and if the bed is properly made it protects them from injuries on the hard floor.

A good bed for the horse should be level, dry and warm, should absorb or allow the urine to drain away in its entirety, and have no injurious actions upon the hoofs or the body. Most materials have some objections but we do have several that can be used very successfully when properly managed. While straw is the most common material used for bedding, as well as the most satisfactory, yet we have other materials that can be used when circumstances make it necessary; the most common of these are, sawdust, shavings, sand and leaves.

Straw to make the best bed should be long, dry, clean, free from mold and of a good bright color. A great deal of the straw used for bedding in towns and cities has been baled, and this crushes it to such an extent that it does not produce as good a bed as the whole, unbaled straw. Straw makes a very attractive bed when properly prepared; being clean and bright looking, and very elastic. However, for best results enough straw should always be available to keep the soiled straw replaced at all times. A thick, wet, urine soaked mass of straw in the bedding is very unsanitary, and should not be permitted under any conditions.

It requires some little experience to make up a bed properly. In the first place, the straw must be laid criss-crossed, for if it is laid straight it does not make a good bed, and does not remain in place long. Where the horses stand in a single stall the bedding should not be placed too far forward, as the horse usually lies as far back in his stall as his tie strap will permit. In making up the bed the straw should be patted down with the fork to get it neatly arranged; if it is left too fluffy and loose it will be moved into large masses by the movement of the animal's feet. We know of no better way for the average horseman to secure the few little practical details that are necessary in making a suitable bed for the horse, than to watch the caretaker or "swipe" prepare the bed for one of our modern race horses. Of course, the farmer cannot devote the time to making up each animal's bed that is spent on the race horse's bed, but he can at least learn the principles of properly preparing the bed, and it will greatly assist him in improving his own method.



Jim Scott.

Reputed to be the best Clydesdale gelding showing in Scotland this year. He was sired by Carbrook Buchlyvie.

The bedding should be removed from the stall, or at least from in under the animal's feet during the day; the wet and urine-soaked straw should be removed as well as all of the manure. If the bedding is but slightly soiled it can be used again after it has been dried. It should be piled in such a way that the air will circulate through it and dry it out thoroughly. There is one objection to throwing the bedding to the front of the stall; a greedy horse may eat it and he will be compelled to breathe the strong ammonia fumes from any of it that may be soaked with urine. The best way to handle it is to throw it in a pile at the rear of the stall out of reach of the animal's feet. New straw can be added from time to time, as it may be needed. On the average farm, straw is plentiful, and no attempt is made to save any of the bedding, but the straw is removed with the manure, and allowed to decompose and soak up the moisture from the other manure, for the purpose of producing manure for fertilizing the season's crops. Where the straw is plentiful this is the most profitable method to pursue, but at times it is necessary to buy straw for bedding, and in such cases becomes necessary to conserve the bedding as much as possible.

Wheat straw is, no doubt, the best straw that is used for bedding; it is long, tough, hard and will wear well; it is not as sweet as oat straw, and not so readily eaten. It should be of a bright yellow color.

Oat straw is more easily crushed and will not wear so long as wheat straw; it is sweeter to the taste and is easily digested, so horses are apt to eat it quite greedily.

Rye straw is the best of all the straws as it is longest and toughest; however, it is too high priced and in too great demand for stuffing for collars and other purposes. The straw is smaller than wheat straw, and not so bright in color.

Barley straw is not suitable for bedding the horse as the awns on the head may irritate the skin, and if eaten in any great quantities may cause colic.

Leaves would make a very good bed and one that is very economical. It is doubtful if farmers would very often be compelled to resort to the use of such

material, as they can usually produce bedding material of some kind. They could be used in case nothing better could be secured. They do not drain the urine away as well as we would like.

Sawdust may be used for bedding horses but it should not be employed, unless ample supplies are available as it ferments very rapidly. The sawdust should be from well-seasoned logs; if it is from green timber it will become heated as soon as it is packed into a bed and soaked with urine, and will cause an irritation of the skin. It is not an unusual sight to see animals that are bedded with sawdust, have a large, scabby surface, where they have lain with that part of the skin next the heated sawdust. If there are drains in the stable they should be stopped up, before sawdust is used, or it will wash into them and clog them. The sawdust must be removed as soon as it is soiled or wet with urine. In very hot weather if allowed to remain damp, it may become flyblown and full of maggots.

Shavings make a very good bed, where they can be secured; they do not heat as badly as sawdust, and are not so good as an absorbent. They occasionally contain some large blocks of wood, which should be removed by hand. The same precautions in handling it as in the use of sawdust, should be taken.

Sand may be used in a dry, hot climate, and where the floor is not damp; it should never be used in damp, cold climates. Care must be taken that the sand is free from all traces of salt, or the horses may eat large quantities of it, which will produce a serious, if not a fatal colic.

The practice of allowing the bedding to remain under the animal all the time, is not to be recommended. It gradually works to the rear of the animal and in a short time, we find that it is simply a damp heap; it is very unsanitary and should be condemned for this purpose.

Before using any absorbent bedding stop all the drains to prevent them being clogged. As a general practice, do not bed the animal down until he has been cleaned, and as the horse will usually stool as soon as the bed is placed under him it is well to place a small fork full of soiled bedding under it, and then remove it when the bedding down is performed for the night; this conserves bedding material.

## LIVE STOCK.

Dry, harsh hair is not a sign of thriftiness in the stock.

Receipts of stock at leading markets is considerably below the same period last year.

Do not misrepresent an animal when answering an inquiry from a prospective purchaser.

It is the production of live stock and farm crops that will give the dollar its full value.

Combing, brushing and a little trimming up greatly improves the appearance of the herd.

Some stockmen are wishing that they had sold their cattle when they were offered a good price.

Some men should be prosecuted for cruelty to animals, for the way they lend assistance in cases of difficult parturition.

Did you ever feed silage to the sheep and hogs? Give a little to the growing pigs and watch them work for the kernels of grain.

Rats are a poor class of animals to keep around the granary or stables. They cause annoyance and loss, but produce nothing of value.

If ensiling the corn the silo would not hold at regular filling time, run a good stream of water into the cutting box. If ensiled too dry corn moulds.

In order to feed economically the herdsman must know the relation of gain to the amount of concentrates fed. This entails the use of scales.

The Ontario Provincial Fair and the Toronto Fat Stock Show will be held next week. These fairs are a source of inspiration to all lovers of good stock. Plan on attending.

Everyone who looks after stock should understand something about the anatomy of an animal, and learn how to correct mal-presentation and render aid in an intelligent manner.

Straw helps fill the cattle and also supplies a certain amount of nutriment. A good deal of it can be utilized to advantage by mixing it with pulped roots or silage a few hours before feeding.

Every flockmaster and herdsman should train their eye to detect signs of distress in their animals, and also study how to render first aid. Too many fail to see anything wrong until someone points it out or the animal goes down.

Have you ever noticed how young pigs like to root in earth? It is a good plan to have sods on hand to throw into the pigs during the winter, or there is no better way of disposing of the soil brought into the root-house on turnips and mangels.

### Stockers and Feeder Trade.

The trend of the live stock market is anything but satisfactory to the man with stock to dispose of. It is generally expected that hogs will drop in price during October and November, but it was scarcely thought that they would strike the low level which they have, and no one can say but what they may go even lower. There is every evidence that there is a shortage of hogs in the country, and, according to the market reports, there were 18,000 fewer hogs on the Toronto market during October than for the same period a year ago, and the receipts for November are correspondingly low. The argument put forth for the lowering of prices is a restricted market for pork products and the high handling costs by the trade market. The drop in cattle prices has even been more sensational than with hogs. Many stockmen were two months too late in disposing of their stock, but possibly if marketing had been on a larger scale during August and September the bottom would have dropped out of it sooner than it did. We have heard of men being offered as high as twelve and a half cents for good butcher steers who held out for even higher prices but finally sold, six weeks later, at nine cents a pound. Many count themselves fortunate if they secure this fall what they paid for the stock in the spring. The live stock feeder has been enjoying a brisk market for several years, but it has now changed from a seller's to a buyer's market.

Reports from the Live Stock Markets Branch indicate that the stocker and feeder movement back to country points has been much below expectation this fall. With the abundant supply of corn and straw one would naturally expect that feeders and stockers would be in demand. This, however, does not seem to be the case. Feeders are evidently somewhat in doubt as to the future, and seem inclined to play safe, but if they have a large supply of rough feed on hand it is just a question whether or not they are playing safe in not buying up some good-quality feeders to winter over on this rough feed and then finish on grass. If

pulling their wool, and rubbing against convenient objects. If means be not taken to destroy the parasites the intensity of the irritation gradually increases as fresh supplies mature, the wool is pulled out in patches and the patients become extremely restless and unthrifty.

When the symptoms noted are first noticed a careful examination should be made, by carefully parting the wool in different places and looking for the cause. If it be ticks, little trouble is found in determining the cause, as they are easily seen, but if the cause be lice there presence is not so easily detected. The louse is the most serious pest; it multiplies more rapidly than the tick, interferes more seriously with the health and general thriftiness of the patient, and also interferes materially with the quality of the wool, as it cuts the fibre near the root.

When an examination does not reveal the presence of ticks, a close inspection should be made for either lice or scab. In a majority of cases the former will be discovered. They are of two varieties, the white and the red, and are found on sheep of all ages, but appear to flourish best on those that are in a weak, unthrifty condition. Ticks also appear to have a preference for the weaker members of the flock, and especially for the lambs.

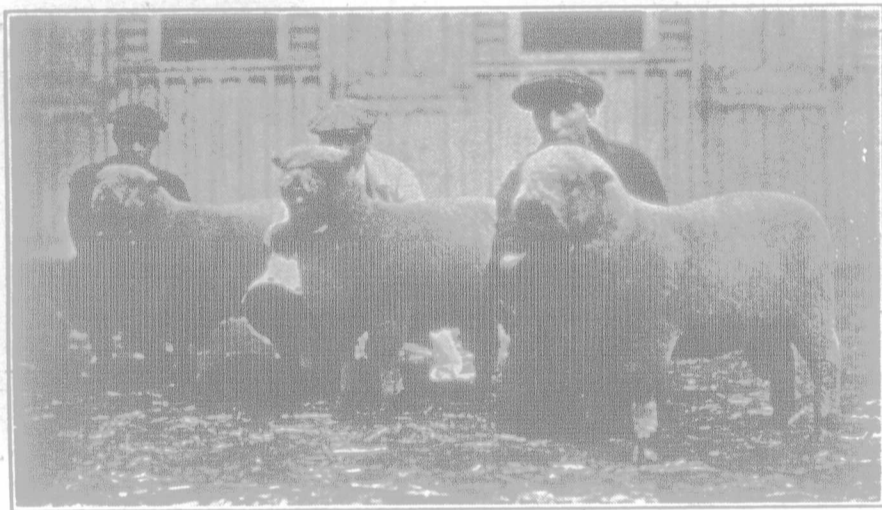
Treatment.—Treatment is not difficult, hence there is no reason why loss caused by their presence should be serious. There are many different preparations recommended; there are many commercial "sheep dips" on the market, each package being accompanied by direction for use. Any of these are effective, and as in order to be effective it must contain a percentage of ingredients that are poisonous, hence it is probable that the use of one of them is safer for the ordinary owner than one put up by himself, in which a mistake may be made, and sufficient poison to do damage be present.

Where a large number of sheep require treatment it is profitable to have a vat or tank made that will hold sufficient fluid to permit of a sheep being stood in it and the whole fleece thoroughly saturated to the skin and kept in this state for two or three minutes, after which it should be moved to a platform and allowed to drip, and the wool lightly pressed, in order

chiefly affected, but older animals are not immune, especially the weaker ones. Strong, healthy sheep, in most cases, appear to have sufficient resistive power to cast off the infection. The trouble is usually noted in the spring, but in wet seasons may be seen at any time.

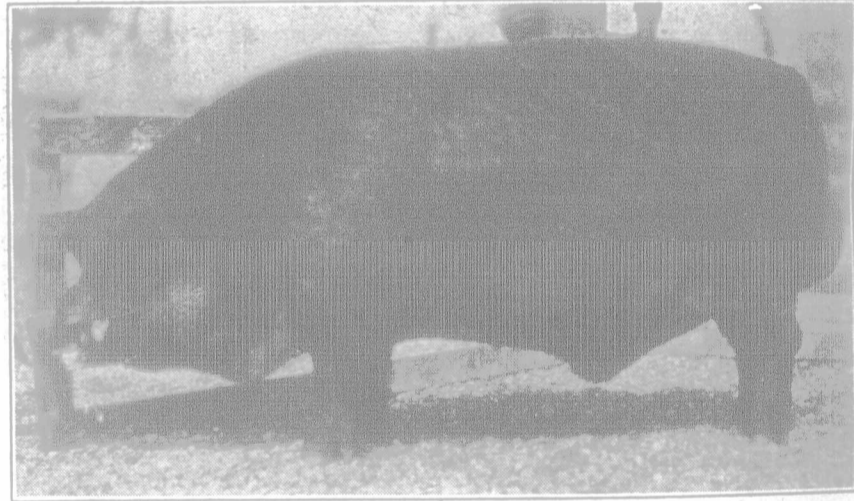
Symptoms.—The symptoms in general are those of a chronic stomachic and intestinal catarrh, causing emaciation, anemia and death. The affected animals are noticed hanging back from the rest of the flock, are weak, thin and progress with a staggering gait. A cold, oedematous swelling frequently develops on the lower jaw and the skin and mucous membranes become pale, the former resembling parchment. They show a decided loss of flesh, the appetite is poor, a dullness and languor are noticeable and the head hangs low; the wool becomes dry and harsh; diarrhoea is generally more or less constant and thirst usually abnormal; the general appearance of the animal is aemic. Some of those infected will withstand the trouble for a considerable length of time, while others succumb in a short period. Sheep in vigorous condition, although they may be affected, may not show any symptoms to lead to suspicion, but lambs and weak, unthrifty, older animals when attacked usually go down rapidly. In most cases a post mortem reveals the presence of a considerable quantity of a darkish fluid in the fourth stomach. In this fluid will be found a variable number of reddish colored, hair-like worms about an inch long.

Treatment.—Prevention, of course, is the best remedy. It consists in keeping the flock in a good, healthy condition during the months in which they are housed. The sheep should be supplied with plenty of nutriment and succulent food, and have free access to salt at all seasons. Winter quarters should be comfortable and thoroughly dry, excluded from drafts, but not close. Free access to air must be provided, but openings should be so arranged that any drafts that may occur will be well above the sheep, and rain and snow must be excluded. These precautions tend to keep the sheep strong and vigorous, and their digestion organs in good condition, in which cases the young produced should also be vigorous, hence fortified to withstand or avoid attacks.



A Trio of Shropshire Rams.

Shown at Toronto by J. D. Larkin, Queenston, Ont.



Duroc Jersey Boar.

Champion at Toronto for Ed McParrill & Sons, Essex, O. t.

there is a very great reduction in the amount of stock wintered over or fed for the spring market, the shortage of supply next spring would naturally tend to increase the price, and the man who fed the cattle would at least get a good price for the rough feed which he utilized. There is no use prophesying as to what the market will be in the future, as, owing to the unsettled condition of things not only in America but throughout Europe, it is impossible to say what the prices may be a few months hence. This much is certain, however, the man who produces a large bulk of rough feed on the farm and markets it through live stock comes out all right in the end. He may lose one year, but in the majority of cases he comes out all right, and his farm is steadily increasing in fertility, which enables him to produce still larger crops. Where little live stock is kept the soil becomes impoverished and the bank account dwindles. Live stock is the keystone of Canadian agriculture.

### Some Parasites That Attack Sheep.

All sheep-raisers are aware that their flocks are liable to suffer from attacks of parasites of different kinds, some of which operate externally and others internally. Either form causes more or less uneasiness and misery, interfere in a greater or less degree with thriftiness and reproduction, hence interfere materially with the pleasure and profit of the industry.

While a large percentage of those engaged in the enterprise are familiar with the symptoms and treatment of such attacks, there are many who are not, as is evidenced by inquiries received re treatment, both preventive and curative, hence a consideration of some of the common forms of parasites that attack sheep may be of some value.

#### TICKS AND LICE.

Ticks and lice are probably more frequently met with than any other forms, and the symptoms are so easily recognized that there is little difficulty in diagnosing. As they directly attack the skin their presence is suspected in the early stages of an attack by the animals exhibiting uneasiness and irritation by biting and

that too much fluid be not allowed to remain. The platform, of course, should be arranged so that the fluid or drip will be returned to the vat, and a sufficient amount of fresh fluid should be added to the tank to keep up the required quantity, and that added should be sufficiently hot to keep the whole warm.

Where only a few individuals are to be treated it will probably be cheaper to treat each by hand, by parting the wool in many places and pouring a little fluid in and working with the fingers so that no parts will escape saturation.

It is generally considered necessary to dip at least twice each year, once in the spring after shearing, and again just before or just after being placed in winter quarters.

In many cases it is wise to give a second treatment in about two weeks after the first, as the dipping does not destroy the fibrous covering of the knits or eggs that are present, and these will hatch out in the meantime. Should conditions arise that necessitate treating sheep for ticks or lice in quite cold weather, it is necessary to provide warm quarters for the flock until they become thoroughly dry. If this cannot be done for the flock, some arrangement can be made to accommodate a few at a time, and the whole flock treated in detachment.

#### STOMACH WORMS.

While several varieties of round worms affect the sheep, the principal one is the round worm technically known as *strongylus contortus* or twisted palisade worm. This parasite is a brownish colored thread-like worm.

These worms deposit very minute eggs in the stomach. These are excreted in the droppings and hatch out in a comparatively low temperature, probably as low as 40 degrees Fahr. The favorite hatching place is in pools of stagnant water. The freshly-hatched worms take up a temporary lodging place on leaves or the stems of grass, are eaten by the sheep and reach maturity in about three weeks.

It is probable that infection takes place principally around shade trees where the animals gather during the heat of the day, but infection may take place on the general pasture or even in the fold. Lambs are

Pastures known to be infected should be cultivated, but, at all events the sheep should not be allowed on them. Where it is necessary to allow sheep on pasture where suspicion of infection exists, if possible they should be changed to other ground every two weeks. In this way trouble may be avoided, as it requires at least two weeks for the eggs to hatch, and the scheme tends to prevent the flock feeding over infected areas, and prevents re-infection.

Curative treatment is usually reasonably effective when given before the patients have become too weak, all suspicious cases should be placed in a separate enclosure. The remainder of the flock should be placed on a dry, well-drained pasture in which there are no pools or stagnant water. There are many satisfactory remedies—gasoline, oil of turpentine, sulphate of copper, etc.—all give good results.

Those to be treated should be fasted for about 24 hours, but should be allowed free access to water. If either gasoline or oil of turpentine is to be used (many prefer the former)  $\frac{1}{2}$  oz. (a tablespoonful) of it mixed with an equal quantity of raw linseed oil, and this mixed with 4 oz. fresh cow's milk makes a dose for an ordinary-sized lamb, for aged sheep twice this much should be given. The treatment should be repeated for three evenings in succession, allowing food a few hours after giving the medicine. If considered necessary, treatment may be repeated in about 10 days.

If sulphate of copper (blue-stone) be used, a pound should be pulverized and dissolved in a gallon of water. Of this  $\frac{1}{2}$  to 1 oz. is the dose for lambs, 2 to 3 ozs. for sheep. If necessary repeat the dose in 8 to 10 days.

WHIP.

It is dangerous to use a broom handle or whip stock to loosen a piece of turnip that has become lodged in a cow's throat. Many a good animal has been sacrificed on the altar of ignorance by having her esophagus punctured by using the above-mentioned tools. If an animal is choking and you cannot dislodge the substance with the hand and no probang is available, call in the veterinarian.



### Rearing the Litter.

There is no question about the fact that the sow's milk is the main and most proper nourishment for the young pigs, and for at least a couple of weeks from birth little or no other food is needed. It is, therefore, apparent that the condition and progress of the youngsters depends on the health and practical care and feeding of the sow during that period; but we must not stop here, for right up to weaning time the milk must be of the right quality to aid in sustaining the progressive development of them. The sow's milk is the natural provision for the sustenance of the piglings, and is consequently the best fluid food for them; it is therefore obvious how essential the good condition of the sow is to the interests and well-being of the fare. Get the sow down in condition, weak and low in health, and the supply of milk lessens and deteriorates in quality, with the result that the litter comes to a standstill, aye, in not a few cases, numbers of, if not the whole of, the litter seem to recede and contract rather than make any progress.

It is well, of course, to furnish some suitable food to the youngsters as soon as they show a healthy desire to be eating something, but it must be remembered that such feeding should be of a supplementary nature rather than to substitute the milk supply from an ill-cared for sow.

It is generally under normal circumstances that the youngsters show a decided desire to be eating when about a fortnight old; but if the sow is well charged with milk, and otherwise in good fettle, I would not recommend a too fulsome supply of slop food for them. A little small corn scattered thinly on a clean bottom for them to pick up and chew at will comprises occupation, nourishment and good exercise for the jaws, and is food that eventually reaches the stomach in a far better regulated manner than does slop food gulped down in irregular quantities, which frequently promotes pot-bellies, whereas the more solid method of supplementary feeding, where an abundant supply of milk is forthcoming from the sow, tends to the retention of the original compact symmetry of the animal, which is a distinct advantage to its welfare, progress and commercial value right to the end of the chapter.

One cannot fail to notice that young pigs, even at a very early age, are desirous of eating something of an earthy nature. They are able to readily secure what they really need and is beneficial to them in this direction where considerable roaming space is available to them; but it is where circumstances demand that the sow and her fare be kept in somewhat close quarters, or under very considerable artificial reservation that the youngsters will accept the most available substitute, which is often far from good for them in that it is dry filth found in nooks and corners about the sty, accumulations engendered as a result of laxity in the "mucking" out operation. What they really require is a little sound earth to nose about and chew.

We cannot well allow the trouble of teat biting and tearing by the youngsters when fighting amongst themselves while sucking the sow or struggling for the last drop of a spare supply to pass without comment. Now, it must be allowed that there is nothing in the natural or mutual order of things comprising the nurture of the sow's offspring that should impel the regular practice, as carried out by some pig breeders, of clipping off the youngsters' teeth. Domestication cannot be charged with having aided and abetted any abnormal growth of these sucking teeth. Rather the other way about. I have seldom found that the well-nourished sow with a

fulsome supply of milk suffers from bitten and torn teats; but for all that, I know that it does happen, and it certainly does to a very great extent tend to the breaking up of the happy home. The sow becomes savage and snappish, and as a result of a nip of an already jagged teat the meal is cut short before the youngsters have had a fill, and in a struggle for a further supply the teats continue to get badly mauled. Whilst allowing for extreme cases, I would commend the adoption of the all-round practice of clipping the teeth. There is a big drain indeed on the sow with a big fare of robust pigs, and if she is to make a sound job of bringing them up she must have the very best of feeding and general management.

Roots and vegetables are good for the sow and litter when supplied in such quantities as shall have only a gentle alterative effect on the whole family. Too much, however, of this class of fare, when discussed by the youngsters at a very early age, aids and abets the pot-bellied condition, and promotes shivers and a staring coat, which never spells progress. A very great mistake



Two Steers at the End of the Grazing Season.  
The worst and best out of a lot of thirty on a Middlesex farm.

frequently discernible when observing the various methods of feeding sows with fares depending on them is that the supplementary dietary which would be an excellent edible as a supplement has to take the place of a main feed, whilst that which should be dealt out liberally as a suitable main food is very meanly handled indeed.—Live Stock Journal.

### Purchasing Feeders.

Owing to following diversified methods of farming some have young cattle to sell each fall, while others find it necessary to purchase. The type, weight, age, etc., of the animals purchased have a great bearing on the profits obtained. Whether the market is strong or weak at time of selling the thick, blocky, low-set, nice quality steer or heifer will make greater returns to its owner than the leggy, narrow-bodied individual. The former kind will cost considerably more than the latter but they will also sell for more, when finished for market. Select the right kind of feeder and buy right. Some men can size up an animal much more accurately than others and know at a glance what the animal is worth to them. The man who is not too sure of his ability to size up an animal had better buy by weight rather than by the dollar; it is fairer for both parties.

When there is a large quantity of roughage to be utilized some prefer buying growthy cattle weighing nine or ten hundred pounds, winter them as cheaply as possible and fatten them on grass. Others, who make a practice of finishing their cattle in the stable buy the ten or eleven-hundred-pound steer carrying a fair degree of flesh. In the latter case grain is fed and the gains in

weight must be fairly good. A spread of one-and-a-half or two cents with a good doing steer pays the feeder fairly well. Judging by reports there are many good feeders in some localities that can be purchased. Each one knows best the weight and age of feeder or stocker which best suits his system of farming, but if buying try and get the kind that are recognized as good doers even if they do cost a few dollars more than the commoner lots.

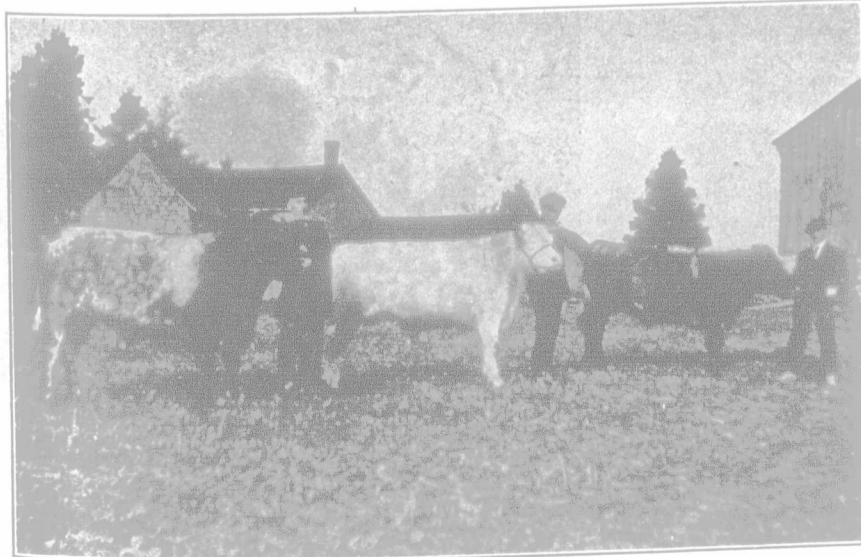
### Salt and Mineral Matter for Hogs.

It is important for the development of the animal frame that there be a certain quantity of mineral matter in the ration. Certain mineral substances are taken up by plants from the soil, and when fed to stock furnish the needed material to build up the body frame. Some feeds are richer in certain minerals than others. Thus when compounding a ration it is advisable to take into account the mineral content for it is found in all the vital parts of the body. For instance, the bone is largely composed of lime, phosphorus is found in considerable quantities in the cells. Iron is essential in the blood. The common feeding stuffs all contain mineral salts, but as a rule the roughages especially legumes are richer in this material than the grains. The nature of the soil will influence the mineral content of the crops grown. Any growing animal that fails to obtain sufficient mineral matter does not develop normally. For instance, if lime is lacking the bone will be porous and brittle. If the feeds lack lime it may be furnished by feeding ground limestone, ground bone, wood ashes, etc. Too often the rations fed growing pigs do not contain enough lime for thrifty growth of body and tissues. Henry and Morrison relate the following experiment in their book on Feeds and Feeding. "One lot of growing pigs were fed wheat bran from which most of the phosphorus had been removed by washing, together with wheat gluten and rice, both of which feeds are extremely poor in mineral matter. Other lots were fed the same ration plus ground rock phosphate or bone ash which supplied ample calcium and phosphorus. For a considerable time all the pigs did well, but as time went on those fed the ration poor in mineral matter fell behind the others. They had no appetite and disliked to stand up; later they lost control of their hind quarters, and had to be carried to the trough at feeding time. When the pigs were slaughtered it was found that those fed insufficient phosphorus had light, weak bones, while those receiving ground rock phosphate or bone ash had strong, heavy bone." When pigs are fed heavily on corn the lime supply is usually low. The cereals, brans, oil-cake and slaughter house waste generally contains plenty of mineral matter.

Pigs kept in confinement may show a craving for some substance. This is very often due to a deficiency of mineral matter in the ration. It is a good plan to mix such materials as charcoal, air-slaked lime or ground limestone, wood ashes, bone meal, copperas and salt, and keep the mixture before the hogs.

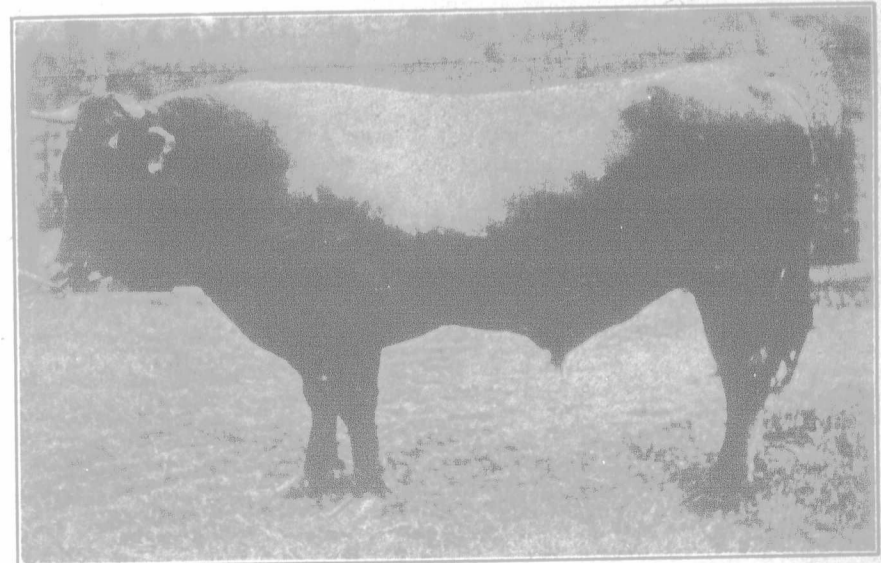
Hogs require less salt than other farm animals, but they need a regular supply. Experiments cited by Henry and Morrison show that pigs having free access to salt made better gains than those not receiving salt or getting it in very small quantities. Salt adds to the palatability of many feeds, aids in stimulating the digestive glands and possibly improves the appetite.

Why is the demand for dairy products so great in Great Britain? This is practically answered by the fact that although the human population of Great Britain rose from 26,000,000 in 1871 to 41,000,000 in 1914 the cow population rose from a little over 2,000,000 in 1871 to under 3,000,000 in 1914. In other words the population increased 40 per cent. for cows and 60 per cent. for consumers of milk and dairy products. The natural result of this unequal increase was that the total quantity of dairy produce imported rose from 250,000,000 pounds in 1871 to 850,000,000 pounds in 1914, while the value of such imports amounted to £38,000,000 in 1914 when war broke out. Much of this produce, too, is imported from Denmark and Holland where natural advantages for dairying are said to be inferior to those possessed by many parts of Britain. A large industrial population seems, in short, to be the answer.



Three Grade Steers of Show Caliber.

Twenty-one cents a pound was offered Jas. McPherson & Sons, of Grey County, for these steers in August.



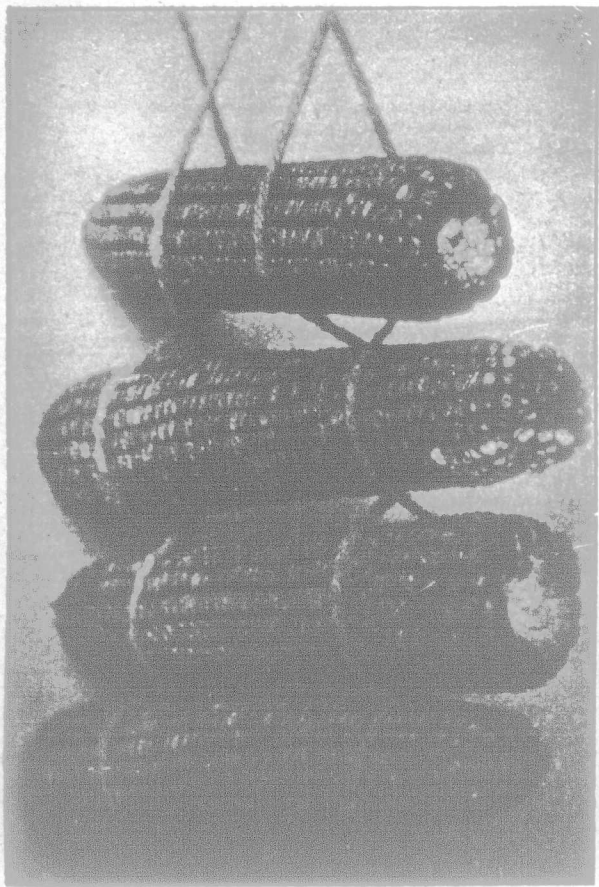
King Albert.

The Brown Swiss bull at the head of J. W. Laidlaw's herd, Wilton Grove, Ont.

## THE FARM.

### Selecting and Storing Seed Corn.

In many sections of Ontario corn matured fairly well this year, and there was a large amount of ripened corn put in the silo. Many went through their crop before ensiling and picked out sufficient good ears to plant for next season's crop. By growing seed on the home farm one is sure to have it acclimatized, and they know the kind of stalk that produced the ear. In other words, it gives them an opportunity to select a certain type which they have fixed in their minds as an ideal. There



String Method of Handling Seed Corn.

is possibly more corn in the corn-cribs throughout Western Ontario this year than usual. From the corn-crib some choice seed corn may be selected, although one does not have the opportunity of considering the size or height of stalk, nor the position of the ear on the stalk. There is still room, however, to exercise judgment as to the length of ears, circumference, regularity of rows, depth of kernel, color, etc. One may be able to husk enough good seed corn from the stooks standing in the field, or may pick it out of the corn-crib, to do for the 1921 planting. It is advisable to select plenty of seed, as when planting time comes some of the ears chosen will not meet with approval. A bushel of corn on the ear will shell, sufficient to plant two to five acres, according to the rate of seeding and whether planting in hills or drills. The small ears of any variety are not to be recommended, and the big, rough, coarse ears are undesirable. With the dents, an ear from seven and a half to nine and a half inches in length and from five and a half to seven and a half inches in circumference is recognized as being a good size of ear to select. The rows of kernels on the cob should be regular, with the same number at the tip as at the butt. The regular rows mean more corn, and, as with other crops, like tends to produce like. Thus the necessity of selecting the type of seed that you would like to have produced. Then, too, the kernels should be fairly uniform throughout. The kernels are more or less wedge-shaped, and one likes to see them of good depth. It doesn't matter whether the kernels are for seed or feed; the greater the depth the larger the production of feed. The shoe-peg type and the kernels that are very wide with rounded edges are undesirable. The width of the kernel should be carried well up to a square shoulder, and the point should be plump. Some of the features mentioned indicate strength and vitality in the kernel, which are essential to a good crop.

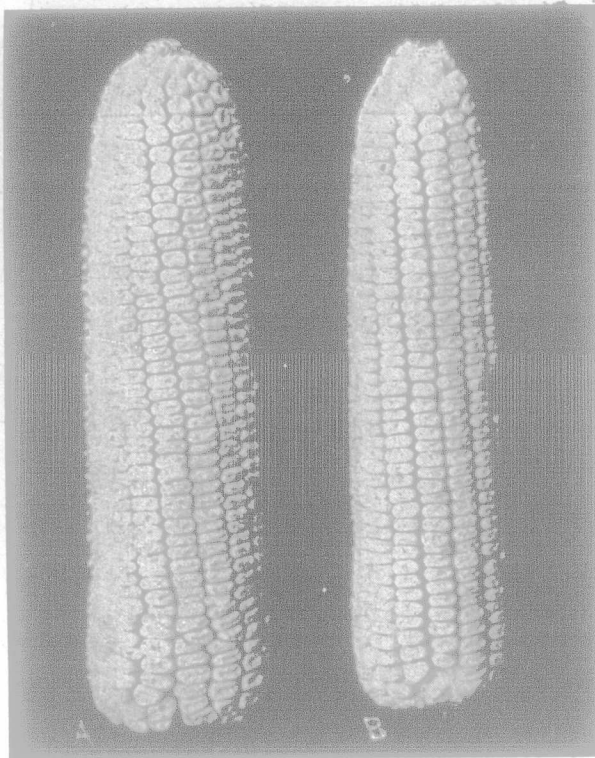
It is advisable to grow corn suitable to the locality. The big, coarse varieties are usually the heaviest yielders both of fodder and grain, but if they do not mature in your locality they lose a portion of their value. In Northern districts, where it is somewhat difficult to get a variety to mature in the short growing season, it is advisable to save home-grown corn for seed, if by chance it should mature sufficiently. The crop would be more likely to mature earlier the following year than if grown from imported seed. Those who have corn in the crib could pick out their ideal ears as they are feeding out the corn during the season and lay these aside for seed purposes. There is the danger, however, that unless the corn is dry when it goes into the crib there may be a tendency to heating, which would weaken or destroy the germ. Seed corn must be kept dry.

Some select a particularly good sample of corn from every view point, but when it is sown it does not give a good stand. The corn has deteriorated in storage. It may have contained a little too much moisture when

exposed to low temperature. Moisture in the kernels does the damage, but, if the kernel is dry and kept dry the corn will not be injured by frost. It is possible that the corn may absorb sufficient moisture to cause it to be injured during zero weather, unless it is placed in a fairly dry building. For all the seed a person needs on the average farm, very little space is required to store it during the winter. Driving nails into a board and impaling the corn on these is a very good method. The string method for hanging up corn is also good and can be utilized to advantage when the corn is stored in the garret, granary or loft of the barn. The ears should not be allowed to touch each other. The corn impaled on the nails can be suspended from the rafters or joists just as well as that tied with string. Nails can be driven through the board on each side for the corn, or if finishing nails are used they do not need to be driven all the way through, as the heads are small enough to stick the corn on. When using the string method, two strings paralleling each other are placed about three inches apart and a cob of corn placed in the centre. The two ends of each string are then brought over the top of the cob and another ear of corn is placed in the crotch thus made. This goes on for the full length of the string and then the bundle is tied to a rafter or overhead beam.

Mice and rats are very partial to corn, and if it is within reach they will find it. It is very disconcerting to hunt up the boxes of selected corn in the spring and find that the mice have taken a portion of the best part of the kernels. The two methods described above for taking care of the seed corn keep it out of the reach of rodents. While there are different ways of preserving seed corn, the principle is the same in every case. Have the corn dry when it is put in storage; keep it dry, and have it where rodents cannot molest it.

Weak germination in the spring is very often due to the kernels containing too much moisture when stored in the fall, or to being immature when husked



Large and Small Types of Dent Corn.

The seed saved should be tested for germination before planting. For a high germination test the corn must be matured, well dried, and kept dry.

### Save the Wood-Lot.

EDITOR "THE FARMER'S ADVOCATE":

Fortunate indeed, is the man who owns a wood-lot. When fuel is so high in price and hard to get at any price. It behooves us to look after what is left to us of our forests. Many farms with wood-lots on them are changing hands but no sooner does the new owner get possession than he turns around and sells the entire wood-lot to a mill owner. A law should be passed to prevent such an occurrence. In the district where the writer lives, many of the maples are dying off. This, no doubt, is due to drought. If the live stock were kept out of the woods entirely for a number of years, the seedlings would have a chance to grow up. In such cases the land should not be taxed. Many counties in Old Ontario are accepting the Government's reforestation plan by which a township or county provides the land and the Government will plant the trees and look after them for forty years, when they will be turned back to the municipality. We are appreciating, perhaps, just before it is too late, the importance of saving, at least, a portion of our forests. Not all of us yet realize that while a tree may grow in a generation or two, a forest will not spring up again perhaps for hundreds of years on soils thoroughly denuded and washed away.

The grandeur of the forest as it once was is hard to realize. To the early pioneers, its wealth of timber was a curse as well as a blessing. To cut or burn the trees off the land, to draw out the stumps, and to clear the fields for planting was the labor of months or even years; but the settlers accomplished it. Acres of the tallest timber went roaring up the broad old-time fire-places

in winter, and the rest was hewn or sawed into lumber. As the forests grew thinner, timber ceased to be an incumbrance, and the word lumber was first applied, possibly, because the woods "lumbered up the land," came to be a commercial term, and to stand for a commodity of rising value. The smaller the amount of timber standing the better was the price it brought, and the swifter, in consequence, was the disappearance of what remained. The merchantable wood was swept off from county after county. Many regions once celebrated for their forests are bare to-day, while modern lumbering is running through our remaining tree-clad areas as fast as the fires of old. Many a farmer, who formerly burned his own wood, now depends on the railroad for coal. In our cities, builders are hampered in their operations because the price of lumber is so high and the cessation of building raises rents. Alternate droughts and floods occur in devastated regions where once the forests acted as natural reservoirs that equalized the flow of the streams and rivers. The laws of nature cannot be violated with impunity. She gave the forests as mediums of natural irrigation. If we destroy the means we lose in the end. The law is inexorable. Men now see the trickling rills where in their boyhood they saw full brimming streams. And they also see bare sun-scathed hillsides where they saw dense primeval forests. It is cause and effect nothing more. But should not rational men learn the lesson? Perth County, Ontario. JOHN DAVIDSON.

### Seasonal Jobs Around the Farm.

At time of writing the weather has set in mild and farmers the Province over are utilizing every minute to get a little more plowing done. Reports indicate that there is less plowing done to date than usual, and unless the weather stays open for a few weeks this will have a considerable bearing on next year's crops. In many sections spring plowing does not give as good yields as fall plowing, unless the season should be moist. Every day's plowing this fall not only tends to insure a larger crop for next year; but it leaves a day to the good for spring seeding.

There is still time to look after the drains and outlets. It seems customary to allow this work to go till the very last and sometimes it is neglected. The drainage-system cannot give the best results unless the outlet is kept clean. Then, too, if the water cannot get away freely there is danger of sediment lodging in the tile, thus lessening their efficiency. Take a shovel or spade and look over the outlets.

When it freezes up it is a good time to put a light dressing of manure on the meadow. Quite a few have done this in the past with beneficial results. Last year, at Weldwood, ten acres were top dressed at nine loads to the acre, and this field gave nearly double the yield obtained on the other meadows. To a large extent this is attributable to top dressing. We have found that this sprinkling of manure not only increases the hay crop but it leaves the soil in good condition for wheat or other crops the following year. Putting all the manure on the corn and roots is not the best practice. A high dressing applied frequently gives better returns in the long run than a heavy coat of manure put on at longer intervals.



Corn Impaled on Nails.

sawed into lumber. ceased to be an in- was first applied, red up the land," o stand for a com- ller the amount- as the price it ence, was the dis- merchantable wood county. Many ts are bare to-day, ough our remaining of old. Many a wood, now depends ities, builders are the price of lumber ing raises rents. in devastated natural reservoirs and rivers. The ith impunity. She ual irrigation. If end. The law is ing rills where in ng streams. And es where they saw and effect nothing earn the lesson? N DAVIDSON.

**the Farm.**

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ails.

Gates left on their hinges are very often sprung by the weight of snow. This applies to both wooden and wire gates. It is good practice to take the gates off and store them in the driving shed or barn, or else stand them up straight against the fence so that the fence will take a portion of the weight of snow off the gate.

It does not take mold-boards and plow shares very long to rust, and anyone who has used the plow knows how annoying it is to use one that does not clean properly. It is particularly hard to get them to clean when one uses them in loose soil in the spring. A good deal of trouble will be saved if the mold-boards and shares are given a good coating of grease or oil when put away in the fall. Most of us know that this is a good practice, but comparatively few put it into effect.

If room is available put the implements under cover. The elements are really harder on them than the actual work during the season. If there is no regular implement shed, a good many of the implements can be packed away in the barn after the threshing is done. In several barns we have been in we have noticed that one of the back bents has been used for storing implements at any time. From eight to ten-foot posts are put in to hold some poles or joists, and on these are laid loose boards. The hay and straw can then be put on top and there is room underneath to store any implements outside of the hay-loader. It is a good plan to go over the implements and give them a thorough cleaning and note what repairs are needed.

Boards and sticks have an uncanny way of collecting around the buildings and yard. These may be picked up now and any that may be useful put away for future use and the rest broken up for firewood. Once the frost tightens the ground, boards and sticks left lying around are there until spring.

In seasons of considerable snowfall, it is not unusual for the mice to girdle the young trees in the orchard. Fine wire netting or building paper wrapped around the trees helps to protect them. Do not wait until the snow comes to do this work. Banking the trees to a height of fifteen or eighteen inches sometimes affords protection.

There should be roses and perennials grown around every farm home. Some of these are not hardy enough to withstand a rigid winter. Some of these may be laid on the ground and covered with straw, while those which do not lend themselves to bending may be wrapped with burlap or sacking. If straw is used along with the burlap it will afford considerably more protection.

The putting on of storm windows and doors is generally left until the temperature is near zero, and then one nearly freezes when doing this work. Why not make an effort to put them on on a fairly mild day? The work can then be done with a great deal more comfort than if a forty-mile gale were blowing.

**THE DAIRY**

**Dairy Notes From all Over.**

The skimming of whey and the manufacture of whey butter are important economies now in the cheese industry. This is evidenced by the fact that in Wisconsin, the leading dairy state of the United States, 4,500,000 pounds of whey butter were manufactured in 1919, at a conservative valuation of \$2,000,000.

Every step taken to improve the quality of dairy products is either directly or indirectly a step for the benefit of producers. The earnest effort of all interested in the dairy industry is necessary to put the dairy industry on a high plane of quality and quantity.

It is estimated that the quantity of creamery butter that will be produced in the Province of Saskatchewan in 1920 will be 7,000,000 pounds. The production in 1919 was 6,622,000 pounds.

The tendency toward larger centralized creameries is illustrated by the fact that in Minnesota in 1919 the production of butter was 130,785,598 pounds from 714 creameries as compared with 124,816,084 pounds produced in 752 creameries in 1918.

The Auckland district in New Zealand is considered one of the best dairy districts in the world and from 1910 to 1920 the production of butter has been increased from 6,510 tons to 12,294 tons, while the production of cheese has increased from 515 tons to 11,774 tons.

As evidence of the superior place that silage now holds as a dairy feed as compared with twenty years ago the following is asserted to be a clause in a contract signed by a New York milk producer in Sept. 1896, with the Anglo-Swiss Condensed Milk Company: "The producer agrees not to feed his milch cows or dry cows wholly or partly on turnips, cabbages, brewer's grains or starch grains in any form, ensilage, sour feed of any kind, rancid oil-cake, sprouts, or any other substance which might taint or in any way deteriorate the quality of the milk; and the possession of any of these feeds shall be accepted as evidence that they are being fed to the cows."

For pure, unadulterated foolishness the following clause of a contract signed by some Pennsylvania dairymen with a condensed milk company, takes the cake. The clause reads: "The said party of the first part (the producer) agrees to sell and deliver as above all the milk until January 9, 1921 for the ruling price per hundred pounds as fixed by the party of the second part (the milk dealer) and published." This is something like hiring out one's self and family for a year without stipulating anything as regards wages.

**Nichols' Sale of Jerseys.**

On Wednesday, November 24, a sale of 27 registered Jerseys was held in Woodstock, and brought a total of \$2,940. They were the property of Ira Nichols, Burgessville, Ontario, and consisted for the most part of cows from three to eight years of age. Included among the lot were eight animals calved in 1920, and four calved in 1919. The attendance was not very large and large buyers were not well represented. It will be noticed from the accompanying list of animals which sold for \$100 or over that prices were not high. This was due partly to the small attendance and partly to the fact that the animals were more or less under-sized, probably as a result of having been bred too young. The following is a list of sales for \$100 or over:

Daisy John Reid, Tara, Ont.	\$130
Agatha's Leone—H. A. Bishop, Norwich, Ont.	125
Bell's Raleigh Fairy — Carswell and Sons, Thamesville, Ont.	175
Model Sultanne—H. D. Vance, Thamesville, Ont.	105
Mabel's Poet's Snowdrop — John Reid, Tara, Ont.	310
Snowdrop 2nd — Harry Cockshutt, Brantford, Ont.	260
Rioter's Polly Anna—R. & H. Baird, New Hamburg, Ont.	155
Premier's Polly—H. Cockshutt	110
Oxford Silver Bell—W. Otto, New Hamburg, Ont.	125
Maple Lea Noble Sue—Wm. Curry, Woodstock, Ont.	165
Maple Lea Pearl—Arthur Simpson, Atwood, Ont.	185
Majesty Madge Oxford — John Rainsburg, Petrolia, Ont.	180



**Veneer.**

First priz: two-year-old Jersey heifer for R. J. Fleming, Pickering Farms, Whitby, Ontario.

**Burford Plant of C. M. P. to Resume Operations.**

A letter sent to patrons of the Canadian Milk Products, Limited, in the vicinity of Burford and New Durham, announces that if a sufficient daily quantity of milk can be secured to operate the plant economically the Company's milk powder plant at Burford will begin operations on Monday, November 29. The following is quoted from the letter sent out to the patrons by the Company under date of November 23.

"We are assured of a market for a high quality powdered whole milk in quantities that warrant the resumption of operations at least at one plant. We thoroughly believe that a resumption of operations at Burford will not be temporary but will be permanent. We feel that we are warranted in giving you assurance to that effect.

"In furnishing our product in this market there are, however, certain conditions in regard to quality, not only of the finished product, but of the whole milk from which our product is made, which must be met. This product is eventually to be sold in small packages to household consumers, and will be used in large measure for infant feeding.

"Beginning Monday, November 29, and until further notice we will pay for whole milk delivered at our receiving station at New Durham, \$2.75 per hundred pounds of milk testing 3.5 per cent. butter-fat, with the usual addition or deduction of 3 cents per each 1/10 of 1 per cent. of fat over or under 3.5 per cent. We will pay an additional 15 cents per hundred or \$2.90 for 3.5 milk delivered direct to our plant at Burford.

"This offer is contingent upon receiving at Burford and New Durham a sufficient quantity of milk daily to run the plant economically. Moreover, it would be impossible to operate the plant partially upon whole milk and partially upon a butter basis with the skim-milk returned, and, therefore, we shall be obliged to discontinue handling milk or cream on a butter basis. We realize that many patrons during the past two months have purchased stock to which they feed returned skim, and that it would inconvenience them materially to have

their skim supply suddenly cut off. We, therefore, offer 3rd. grade skim-milk powder at 4 cents per pound (equivalent to 34 cents per hundred for liquid skim-milk) to be used for feeding such stock."

**Farm-Grown Grains for Dairy Cattle.**

While the economy of the dairy cow rests largely upon her marvellous use of roughages, such as hay, roots and silage, it is recognized by every progressive dairyman that a sufficient proportion of concentrated feeds is necessary for maximum economy in milk production. The reason for this is that milk is a food that is high in protein, and therefore some feeds must be fed which will supply this protein as economically as possible. It is good economy to use farm-grown grains wherever possible, although these can often be supplemented with still further profit to the owner by concentrated feeds such as gluten feed, bran, oil cake and cotton-seed meal.

Among farm-grown grains in Eastern Canada, oats occupy a very strong position, owing to the large quantity of this crop which is produced annually. Oats are suitable as a feed for dairy cattle of all ages, but are perhaps more valuable as a growing feed than as a feed for milk production. Nevertheless, oats contain a larger proportion of protein than any other farm-grown grain except peas, while the larger proportion of hull which they contain, in comparison with other grains, adds bulk to the feed and takes away that heaviness which is not desirable in a feed for milk production. Moreover, oats are very palatable to all classes of live stock, and for these reasons no other single grain is so satisfactory or can be used with equal

safety with live stock of all classes. The Wisconsin Agricultural Experiment Station reports experiments which show that oats produce ten per cent. more milk and fat than an equal weight of bran, when fed with clover hay and corn fodder as roughage. Bran, however, contains a larger amount of digestible protein than oats, for which reason the bran would be more valuable as a concentrate if it were to be fed in conjunction with timothy hay and corn fodder, since timothy hay is a low-protein, non-milky feed. From the Massachusetts Station comes a report that 4.5 pounds of oats was equal to the same weight of cornmeal for milk production, when the oats were fed with 3.2 pounds of bran and 14.5 pounds of mixed hay.

One of the reasons why oats are suitable for growing calves and young cattle is the fact that this grain combines a good protein content with a considerable amount of ash, both of which are essential for the production of muscle and bone. In addition to these valuable ingredients, the lightness of oats as a ground feed adds to its digestibility. Bulletin 253, of the Ontario Agricultural College, states that during the time the calf is under seven or eight months of age whole oats give equal satisfaction with ground oats, but that after this age the ground oats are preferable for the reason that mastication is not so thorough. At the Iowa Experiment Station it was found that 1 1/2 pounds of oatmeal, when fed along with skim-milk, made as large and cheaper gain than 1.2 pounds of linseed meal, or 1.2 pounds of cornmeal, and .1 pound of flaxseed, when fed to calves over two months old. The feeding value of oats usually warrants its use at a fairly high price, especially for growing animals, but because the demand is very great for oats as horse feed and for oatmeal, it may occasionally be unprofitable to use oats for milk production. Under these circumstances, oil meal and cottonseed meal may provide protein more cheaply, while gluten feed or brewers' grains can be used to add lightness and bulk to the ration.

Corn is not a high-protein feed, although its carbohydrates and fat are present in considerable quantity and are easily digested. While quite palatable for live stock and easily eaten, it is not advisable to use corn as more than half of the grain ration because of its heavy nature and low-protein content. Bran or oats will lighten up a grain ration in which corn is used, and will give greater bulk for the same weight of feed. Thus, at the Maryland Experiment Station it was found that cows gave 33 per cent. more milk and 45 per cent. more butter in one year when the ration consisted of wheat, bran, gluten feed and corn, than when the grain ration consisted merely of cornmeal in the same quantity. Similarly, corn may be fed heavier where high-protein roughages, such as clover hay or alfalfa are fed than where timothy is used. For this reason corn, when used for milk production, has its greatest value when fed along with bulky, protein concentrates, such as bran and oats, and the high-protein roughages such as clover and alfalfa hay. Sometimes corn and cob mea

is fed, which is secured by grinding up both the kernels and the cob. In this case the cob adds bulk and lightness to the meal, which is, therefore, a more satisfactory feed in the absence of other bulkier concentrates than if the cornmeal were fed alone. Sometimes corn is used as a supplement to skim-milk for growing calves. Its value here lies in the fact that it is rich in easily-digestible fats, in which property the skim-milk is lacking.

The use of barley for milk production is more limited than oats. When fed along with bran, as half the grain ration, barley was found at the Ontario Agricultural College to give almost as good results as oats. Like corn, however, barley contains a large proportion of easily-digested carbohydrates, although the proportion of protein is ten per cent. greater and the amount of fat only half as much. Like corn, it is a heavy feed when ground, and should be lightened by the addition of bulkier and lighter concentrates, such as bran or oats. Leitch advises that on account of its tendency to heat the animal, it is usually not advisable to feed barley just previous to freshening, or immediately after, especially if the cow's udder be swollen or inflamed.

It may sometimes pay to feed wheat for milk production, if the quality of the grain is too low to sell to advantage. At the Maine Experiment Station wheat was found to be of equal value with corn, pound for pound, when fed for both milk and fat production. Danish experiments go to show that wheat is nearly equal to an oats-and-barley mixture. At the Central Experimental Farm, Ottawa, it was found that screenings containing 65 per cent. wheat, 25 per cent. other grains, and 10 per cent. weed seeds and chaff, was equal to a mixture of four parts bran, two parts gluten feed, one part oil cake, and one part cottonseed meal, when the screenings constituted one-third of the daily grain ration, and the other two-thirds consisted of the mixture mentioned above. The value of wheat screenings largely depends upon the proportion of weed seeds contained in them.

When not too high in price, which does not occur very often, peas are excellent stimulants to milk production. For this reason they are sometimes used, in spite of their high price, for feeding high-record cows in order to make large milk and fat records. Peas are rich in protein, fat, carbohydrates and ash. Although easily digested, they make a heavy feed when ground, and must be lightened up with bulkier and lighter concentrates.

Buckwheat middlings are about equal to a mixture of corn and bran, equal parts, when fed as a part of a balanced ration for milk production. Buckwheat middlings, however, are not relished to any extent by cattle, and if fed in too large a quantity are likely to injure the quality of butter made from the milk. This unfavorable influence, however, is more marked in the case of the buckwheat itself, which is on the whole more suitable for fattening purposes than for milk production. Where available, however, buckwheat may take the place of part of the corn, barley or oats.

Neither rye nor emmer are very efficient grains for the production of milk. This is particularly true of rye, which is probably the least satisfactory of all farm-grown grains for dairy cows, while at the South Dakota Experiment Station, emmer was found to be from 12 to 15 per cent. less efficient for milk production than either barley or cornmeal. Emmer, however, can be fed with safety as part of a ration, while rye is a more frequent cause of digestive troubles than other cereals, and in addition has not the feeding value of other grains. Where it can be secured at a sufficiently low price, it might be used satisfactorily to replace some of the other grains.

## HORTICULTURE.

### Move Made to Organize Niagara Fruit Growers.

Every fruit grower in the Niagara Peninsula is sufficiently well aware of the disastrous effects of inadequate distribution and the unusual shortage of packages, refrigerator cars, and labor on the fruit business of the Niagara District this year. Early in October the Hon. Manning W. Doherty, Minister of Agriculture for Ontario, took steps to call together a small committee of about a dozen representative Niagara district fruit growers, with a view to preventing another year the recurrence of conditions which in 1920 have been so unsatisfactory. A part of the Minister's letter to representative growers reads as follows: "I have followed with interest and much concern the progress of the fruit crop of the Niagara district. In its magnitude and quality it has been a credit to the growers, and further evidence that the district is wonderfully favored by nature. In its marketing, however, I regret to know that difficulties have arisen which have resulted in serious loss to the growers, and the Province as a whole. For this many causes have been ascribed, and some remedies suggested. I think it would be very useful to get together men from different sections to exchange experiences and endeavor to work out a plan for future operations. It has been suggested that better distribution and wider markets would offer a solution of many of the difficulties encountered this year, and it is also suggested that this could be effected through a more general and more complete organization of the growers themselves. If the committee is able to recommend definite plans of action, it may count upon the active and aggressive support and assistance of this Department to the fullest possible extent."

As a result of this letter the following committee of growers was called together at the Horticultural Experi-

ment Station, Vineland Station, on Wednesday, Nov. 24: David Allan, Grimsby; Major Homer Carpenter, Fruitland; Arthur A. Craise, St. Catharines; J. B. Fairbairn, Beamsville; W. M. Gayman, Vineland Station; J. R. Hastings, Winona; J. W. Hewitson, Winona; Erland Lee, Stony Creek; T. J. Mahoney, Hamilton; Jas. A. Railton, Fonthill; T. B. Revett, Niagara-on-the-Lake; Col. H. L. Roberts, Grimsby; A. J. Sheppard, St. Catharines; Arthur W. Smith, Winona; and Hudson Usher, Queenston. Messrs. Lee, Railton and Sheppard were the only ones not present of the committee, while the Department was represented by W. Bert Roadhouse, Deputy Minister; P. W. Hodgetts, Director, Fruit Branch; and E. F. Palmer, Director of the Horticultural Experiment Station. Messrs. Roadhouse and Hodgetts were asked to act as temporary chairman and secretary, respectively, until such time as the committee could select suitable officers from among themselves.

#### TRANSPORTATION MATTERS.

There was also present the general Agricultural Agent of the Canadian Pacific Railway, who was promptly given a busy hour by the growers, endeavoring to make clear the reason for the shortage in refrigerator cars. It seemed to be apparent, however, from the remarks of the growers, that the onus of responsibility for failure to promptly supply "freezers" or refrigerator cars rests largely with the Grand Trunk Railway. C. P. R. freezers in most cases appeared to have been promptly supplied to Niagara district growers over the line of the H. G. & B. Electric Railway. Mr. Dougall pointed out that so far as refrigerator cars are concerned, the C. P. R. must look after its own growers first, that is, those on C. P. R. land, and made a further statement that there are a lot of refrigerator cars on the way East to take care of the apple situation. The British Columbia crop is practically all moved, and the shortage of the potato crop in New Brunswick will permit of more refrigerator cars being available for other crops. The speaker believed that the supply of equipment was adequate to take care of the situation.

It was also explained that the C. P. R. gets out a crop estimate yearly, a copy of which is supplied to the officer in charge of the distribution of cars. The cars are then distributed on the basis of this crop estimate, but if the crop later on falls down below the estimate made the distribution of cars may, perhaps, prove to have been faulty.



An Illustration of the Unfortunate Waste of Fruit Forced Upon Niagara District Fruit Growers this Year.

It was further stated that it is much more difficult to estimate crops from the Province of Ontario than from British Columbia, for instance, where the fruit areas are comparatively small and isolated from each other. At the present time there are ten freezers of the most up-to-date brine-tank model being turned out daily from the C. P. R. shops. Refrigerator cars have been cut off from the export meat business to take care of the moving of the fruit crop. Mr. Dougall also stated that the Canadian Pacific Railway very much preferred to deal with fruit growers as an organization, and cited the efficient work of the Okanagan United Growers, in British Columbia, as evidence of the splendid results which might be secured from co-operative effort. British Columbia growers, in the opinion of the speaker, were practically driven to co-operation by poverty. Just this year, also, fruit growers in the Province of Quebec have organized on a co-operative marketing basis with much success.

J. B. Fairbairn stated that the shortage of refrigerator cars had cost fruit growers in the Niagara district thousands of dollars this year, and that at one time there were one hundred empty refrigerator cars on the tracks at Hamilton when growers could not get one placed for fruit. On one day also, during the peach season, when fourteen refrigerator cars had been asked for, only three were delivered, while on the same day a refrigerator car loaded with empty baskets which could just as well have been shipped in any other kind of a car, was delivered at the same station. Arthur Smith also pointed out that the Grand Trunk would supply a car for the Montreal market when they would not supply it for smaller towns, because they claimed a longer haul was thus possible. The result, however, was that the Montreal market was glutted with fruit on occasions

when other cities and towns would have offered a good market.

#### VIEWES REGARDING ORGANIZATION.

After this preliminary skirmish about transportation matters, members of the committee were asked to give their views with regard to the situation, and the trend of the whole meeting thenceforth was toward organization the need for which all members of the committee were agreed upon, but there were many and varied views as to the causes of present conditions and methods of overcoming them.

J. R. Hastings, Chief Fruit Inspector for Western Ontario, and formerly Manager of a co-operative fruit growers' organization in the Niagara district, offered on behalf of C. W. Baxter, Dominion Fruit Commissioner the fullest co-operation of the Fruit Branch of the Dominion Department of Agriculture. The Fruit Commissioner, said Mr. Hastings, takes the position that organization offers the only solution for Niagara district growers. The speaker believed that no sane person, unless prejudiced, would say that a well-managed co-operative association would not give more satisfactory service to the growers than individual effort. Some say that there are too many large dealers, and that a man cannot be secured who is qualified to handle a big association. These difficulties could be overcome. It should not be expected that all the growers will come in at first, and there are some who will need a considerable amount of education before they would make valuable members. So far as the dealers are concerned, some of them should stay in the business whether an association is formed or not, and they will undoubtedly benefit mutually with the growers by so doing.

Mr. Hastings enumerated several essentials which, in his opinion, were necessary for the most successful organization. It would be necessary to have a private telephone exchange whereby every portion of the Niagara district could be reached immediately with market information. The railways must provide good accommodation at every shipping station. There are also conditions obtaining in the Niagara Peninsula that probably do not obtain anywhere else in North America, and the speaker believed that small organizations controlled by a larger central organization is a plan that will not work. He would have members directly connected with the central organization, and would form districts under the control of sales managers employed by the central association. No large amount of capital need be raised.

Colonel H. L. Roberts had been connected with co-operative organizations since 1904 or 1905, and since that time had never sold fruit otherwise. He was free to admit, however, that at Grimsby they had started originally with an impractical idea in mind. This was the idea of packing tender fruits in central packing houses and it was found to be unworkable. Colonel Roberts laid greatest stress upon the necessity for strict and careful grading. In his opinion the person who determined whether or not a certain lot of fruit was properly graded, or was up to the grade, should not be in the employ of a local branch or local association. He should be an employee of a central association. A No. 1 sample of fruit should be the same all over the district, and must be worthy so far as practice of the same price. The good grower could only be retained in a central association by protecting his grade. There must also be effective communication between the grower, the central association, and the market. It would need a big man to run the association. The speaker saw no difficulties in organizations that were insurmountable, and he did not think it would be necessary to have every grower a member.

#### COMPETITION BETWEEN LOCAL ASSOCIATIONS.

J. B. Fairbairn said there might be some question as to whether all of the growers were ready for a central Niagara district organization. There were many instances where co-operation had been most successful where it was the result of extreme conditions. Personally, as an independent grower and not a member of any local association, he favored organization. As a non-member he felt that perhaps one of the difficulties of organization would be the feeling which now exists to a greater or less extent, between the existing local co-operative associations. He felt that if a large organization were to succeed, it would be necessary to give it sufficient control over the fruit business of the members and of the districts.

J. W. Hewitson believed the lack of good feeling to be due to competition, which resulted in many cases of price-cutting. He quoted one instance wherein he had sold 1,100 packages of sour cherries, 800 of which his association could supply and which were shipped by freight. The remaining 300 he shipped by express, and these were purchased from the manager of another association. They were sold in a certain town at \$1.30 per package, but they were purchased from the other co-operative association at \$1.15. Less than two hours after, he found that the manager from

whom he had made the purchase was offering sour cherries in the same town for \$1.10, claiming that this price-cutting was necessary because of competition with a dealer. It appeared, however, that only a short time before, this same town was a market for sour cherries at \$1.35.

David Allan was chiefly interested as a grower of plums and peaches. The large crop and the shortage of labor and containers was responsible for the fact that he had only picked about one hundred baskets of a total crop of twenty-five hundred Lombards. The same conditions obtained with regard to Reine Claudes, for which this was the best year he had ever seen. He believed the primary object of organization to be the sale and distribution of fruit. It would require a tremendous lot of work to complete organization, but as a grower he was inclined to give it a trial. The difficulty with the grower, in his opinion, is that for years he has been selling to dealers from whom he gets a price which he is absolutely sure of. In this case the dealer pays the overhead expense, whereas under co-operation the growers themselves agree to carry the overhead and take what remains. In a period of glut the dealer does not want fruit, but at the same time they take many risks and certainly deserve a profit.

Hudson Usher said that this year the Niagara district had drifted into the marketing of the biggest crop the district had ever had, with no organization of any kind. Two or three years ago an advertising campaign had been conducted. He believed it had been valuable and returned one dollar for every cent spent. Later on a price committee had been formed, but now the local associations were competing too closely with each other. His section of the district, near Niagara-on-the-Lake, was in a peculiar position. Practically all of the crop this year was sold to Toronto commission firms, and was shipped by boat from Queenstown and Niagara-on-the-Lake. The growers there have had good prices over a period of years, and some of the largest growers are inclined to feel rather indifferent about organization. He believed that the existing organization should be considered in organizing for the whole district. So far as the Queenston Fruit Growers' Association was concerned, it was willing to do anything to stabilize prices and equalize distribution.

Arthur Craise believed that the growers, after this year's experience are willing to do anything that will better their conditions. He would not ignore the existing organization and also believed in the necessity for central packing houses for peaches, pears, apples and possibly some other fruits.

Major Carpenter also believed the time to be ripe for a larger organization. Prices have been fair this year, but the amount of waste has been extreme. He would not ignore the existing organization, and believed also that the Niagara District Grape Growers' Association should not be lost sight of. He believed that an amalgamation should be brought about between the grape growers and the proposed organization. With regard to distribution, he felt that better business methods would have saved the crop for at least some of the growers. Some few did take the bull by the horns and sold whole carloads of fruit in new towns. This fruit was advertised a few days ahead of time, and in some cases a car could be sold out in a day or two.

WHAT THE GRAPE GROWERS HAVE ACCOMPLISHED.

T. J. Mahoney spoke as President of the Niagara District Grape Growers, Ltd. The Niagara District Grape Growers' Association was formed in 1919 and about 58 cars of grapes were shipped to the United States last year, besides doing other valuable work along lines of organization. It was thought, however, that a more complete organization was necessary for grape marketing and that it should cover the territory between Stoney Creek and the Niagara River. The Grape Growers also believed that the wineries should pay a higher price, because their present flourishing business is in quite a large measure due to the influence of the grape growers when representations were being made with regard to the Ontario Temperance Act. A meeting was arranged between the dealers, the growers and the manufacturers, but for some reason or other the growers were notified that it was not suitable to hold a meeting. The growers, however, organized and obtained a charter on August 25, between which date and Nov. 11 the Niagara District Grape Growers, Limited, handled 435 cars, or 45 per cent. of the grape crop of the district. The turnover for the season was \$440,000, which is expected can be doubled, next year, and as many as 35 cars of grapes were handled in one day.

Mr. Mahoney said that experience had taught the grape growers that the only satisfactory organization is one which covers the whole district instead of local organizations working separately. The Grape Growers will be glad to join with any organization to secure greater efficiency in the marketing of all fruit. Thorough and accurate information is required, and the Grape Growers had planned for a thorough canvass of the acreage and opinions of every fruit grower in the Niagara district. It was thought that after this was obtained, a general organization could more intelligently be formed. He believed that competition is one of the chief difficulties, and that the cutting of prices is the result of keen competition. The grower pays the shot. Another disadvantage of the Niagara district is that not a dollar is being spent in advertising Niagara district fruit. Referring again to the work of the Grape Growers, Mr. Mahoney said that the organization had combed the United States for packages, and as a result has imported 100,000 bushel baskets. All told 96,596 bushels of grapes were exported, in addition to 316,970 6-quart baskets and 79,208 11-quart baskets. Some Canadian grapes had been sold in Memphis, Tenn. for as much as \$2 for an 11-quart basket, and had retailed there at 20 cents per pound.

SURPLUS AN IMPORTANT FACTOR.

W. M. Gayman believed that the growers should organize first for a good pack, and that this was the chief difficulty from the selling point. Every grower should know just what is meant by a No. 1 peach, and this would eliminate the difficulty that was often experienced in connection with rebates, due to poorly-graded fruit. He gave one illustration of a car of grapes sold in a Western market wherein 23 baskets purchased outside of his association had been the means of causing a rebate of \$125 on this car. There were also growers who would pick up apples off the ground and pack the best of them, a proceeding for which there should be a severe penalty. If there had been a good organization this year, and a rule that no one should pick a No. 2 peach, at least until all the No. 1's had been harvested, the scarcity of baskets would have been relieved to a considerable extent. The individual grower should be fully educated as to the benefits of organization. Many growers are not loyal to co-operative organizations because they do not understand. Mr. Gayman was also very strongly in favor of cold-storage or pre-cooling plants at every shipping station in the Niagara district. Plants of this kind would be believed, be most effective in bringing about better distribution.

T. B. Revett hardly thought that distribution was faulty this year. He believed in a central organization but did not see how it could be worked out. At least it would take some years and he thought that perhaps two organizations should be started which could later be blended together. He believed that something would have to be done, because at the present time there is only a small percentage of the area in the district planted to fruit and if it is impossible to distribute this acreage a larger acreage would be utterly impossible. Either the present land values are utterly fictitious or some improvement must be immediately made. He emphasized particularly, however, the necessity for taking care of the surplus fruit, such as is being done by large organizations in California, New York State, and the Pacific Coast. This can be done by by-product factories and cold storages to hold the surplus.

A LARGER DISTRICT DISCUSSED.

Some mention was made of enlarging the sphere of co-operation to take in the Hamilton and Toronto districts. Mr. Hodgetts stated that except for the Burlington district, small fruits were a staple product in most of the territory between Hamilton and Toronto. The greatest trouble this year has been in connection with packages. The manufacturers want high prices and the growers have been approached by British Columbian manufacturers with offers of supplies at lower prices. The difficulty, however, is that the use of British Columbia supplies entails the use of the B. C. hallock. In addition, wood suitable for making bands on Climax baskets is not available in British Columbia. No contracts have yet been made in the Clarkson district, but there is the possibility that the British Columbia firms will ship their stock to Ontario and make up packages as well as baskets after securing band material here. Mr. Hodgetts favored using the existing organizations as a nucleus for the larger association. He believed this would appeal more to the average grower.

A RESOLUTION.

As a result of the discussion, the following resolution was passed on motion by Col. Roberts: "This Committee, called on the invitation of the Minister of Agriculture for Ontario, is of the opinion after reviewing conditions and experiences in the fruit industry in the Niagara district, from Hamilton to the Niagara River, that a central co-operative organization embracing all branches of fruit would be in the best interests of the industry as a whole, and recommends that a small sub-committee be named to go into the details and submit a draft plan for such central organization to this committee."

"This committee is further of the opinion that such plan of central organization, after being approved by this committee, be submitted to the growers in a series of meetings in different sections for thorough discussion." Mr. Fairbairn, who seconded the above resolution, then moved that Messrs. Roberts, Usher, Mahoney, Gayman, Carpenter, and Sheppard constitute the personnel of the sub-committee authorized above, and it was later decided that this sub-committee would hold its first meeting at Grimsby, on Wednesday, December 1.

ANOTHER VIEW OF ORGANIZATION.

Of interest also in this connection is the following discussion of the matter which was prompted by an editorial in "The Farmer's Advocate" in our issue of November 18. Still another angle to the situation is presented herein by our correspondent:

"I have read with considerable interest your editorial on 'Niagara District Fruit Problems' in the November 18th issue of your paper. Generally speaking, I agree with the sentiment expressed in this editorial. As to what measures may be taken either by the Government or the fruit growers themselves to prevent such a recurrence of conditions, I am somewhat at sea. Your solution apparently is out and out co-operation whether by a system of federated locals or by one large co-operative concern. There are many obstacles in the way of such co-operation besides the ones you mentioned that the various sections are not temperamentally adapted and the opposition of the fruit buyers."

"In the first place, the fruit production of this district is extremely variable, one year with another. This means that no co-operative concern, large or small, can build up a permanent market for its fruit. Then there is the fact that some at least, of our best co-operative men believe that the fruit crop can be better handled

if there is a certain amount of competition even between co-operative concerns. Apparently the B. C. growers have recognized this principle in the form of Provincial co-operation which has been adopted. The B. C. Traffic & Credit Association consists of an affiliation of twenty or more local co-operative shipping associations and also fruit buyers and shippers. The central association does not actually sell the fruit. The locals and buyers do this themselves in competition with one another in the open market. The central association, i. e., the B. C. Traffic & Credit Association, concerns itself with the matters of a broader concept such as the supply of cars, refrigerator service, express service, sugar supply in the Prairies, claims against the railways, etc. In other words, it acts as the financial advisor of all the locals, the markets advisor, and relieves the locals of the expensive and often hopeless business of adjusting claims, shortage of cars, etc. By its size it is of sufficient importance to commend the respect of even the largest concerns with which the growers have to deal such as railways, etc. Transferring in imagination the activities of such an association to Niagara District problems, it would work out something like this. It would leave the actual making of sales of fruit to the local associations and buyers as they now exist (and don't overlook the fact that, however, much may be said against the buyers yet without them the situation would undoubtedly have been much worse the past season than it was). The central association would, however, have immediately concerned itself, in fact, would have foreseen by months the basket shortage, the car shortage, labor shortage, etc., and by virtue of its importance would or should have been able to very greatly relieve all three troubles. Many carloads of baskets could have been secured from British Columbia. The bulk of the C. P. R. refrigerator cars were handling B. C. fruit both in 1919 and 1920. A similar central organization here would have assured to Ontario its share of cars. Pressure would also have been brought to secure adequate supply of fruit jars during the canning season. Little has been said in the papers on this phase of the question yet undoubtedly it was a considerably factor in glutting the markets.

"I am simply jotting down these views for your perusal as I am somewhat of the opinion myself, though still open to conviction in other ways, that Niagara District problems could better be solved by such an organization as the B. C. Traffic & Credit Association which concerns itself not with the actual selling of the fruit but rather all those problems which go to make a good sale possible. Even if we have one big co-operative concern, it seems to me we must still have within it a department whose only work would be along the lines of the B. C. Traffic & Credit Association. That is, the ordinary selling organization of the association would not have the time or the information to take up matters of transportation, basket supplies, express matters, icing, railway claims, etc."

POULTRY.

American Egg-Laying Contest.

At the close of the fifty-second week of the American Egg-Laying Contest, the leading pens had laid the total number of eggs detailed below. These figures will, no doubt, be of interest to Canadian poultrymen in view of the fact that while ten birds made up a pen in the Canadian contests, five birds constituted a pen in the American contest.

Variety	Address	No. of Eggs
1 R. C. R. I. Whites.....	Kentucky.....	1218
2 S. C. White Leghorns.....	Pennsylvania.....	1197
3 S. C. White Leghorns.....	Texas.....	1144
4 S. C. Reds.....	New York.....	1135
5 S. C. White Leghorns.....	Iowa.....	1128
6 White Wyandottes.....	Pennsylvania.....	1103
7 S. C. White Leghorns.....	Washington.....	1072
8 S. C. White Leghorns.....	England.....	1071
9 S. C. R. I. Reds.....	Illinois.....	1053
10 S. C. White Leghorns.....	Michigan.....	1043

Success With Geese.

EDITOR "THE FARMER'S ADVOCATE":

I am an interested reader of your paper, and as I read of your reader's experimenting with goslings last summer, I wondered if my experience would help anyone. I have never known anything but success with geese. Twice in my life I have started with geese. I started with two geese and one gander, all young—just common large geese. When young, say nine months old, the gander weighed 19 1/4 pounds, one goose 18 pounds and the other goose 16 pounds. The first year if you get 25 goslings you do well; with the above geese I got 32 goslings out of 46 eggs. The second year I had 61 eggs from the two geese; 14 of these met with an accident, and I had 38 goslings hatch. Wild animals had their share, and I then had 32 to market.

Your readers have different ideas of rearing goslings from mine. I set all the eggs under heavy hens, five eggs under each; then I take them from the hens and put them together with the larger ones as they come out. When they are small, I put them in a small box and cover at nights with a blanket. When they are a little larger I drive them in a box at night. If they are big, strong goslings, tender grass and water or milk is good feed, but I like them to take bread and milk for the first few days. If one is weak and doesn't seem to eat, I hand-feed it with bread and milk three to five times a

day. I put them on the lawn for the first week or so and then in the orchard, with neither hen nor goose. My geese sit well, but as the eggs are hatched they are too heavy and the result is they break the eggs. I never have young goslings dying. Sometimes some come out weak and may not live long, but they have a fair chance. Even the youngest of these from 61 eggs was ready for the market by Thanksgiving. I am opposed to changing geese frequently. If you have good geese, don't forget to feed them well, and as long as they are laying, stick to your old geese.

York Co., Ont.

MRS. WM. CRAIB.

### The Cotton-Front House.

BY PROF. R. K. BAKER.

The cotton-front poultry house has been called a "cold house." For this reason a good many poultrymen have been afraid to try one. Cold is merely a comparative term. We measure the degree of cold by a thermometer, but the way in which people or animals feel cold or are affected by it, depends on whether or not they are in good health, well fed and warmly clad. It depends also on whether the air is dry or damp, and on whether it is still or in motion. To a healthy man in this country a still day in winter, with the thermometer at 15 below zero is no hardship. The temperature is not considered worth mentioning. Because the air is dry and still, we do not mind the cold. But 15 below zero in New York or Halifax causes a great deal of hardship, many people being badly frozen. The same degree of cold here with a high wind blowing becomes unbearable except for a short period of time unless we can keep exercising.

Compared with a carefully-built, stove-heated poultry house, the cotton front may be termed a cold house, but when compared with an almost air-tight, damp poultry house, or a drafty house, the cotton-front house, if properly built, is not a cold house. When provided with a drop curtain which may be let down at night to protect the birds while on the roost, it is necessary to leave ventilating spaces above and below this curtain to prevent the birds from getting too hot.

The heated house for poultry has never been satisfactory, probably because the temperature has been allowed to vary too much, and little or no ventilation was provided for. No matter how warmly built, the air-tight house will be damp in winter. One man reports having fowls frozen to death in a place built with four ply of lumber and with two dead-air spaces. The writer has used the cotton front, and the glass-and-cotton-front house. We always have been able to get eggs in winter, and have yet to learn of anyone who has used the cotton-front house, going back to the artificially-heated, or the all-glass front or the expensively-built air-tight house.

The poultry house requires more ventilation in proportion than any of the other farm buildings, because practically all of the water which the fowls drink is given off by their lungs and skin directly into the air as watery vapor. Ventilation is required to remove this damp air from the house.

Ventilator shafts on poultry houses have not been satisfactory. They are usually either so small that they become choked with frost in cold weather, or so large that they let off all the warmed air from the house. A fairly large shaft, fitted with a damper might be made to work, if the attendant could arrange to go and regulate the damper every time the temperature or the direction of the wind changed.

Cotton windows have given the best satisfaction at the least cost for material and labor, of any method of ventilation yet tried. The number and size of the cotton windows varies with the type of house and with the locality. In the East one square foot of cotton windows to ten or fifteen square feet of floor space is advised by some writers. We have used one foot of cotton to six of floor space, and in some houses one square foot of cotton to four of floor space, with good results.

## FARM BULLETIN.

### Hon. Manning W. Doherty Returns From England.

It is recognized, we believe, that the United Kingdom is the chief market for surplus Canadian farm products, and also that Ontario is the banner agricultural Province of the Dominion, so far as volume of production is concerned. It was, therefore, perhaps, only natural that the Honorable Manning W. Doherty, Minister of Agriculture for Ontario, should have considered it advisable to pay a visit to the old Country, with a view to getting first-hand knowledge regarding the conditions of this big market for Ontario products, and finding out how best our products could be placed on this market. There was also, of course, the strong necessity for increased agricultural immigration into the rural districts of Ontario and the additional fact that the Minister felt he should have some intimate knowledge of the work being done by the Ontario offices located in the British Isles. On his return from Great Britain, on Thursday, November 25, "The Farmer's Advocate" immediately arranged for an interview, which took place on the following day, and there are set forth herein some of the impressions which the Honorable Mr. Doherty received while in England as to matters of particular concern to Ontario agriculture.

#### FRUIT MARKETING.

Some little attention was given by the Minister to the question of getting a suitable market in Great Britain for Ontario fruit. Under normal conditions we have a large surplus in excess of home demand, and his year, as everyone knows, a serious situation was created due to the excessive crop and the high cost of

packages which resulted in a loss of thousands of dollars' worth of fruit, both peaches and apples. The Minister felt that officers of his Department should not advocate increased production or improved cultural methods without first giving some attention to the matter of marketing. Growers naturally feel that it is not worth while producing more fruit when they are frequently unable to dispose of what they have produced to the best advantage. The demand for fruit in England, said the Minister, is tremendous and any excess fruit which Canada can produce can be absorbed by the British market. The difficulty, however, in the opinion of the Minister, is one of getting our fruit in England in good condition and of arranging some channel of trade whereby the costs of distribution may be reduced with benefit to both the grower and the British consumer.

For a quarter of a century, more or less, Ontario has been exporting apples to Great Britain and this Province produces seventy-five per cent. of all the fruit grown in Canada. Similarly, the British consuming public would welcome greater quantities of our excellent Ontario peaches, which we should be able to place on the British market in about ten days after leaving the orchard, as compared with the twenty-six days now required for the shipment of the large quantities of South African fruit which reach Great Britain. It is possible that some further experimental shipments of peaches will be made to the British market next year, and the Minister feels that a success can be made of such shipments. The English and Scottish consumer now pays as high as 20 cents apiece for peaches, and Canada should be able to put peaches on the British market at a lower price. So far as apple marketing was concerned, apples for which the Canadian producer got only five dollars per barrel retailed for as high as 20 cents per pound, or nearly twenty-eight dollars per barrel. These same apples sold wholesale in Liverpool for from \$15 to \$17 per barrel. Mr. Doherty believes that Ontario fruit should be handled co-operatively right to the British consumer, and that our fruit associations in Ontario should pick, pack, grade and ship their fruit co-operatively. Probably some steps will be taken by the Department to further such a co-operative movement among apple growers for the season of 1921. Temporarily, Ontario fruit might be handled by some of the British co-operative societies on a moderate commission of, say, five per cent., which would mean the distribution of Ontario fruit direct to the British consumer at a moderate price.

#### DAIRY PRODUCTS.

The Minister interested himself also in the question of a market for our dairy products. Butter, of course, is now rationed in England and is retailing to-day at something over four shillings per pound. The Minister obtained a quotation on one thousand boxes of No. 1 butter from an Ontario creamery and offered this quantity of butter to the Dairy Department of the British Ministry of Food. On account of the exchange situation the offer could not be accepted, although if sterling was at par in Canada an immense quantity of butter could have been sold for more than 60 cents per pound. The Ministry of Food did, however, offer 300 shillings per cwt. c. i. f., which, with exchange at 3.80 is the equivalent of nearly 65 cents per pound. The Minister pointed out, however, that the Ministry of Food has a contract of 65 cents with Denmark, and they have agreed with both New Zealand and Denmark that if any higher price is paid to other countries for butter the price to them will be increased accordingly. New Zealand, of course, offers no difficulty as to exchange, which is a marked advantage at this time as compared with Canada's position. The question of grading dairy products was also discussed, and Mr. Doherty early concluded that the Government would be quite justified in continuing the campaign for the grading of early dairy products, but that for the time being at least, compulsory grading in Ontario would not be expedient.

Some little attention was also paid to the market for Ontario tobacco. Since the war about 65 per cent. of all the tobacco imported into England is manufactured into cigarettes, so that our tobacco growers in order to cater to the British market will be forced to grow cigarette tobacco. Ontario climate and soil, however, is, in the opinion of the Minister, quite suitable for growing any of these flue-cured varieties.

#### HEAVY IMMIGRATION ASSURED.

As regards the matter of immigration, the Minister is firmly of the opinion that no difficulty will be experienced in getting immigrants, but he feels that the greatest care should be exercised that only farmers and farm laborers should be encouraged to come to Ontario. There is some slacking of industry in Great Britain, with, as a result, a considerable degree of unemployment. Probably from 10,000 to 20,000 farmers and farm laborers will come to Ontario in the spring of 1921, and among these will be many men with capital. The reason for this latter class is that high taxation in England is bringing about the sale of many large estates. In many cases these estates are being broken up and offered to tenants. There may, for instance, be from twenty-five to fifty tenants on a good sized estate, and in some cases these tenants will represent the second, third or fourth generation of the same family which has rented the same farm of say 200 or 300 acres. In some cases these tenants have paid a rental of no more than 3 per cent. on the investment, so that they have always been able to make plenty of money under the tenant system. Now, however, when the land is sold they may be forced to pay up to ninety pounds per acre, or nearly \$300, and thousands will find it of greater advantage to themselves to take what money they have and emigrate to Canada than to make the change from tenant to owner in England.

#### CANADIAN BACON UNDER A CLOUD.

During his visit in England, also, the Minister investigated two questions that are perhaps federal rather than provincial in nature. They are the matters of the British embargo against Canadian cattle and the condition of our bacon trade with the United Kingdom. In connection with the latter, Mr. Doherty found a very unfortunate condition to exist. To use the Minister's own words, this condition is as follows: "During the past twenty-five years Canadian bacon has established a very enviable reputation in Great Britain. This was brought about in the first place by the Canadian farmers producing the proper type of hog to make first-class Wiltshire bacon so highly desired by the British consumer. As a result of this established reputation Canadian bacon has always met with ready sale in Great Britain up until the last year or two. I now find that the reputation of Canadian bacon has suffered very severely, particularly in the last twelve months. A very large percentage of the consumers now would not have Canadian bacon in their homes. When this first came to my notice you can understand how surprised I was; as a matter of fact, I could not believe it. I went to a retail store and I heard the clerk trying to sell some Canadian bacon to a prospective purchaser, but the lady absolutely refused to buy the Canadian bacon and took Danish bacon instead. I spent several days trying to find out the cause of this situation. I felt that Canada to-day was producing as good bacon as ever she did and I could not understand why this bacon should now be looked upon with such disfavor. After several days investigating the matter I went to the Smithfield market and visited several of the large wholesale bacon dealers, and although I am still unable to put my hand upon the individual or the concern or agency which has created this situation, I am perfectly convinced that quantities of bacon have been going on the British market as Canadian bacon which were not Canadian bacon at all. I am also convinced that immense quantities of Canadian bacon have been held in storage over long and and that this bacon has been retreated and placed on the British market."

Undoubtedly this is a matter which should receive the serious consideration of every Canadian interested in our bacon trade. Our bacon in England at the present time is under price control by the British Ministry of Food. Irish and home-grown bacon have been de-controlled, and as a result Canadian bacon to-day, according to the Minister, is selling in England at about 50 shillings per cwt. less than Irish bacon, whereas the normal difference is from 8 to 10 shillings. Mr. Doherty made a strong protest to the Ministry of Food against the continuance of this price control, and learned to his surprise that some six or eight weeks ago the Canadian packers had met the Minister of Food, in reference to that same matter. At that time, said the Minister, the British officials made the following proposition to the Canadian packers: "If Canadian packers would pay the Canadian farmers 5 cents per pound for their hogs in excess of the top price for live hogs in Chicago, the British Government would be prepared to pay the packers an excess price for their bacon sufficient to take care of this bonus paid to the Canadian farmer." In other words, the British officials assured Mr. Doherty that they are anxious to encourage hog production in Ontario, but they are insistent that any extra price paid by the British consumer shall go to the Ontario producer rather than to the packers.

#### THE EMBARGO QUESTION.

So far as the matter of the embargo against Canadian cattle is concerned, there is strong opposition in Great Britain which the Minister believes can be overcome by concerted, energetic effort. This embargo has been in existence since 1892, and the Minister is fully aware of the fact that several strong efforts already made, have failed. Already a strong active campaign has been instigated to secure the removal of this embargo, and if Canadian live-stock men will but unite to secure what the Minister believes to be to their advantage, he feels that within a very short time the embargo can be lifted. Opposition to the lifting of the embargo comes from a very small section of the British public. The British farmer, the British consumer, and the British business man are absolutely in favor of lifting it. The opposition comes from the breeders of pure-bred cattle. As an evidence of what value the British consumer would be likely to receive from the entry of Canadian live-cattle, the Minister referred to what he saw at an ordinary sale in the County of Kent, as follows: "Very ordinary steers weighing from one thousand to eleven hundred and fifty pounds were sold at this sale for from twenty-six to twenty-eight cents per pound on the hoof. In connection with this campaign I intend to call together our live stock associations and to have them strengthen our demand for the lifting of the embargo. I also intend to ask the other Provinces to join us. I hope that our united efforts will succeed in solving this question."

### Canadian Students in International Judging Competition.

There were three Canadian teams competing in the live stock judging competition this year at the International Live Stock Show, now being held in Chicago. There were twenty-one teams in all, from agricultural colleges in Canada and the United States. The team from the Ontario Agricultural College was thirteenth in the competition, with Macdonald College, Quebec, in eleventh place, and Saskatchewan twelfth. The first-prize team was from Purdue University, Indiana, with Nebraska second and Iowa third. No individual on the Ontario team succeeded in getting into the first ten places.

# Toronto, Montreal, Buffalo, and Other Leading Markets.

Comment on week ending November 25. Quotations on last Monday's markets.

## Receipts and Market Tops.

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

	CATTLE						CALVES					
	Sales		Top Price		Good Steers		Sales		Top Price		Good Calves	
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
Toronto (U. S. Y.)	7,988	13,068	8,941	\$10.00	\$13.25	\$12.50	691	883	753	\$18.00	\$18.50	\$18.50
Montreal (Pt. St. Chas.)	1,431	2,499	1,836		11.50	10.00	1,016	580	839	15.00	14.00	15.00
Montreal (East End)	2,008	3,371	2,812		11.50	10.00	1,214	771	1,128	15.00	14.00	15.00
Winnipeg	13,274	9,418	17,331	9.50	13.00	10.50	926	761	1,460	7.00	10.00	7.50
Calgary	3,550	7,484	2,665	8.75	10.25	8.00	429	814	370	7.25	8.00	7.60
Edmonton	1,830	1,072	1,274	9.00	10.00	8.00	330	65	262	7.50	6.50	8.00

	HOGS						SHEEP					
	Sales		Top Price		Selects		Sales		Top Price		Good Lambs	
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
Toronto (U. S. Y.)	6,921	10,239	5,639	\$16.50	\$16.75	\$16.75	10,997	13,572	12,581	\$12.75	\$14.50	\$14.00
Montreal (Pt. St. Chas.)	1,290	2,122	1,486	17.25	16.65	17.00	4,981	2,735	3,085	12.50	13.85	13.00
Montreal (East End)	2,278	1,695	1,642	17.25	16.65	17.00	3,879	2,261	4,638	12.50	13.85	13.00
Winnipeg	2,915	6,669	2,917	14.75	15.50	15.75	1,771	2,504	2,128	10.00	13.25	9.50
Calgary	515	1,135	271	15.15	16.50	17.00	1,977	1,527	2,790	10.75	11.75	10.50
Edmonton	181	364	194	15.25	16.00	16.25	264	69	341	10.00	11.00	10.00

### Market Comments.

#### Toronto (Union Stock Yards).

Receipts for sale were made up of 3,076 cattle, 716 calves, 7,131 hogs and 11,553 sheep. Approximately 1,300 cattle were billed through to points across the border and 290 hogs to out-of-town packers. A heavy run was expected because of the snow falls at the close of the previous week, but on the contrary, receipts were light. Shippers are holding off largely because of repeated warnings against making heavy shipments to a very weak market. No Christmas quality of beef has as yet arrived, feeders stating that they will not ship until the conditions look better, as these cattle were bought at high prices and at the present time feed is cheap and plentiful. The market is glutted with inferior grades of cattle and even with light runs there were two thousand cattle left over for the next week's market. In view of the possibilities of further price reductions, the packers were not inclined to load up. Choice butcher steers sold from \$10 to \$11.50, fair kinds from \$7 to \$10, and common from \$5 to \$6. Choice butcher heifers moved from \$9.50 to \$11, fair from \$6.50 to \$9.50, and common from \$5 to \$6; these prices are about \$1 lower than the opening prices of the previous week. Choice butcher cows sold firm from \$7 to \$8.50, fair cows from \$5.50 to \$6.50, and canners around \$3, a drop of 25 cents. Good milch cows were sold at prices ranging from \$100 to \$150. Good springers from \$110 to \$155. There was a fairly good trade in stockers at reduced prices, good kinds changing hands from \$8 to \$9 and fair from \$6 to \$7.50. Quite a few farmers were on the market looking for good feeders with a little flesh on them. Prices, however, did not meet with their view, and this coupled with the inferior quality of the offerings caused a very dull market. Good feeders were quoted from \$9 to \$10.50, and fair kinds from \$8 to \$9.50. Notwithstanding the light run of calves there was a steady decline in prices on account of the drop in the Buffalo calf market. Choice veal opened on Monday at \$18 for tops and closed on Thursday at \$17. A lot of heavy rough calves were received and these sold at low prices from \$5 to \$8. There is a fairly good demand for choice veal.

Lambs were \$1 weaker all around. Culls were hard to dispose of. Good lambs sold on Monday at \$11.50. At the end of the week there was a little stronger tone and a raise of 25 cents for all grades. Handy weight sheep moved at \$7.50, and yearlings from \$8.50 to \$10.

A light run of hogs was responsible for steady prices on Monday and Tuesday, but on Wednesday there was a drop of \$1, fed and watered selects selling weaker at \$15.25 to \$15.75. Packers seem determined to reduce prices to something near the level of other markets. Hogs were \$10.50 in Buffalo and \$10 in Chicago; these are pre-war prices.

The total receipts from January 1 to November 18, inclusive, were: 262,264 cattle, 70,449 calves, 263,742 hogs and 219,499 sheep compared with 327,141 cattle, 61,750 calves, 346,207 hogs and 250,689 sheep, received during the corresponding period of 1919.

TORONTO						MONTREAL			
CLASSIFICATION	No.	Avg. Price	Price Range	Top Price	No.	Avg. Price	Price Range	Top Price	
STEERS									
heavy finished	26	\$10.50	\$10.00-\$11.00	\$11.00					
STEERS									
good	223	9.50	7.50-10.00	10.00					
1,000-1,200	103	7.75	7.00-8.00	8.00					
STEERS									
good	800	7.77	7.00-8.50	9.00	23	9.00	9.00	9.00	
700-1,000	914	4.65	4.00-5.25	5.25	213	7.00	5.25-8.00	9.00	
HEIFERS									
good	298	9.00	8.00-10.00	10.00	4	8.75		9.00	
fair	281	7.01	6.00-7.50	8.00	46	7.50	7.00-8.00	8.50	
common	436	4.96	4.00-6.00	6.00	233	6.00	5.00-7.00	7.00	
COWS									
good	113	7.14	6.00-8.00	9.50	34	7.25	7.00-8.00	8.00	
common	681	5.37	5.00-6.00	6.00	314	6.00	5.00-6.75	7.00	
BULLS									
good	33	6.55	6.00-7.50	8.50					
common	233	4.50	4.00-5.00	5.00	211	4.50	4.50	5.00	
CANNERS & CUTTERS	1,089	3.58	3.00-4.25	5.00	315	3.25	2.75-4.25	4.50	
OXEN					10				
CALVES									
veal	691	15.32	12.00-17.50	18.00	123	13.25	12.00-14.00	15.00	
grass					893	5.50	5.50	6.00	
STOCKERS									
good	1,719	7.81	7.50-8.50	8.50					
450-800	888	7.46	7.00-7.50	7.50					
FEEDERS									
good	151	9.60	8.50-10.25	10.25					
800-1,100									
selects	6,722	15.50	15.25-16.50	16.50	1,198	17.15	17.00-17.25	17.25	
HOGS									
heavy	1								
(fed and watered)	40	13.50	13.25-14.50	14.50	74				
lights	152	12.33	11.25-13.50	13.50	15	13.15	13.00-13.25	13.25	
sows					3				
stags	1								
LAMBS									
good	8,003	11.69	11.25-12.50	12.50	2,009	11.50	10.00-12.00	12.50	
common	322	8.63	7.00-10.00	10.00	2,129	10.50	10.00-10.75	11.00	
SHEEP									
heavy	138	7.32	7.00-7.75	8.00	384	6.00	6.00	6.50	
light	1,888	6.50	6.00-7.00	7.50	459	5.00	5.00	5.75	
common	646	4.50	4.00-5.00	5.00					

Montreal hogs quoted on basis off-car weights.

#### Montreal.

There were 3,439 cattle offered for sale on the two markets during the week. Of that amount quite a marked percentage was shipped from points as far East as Inverness, N. S., and as far West as Winnipeg. As these shipping points are in the neighborhood of twenty-three hundred to twenty-four hundred miles apart, it shows that local producers are not supplying sufficient cattle to meet Montreal demand. In addition, there are frequently as many as forty cars of dressed meat shipped in to Montreal in one consignment. Heavy shipments of Winnipeg cattle direct to packers' sidings are still one of the controlling factors in the local prices. Sales of medium grades of light butcher cattle were quite active on Monday at prices ranging from \$6.50 or \$7 and \$8 per hundred. After Monday trade was dull and cattle were held over each day until the close of the week when everything was cleaned up at reduced prices. Canners were down to \$2.75. Bologna bulls remained about steady at \$4.50. Light heifers and steers weighing from \$5.50 to \$8 and averaging around six hundred and fifty brought \$5.25 to \$5.75. Fairly good steers averaging nine hundred and twenty pounds brought \$8, and medium steers averaging eight hundred to eight hundred and fifty were weighed up at

\$7 to \$7.85. There were no choice cows and \$8 was the extreme top. The best of the medium grades brought \$7, and common thin cows were sold as low as \$4.50. Grass calves were lower by about \$1 per hundred; the majority of sales were made at \$5.50. One local dealer shipped 650 calves to New York to be sold on the open market. There was no change in prices for veal calves.

There was a very low average quality of lambs. On Monday the top loads were weighed up at \$12 when the market opened. Later in the day this price fell off to \$11 and held throughout the balance of the week. By Thursday, advices from American markets indicated a slightly firmer tone.

Hogs remained quite firm during the week in spite of reports of an adverse nature from other markets. Local butchers paid up to \$17.25 for selects, off cars. Packers offered \$16.50. Sows sold \$4 lower than selects. There were very persistent rumors of an impending drop in hog prices at Montreal.

#### Wool Market Report.

The recent drop in wool has brought prices in some grades at least very near the level of advances made to growers by brokers and others who have received wool on the consignment basis. The wool trade is still discussing when the Zero point in the wool market will be

reached and the very large percentage of withdrawals which have taken place in practically all British auctions recently indicates that sellers have again reached the point where they are prepared to fight a further reduction of prices. London sales have experienced a drop of 7½ per cent. to 30 per cent. the greatest depression taking place in the lower grades.

In the Canadian trade there is very little activity. The bids being made on better grades are few in number and have not been sufficiently attractive to effect sales. 13 cents and 14 cents is being offered for seedy and coarse wools.

#### Chicago.

Hogs.—Heavy weights, \$9.80 to \$10.25; medium weights, \$10 to \$10.25; light weights, \$9.80 to \$10.15; light lights, \$9.75 to \$10; heavy packing sows, smooth, \$9.35 to \$9.75; packing sows, rough, \$9.10 to \$9.35; pigs, \$9.25 to \$10.

Cattle.—Compared with a week ago native and western beef steers, 25c. to 75c. higher; fat cows and heifers around steady; canners and cutters, 15c. to 25c. higher; light and handy veal calves, \$1 to \$2 lower; heavy calves, slow to lower; stockers and feeders, steady to 25c. higher.

Sheep.—Compared with a week ago fat sheep, lambs and yearlings, 25c. to 50c. lower; feeders, 50c. to 75c. lower.

DER A CLOUD.

also, the Minister are perhaps federal They are the matters Canadian cattle and the the United Kingdom. Doherty found a very to use the Minister's follows: "During the bacon has established at Britain. This was the Canadian farmers to make first-class the British consumer. reputation Canadian sale in Great Britain find that the reputa- offered very severely, onths. A very large would not have Canad- this first came to my surprised I was; as a ve it. I went to a k trying to sell some purchaser, but the Canadian bacon I spent several days situation. I felt that od bacon as ever she why this bacon should savor. After several went to the Smithfield large wholesale bacon able to put my hand a or agency which has ectly convinced that going on the British were not Canadian that immense quanti- held in storage over s been retreated and

which should receive Canadian interested England at the present the British Ministry of bacon have been de- adian bacon to-day, g in England at about h bacon, whereas the illings. Mr. Doherty try of Food against the l, and learned to his eeks ago the Canadian of Food, in refer- At that time, said s made the follow- packers: "If the Canadian farmers in excess of the top e British Government ckers an excess price are of this bonus paid er words, the British that they are anxious Ontario, but they are d by the British con- producer rather than

ESTION. Cargo against Canadian g opposition in Great ves can be overcome his embargo has been Minister is fully aware ts already made, have campaign has been of this embargo, and but unite to secure to their advantage, he e the embargo can be of the embargo comes British public. The mer, and the British vor of lifting it. The rs of pure-bred cattle. British consumer would rity of Canadian live t he saw at an ordinary lows: "Very ordinary nd to eleven hundred sale for from twenty- und on the hoof. In intend to call together have them strengthen embargo. I also intend u us. I hope that our g this question."

#### International Competition.

teams competing in the his year at the Inter- being held in Chicago. all, from agricultural ed States. The team ollege was thirteenth al College, Quebec, chewan twelfth. The e University, Indiana, third. No individual getting into the first

## Toronto Produce.

## Breadstuffs.

Manitoba Wheat.—No. 1 northern, \$1.85; No. 2 northern, \$1.86; No. 3, northern, \$1.82½; No. 4 wheat, \$1.78½.

Manitoba Oats.—No. 2 C. W., 56½c.; No. 3 C. W., 52c.; extra No. 1 feed, 50½c.; No. 1 feed, 47½c.; No. 2 feed, 44½c.

Manitoba Barley.—No. 3 C. W., 86½c.; No. 4 C. W., 76½c.; rejected, 67½c.; feed, 67½c.

All above in store, Fort William.

Ontario Wheat.—F. o. b. shipping points, according to freight; No. 2 winter, \$1.70 to \$1.80; No. 2 spring, \$1.65 to \$1.75.

American Corn.—Prompt shipment, No. 2 yellow, track Toronto, \$1.05.

Ontario Oats.—No. 3 white, 45c. to 48c., according to freights outside.

Barley.—Malting, 80c. to 85c., according to freights outside.

Ontario Flour.—Winter, in jute bags, prompt shipment. Straight run bulk, seaboard, \$8.50.

Buckwheat.—No. 2, 95c. to \$1.

Manitoba Flour.—Track, Toronto, cash prices: First patents, \$11.60; second patents, \$11.10; first clears, \$10.50; according to freights outside. Market nominal.

Peas.—No. 2 outside, \$1.75 to \$1.80.

Rye.—No. 2, nominal; No. 3, \$1.50 to \$1.55.

Millfeed.—Car lots, delivered, Toronto freights, bags included: Bran, per ton, \$40.25; shorts, per ton, \$42.25; white middlings, \$47.25; feed flour, \$2.75 to \$3.

## Hides and Wool.

Country Hides, delivered Toronto.—Beef hides, flat cured, 8c.; green hides, 7c.; deacon or bob calf, 25c. to 50c.; horse hides, country take-off, \$3 to \$4; No. 1 sheep skins, 40c. to 65c.; horse hair, farmers' stock, 33c.

City Hides.—City butcher hides, green, flats, 8c.; calf skins, green flats, 10c.; veal kip, 8c.; horse hides, city take-off, \$3 to \$4.

Tallow.—City rendered, solids in barrels 8c. to 9c.; country solids in barrels, No. 1, 7c. to 8c.; cakes No. 1, 11c. to 12c.

Wool.—Unwashed, coarse, 12c.; medium 17c.; fine, 22c.

## Farm Produce.

Butter.—On the wholesale market was pretty much a steady trade at unchanged quotations. Best demand was for choice, fresh-made creamery pound prints, which sold at 60c. to 62c.; choice creamery at 56c. to 59c., and medium creamery at 54c. to 57c. Dairy butter was a slow trade, and best quality sold at 49c. to 50c. per lb.

Eggs.—Eggs were a firm trade and prices on storage were slightly higher. Receipts of new-laid from Ontario points were comparatively light, but several carloads were received from the United States. Quotations were: New-laid, 85c. to 90c.; selects in cartons, 75c. to 78c.; selects, ex-cartons, 72c. to 74c.; No. 1's, 66c. to 69c. per doz.

Cheese.—The market continued to show an easy trend, and while most dealers quoted prices as steady, many sales were made at lower price levels. New large sold at 27c. to 27½c.; twins at 28c. to 28½c., and old large at 32c. to 33c.

Honey.—Choice comb at \$7.50 to \$8 per case of 15 combs, bulk 5's, 28c. to 29c.; 10's, 27c. to 28c.; 60's, 26c. to 27c.

Poultry.—Although the receipts of all kinds of poultry were heavy, trade was active and prices steady to firm in most cases, and some lines showed a slight advance. Live weight prices were, per lb.: Crate-fed chickens, 25c. to 27c.; chickens, good farm stock, 22c. to 24c.; old hens over 6 lbs. each, 30c.; over 5 lbs., 28c.; over 4 lbs., 24c.; under 4 lbs., 18c.; old roosters over 5 lbs., 18c.; choice ducks over 5 lbs., 30c.; under 5 lbs., 28c.; choice young turkey hens, 40c.; choice young turkey gobblers, 40c.; old hen turkeys, 30c.; choice geese, 30c. Dressed Poultry.—Crate-fed chickens, 34c. to 36c.; chickens, good farm stock, 28c. to 32c.; choice ducks over 5 lbs., 32c. to 35c.; under 5 lbs., 30c. to 32c.; old hens over 6 lbs., 32c., over 5 lbs., 30c., under 5 lbs., 28c.; old roosters, 18c. to 22c.; young hen turkeys, 47c. to 50c.; young gobblers, 45c. to 48c.; old hen turkeys, 35c.; choice geese, 28c.

## Fruits and Vegetables—Wholesale.

Apples were a slightly improved trade, there being a good demand for No. 1 stock of practically all varieties. Practically all of the loose lots that have been

consigned to the different commission houses were sold at prices ranging from \$4 to \$4.50 per bbl. (barrels being emptied and returned) for all kinds except Spys, which sold at \$5 to \$6. Hand-picked, faced stock sold as follows: Spys, No. 1, \$8 to \$9; No. 2, \$6.50 to \$7.50; Greenings, Baldwins and other varieties, No. 1's, \$5.50 to \$6.50; No. 2's, \$4 to \$5 per bbl.

B. C. apples, \$4 per box. Bananas.—12c. per lb. Cranberries.—\$16 to \$18 per bbl. Lemons.—\$4 to \$4.50. Oranges.—\$6 to \$8.50 per case. Pears.—Keiffers, 40c. to 50c. per 11-qt. basket.

Vegetables.—Potatoes were an easier trade; a few sales were made at \$2.50, but most dealers were offering them at \$2.25 to \$2.40 per bag.

Beets, carrots, onions, etc., were a slow, draggy trade.

Beets.—\$1 per bag. Cabbage.—40c. to 75c. per doz., \$1 to \$1.50 per bbl.

Carrots.—75c. to \$1 per bag. Cauliflower.—50c. to \$2.50 per doz. Celery.—50c. to \$1 per doz.

Lettuce.—Leaf, 30c. to 35c. per doz.; Canadian head, 75c. to \$1.50 per doz.

Onions.—\$1.50 to \$1.75 per 100-lb. sack; pickling yellow, 50c. per 11-quart; white, \$1 to \$1.50 per 11-quart basket.

Potatoes.—\$2.25 to \$2.50, bulk at \$2.25 to \$2.40 per bag.

Sweet Potatoes.—\$3 to \$3.50 per hamper.

Squash.—75c. to \$1.50 per doz. Pumpkins.—75c. to \$1.50 per doz. Turnips.—60c. to 75c. per bag.

Hay and Straw—Farmers' Market. New hay, No. 1, per ton, \$38 to \$40; mixed, \$32 to \$35; straw, rye, per ton, \$25 to \$28; straw, loose, per ton, \$13 to \$14; straw, oat, bundled, \$18 to \$20.

sold at \$12.25, and the best heavy Canadian steers landed at \$10.50 and \$10.75, with others dropping to \$9 to \$10. Choice handy steers were scarce and while few reached above a dime, sellers quoted the right kind up to eleven. About the best in the heifer line had to take \$9 and \$9.25, and best cows sold from \$7 to \$7.50, with canners landing largely at \$2.75. Bulls show a spread of from \$5 to \$8.50, few fancy up to \$9.50, and stockers and feeders sold from \$5 to \$8, with a few fleshy feeders up to \$9. Milk cows and springers were steady, ranging from \$40 to \$125. Receipts for the week were 5,865 head, the week before there were 7,375 head, and 7,350 head were offered for the same week a year ago.

Steers, Canadian.—Best, \$10.50 to \$10.75; fair to good, \$9.75 to \$10; common and plain, \$9 to \$9.50.

Butchering Steers.—Yearlings, good to prime, \$13 to \$14; choice heavy, \$11.50 to \$12; best handy, \$10.75 to \$11; fair to good, \$10.25 to \$10.50; light and common, \$9 to \$9.75.

Cows and Heifers.—Heavy heifers, \$9.25 to \$10; best butchering heifers, \$9 to \$9.25; good butcher heifers, \$8 to \$8.50; light, common, \$5.50 to \$6; very fancy fat cows, \$7.50 to \$8; best heavy fat cows, \$7 to \$7.50; medium to good, \$5.75 to \$6.50; cutters, \$3 to \$3.50; canners, good, \$2.50 to \$2.75.

Stockers and Feeders.—Best feeders, \$8 to \$9; common to fair, \$7.25 to \$7.75; best stockers, \$7.25 to \$7.50; fair to good, \$6.75 to \$7; common, \$5.50 to \$6.

Bulls.—Best heavy, \$8 to \$8.50; good butchering, \$8 to \$8.50; sausage, \$5.50 to \$6.50; light bulls, \$5 to \$5.50.

Milkers and Springers.—Best, \$85 to \$110; medium to good, \$75 to \$80; common, \$50 to \$65.

Hogs.—Prices were given a hard jolt at all marketing points again the past week,

sold at \$12.50, with culls bringing up to \$10. Sheep also sold better the latter part of the week, ewes fetching up to \$5.50, with best wethers \$6.25 and \$6.50. Receipts for the week were 22,000 head, as compared with 30,400 head for the week before, and 23,000 head for the same week a year ago.

Calves.—Calf prices also showed a tumble the fore part of last week, but a reaction was had before the week was out. Monday tops sold at \$16; Tuesday's trade was steady; Wednesday best sold at \$16.25, and Friday bulk moved at \$17. Under grades sold badly. Few culls reached above \$11, weighty fat calves ranged from \$6 to \$10, and grassers \$4 to \$5. The week's receipts were 3,200 head, being against 3,200 head for the week previous, and 3,000 head for the same week a year ago.

## Monday's Live Stock Markets.

Montreal, November 29. Cattle.—Receipts, 3,132. Market very slow with no good cattle of any kind. One load of steers, averaging 875 lbs., was sold at \$7. Aside from a few odd animals that might be picked out at \$8 and \$9, nearly all sales were made under \$7. Common, light stuff reported early on the market to be 50 cents lower. Canners and bulls about steady. Quotations: Butcher steers, medium, \$7.50 to \$8.50; common, \$5 to \$7.50. Butcher heifers, common, \$4 to \$7. Butcher cows, medium, \$4.50 to \$6.50; canners, \$2.75; cutters, \$3 to \$4. Bologna bulls, \$4 to \$5.

Calves.—Receipts, 788. Grass calves mostly common quoted at \$5 to \$5.25. No change in the market for veal calves. Quotations: Good veal, \$13 to \$15; grass, \$4.50 to \$5.50.

Sheep.—Receipts, \$3,795. Prices established late on the market, which seemed a bit weaker than the week previous, when top lambs sold for \$11.

Hogs.—Receipts, 1,550. A few hogs were weighed up at \$16.50, with \$16 as the ruling price. Sows, \$4 less than selects. Quotations, off-car weights: Selects, \$16; sows, \$12.

Buffalo, November 29. Cattle.—Receipts, 3,800. Choice cattle, 25 to 50 cents higher. Others steady.

Hogs.—Receipts, 12,800. Best grades, \$11.25 to \$11.40; top, \$11.75 to \$12.

Sheep.—Receipts, 8,000. Best lambs, \$13.50; best ewes, \$5.50.

Calves.—Receipts, 3,000. Top price, \$17.

Toronto, November 29. Cattle.—Receipts, 2,759. With a small run of cattle and a general better quality, trade is active to-day. Choice cattle are strong; common to medium grades, steady. Inquiry for good feeders is noticed, but the class offered is not up to requirements in some cases. Quotations: Heavy beef steers not quoted, but choice steers, \$10 to \$11.50; good, \$9.50 to \$10; medium, \$7 to \$9.50; common, \$5 to \$6. Butcher heifers, choice, \$9.50 to \$11; medium, \$6.25 to \$9.50; common, \$5 to \$6. Butcher cows, choice, \$7 to \$8.50; medium, \$5.50 to \$7; canners and cutters, \$3 to \$5. Butcher bulls, good, \$7 to \$8.50; common, \$4 to \$6. Feeding steers, good, \$9.50 to \$10.50; fair, \$8 to \$9.50. Stockers, good, \$8 to \$9; fair, \$6.25 to \$7.50.

Calves.—Receipts, 198. The calf trade is a little draggy. Choice veal, tops, 17 cents; the majority of the run common variety. Quotations: Choice, \$15 to \$17; medium, \$12 to \$15; common, \$5 to \$10. Milch cows, choice, \$100 to \$150. Springers, choice, \$110 to \$155.

Sheep.—Receipts, 5,717. Lambs are again about a quarter stronger than Thursday, the bulk selling at \$12.75 to \$13. Quotations: Lambs, \$12 to \$13.

Hogs.—Receipts, 3,894. In spite of predicted lower prices, hogs are steady at last week's close, \$15.25 to \$15.75, fed and watered. Quotations: Fed and watered basis: Selects, \$15.25 to \$15.75; lights, \$13.25 to \$13.75; heavies, \$14.25 to \$14.75; sows, \$11.25 to \$12.75.

## Cheese Markets.

On the Montreal market, on Saturday, November 27, finest Eastern cheese sold at 18c. to 23½c. At New York, State, whole-milk flats, held, average run, sold at 24½c. to 26½c.; fresh, average run, 23½c. to 24½c.

Markets continued on page 2074.

## Your Christmas Number

This handsome and valuable number will be mailed next week, see that you get it. If it is not in your mail box or Postoffice, raise a row, some other person will have it.

Please send us \$3.00 at once, and pay for two years in advance, and save \$1.00. The price after January 1st, 1921, will be \$2.00 per year.

Send in a new subscription with your own; for every new subscription you send in, we will advance the date on your label six months. \$1.50 to accompany each new subscription if sent before December 31st, 1920.

## Clover Seed.

Dealers quote clover seed at country points as follows—Alsike, No. 1 fancy, \$14 to \$15; No. 1, bush., \$13 to \$14; No. 2 bush., \$11.50 to \$12.50; No. 3 bush., \$10 to \$11; rejected, \$6.50 to \$9.50. Red clover, No. 1, bush., \$12 to \$13; No. 2, bush., \$11 to \$12; No. 3, bush., \$9.50 to \$10.50.

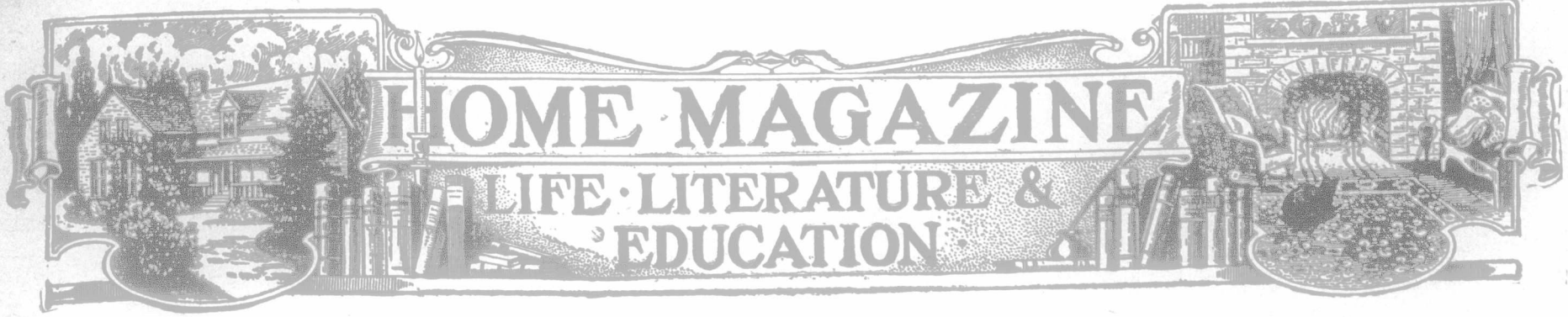
## Buffalo.

Cattle.—Cattle market, as a result of liberal receipts at all marketing points, a bad dressed meat trade down east, and the fact that this being Thanksgiving week in the United States, when the mind of the consuming public naturally turns toward turkey and other poultry, was the most unsatisfactory that has been witnessed for a long time back. Prices here went off a quarter to fifty cents, and in some cases as much as a dollar from the week before, and it was a slow, draggy session at that, the close of each day showing several loads going over unsold. Monday's run of 5,000 head, included around thirty cars of shipping steers, majority of which were Canadians. Best native shipping steers on the medium weight order, with a short feed of corn,

Buffalo's market being the lowest since December, 1916. Receipts were liberal, the run locally for the week being 34,500 head, as compared with 92,500 head for the week before, and 27,600 head for the same week a year ago. Monday the best grades landed at \$11.50, with pigs bringing up to \$11.75, and Tuesday and Wednesday buyers got good hogs down to \$10.50 and \$10.75, with pigs \$11 and \$11.25. Thursday there was no market on account of Thanksgiving, and Friday the trade was steady to a quarter lower, best grades moving at \$10.50, with pigs \$11. Roughts dropped to \$9, and stags ranged from \$7 to \$8.

Sheep and Lambs.—Thanksgiving week is usually about the worst time of the year for the sheep and lamb trade, and last week was no exception to the rule. Receipts were not overly large, however, there was little demand, and as a result values were hit hard, local prices striking the lowest level since November, 1916. Monday buyers got choice lambs at \$11, culls sold from \$8.50 down, and good ewes, which made up most of the sheep receipts, were slow sale at a nickel. After Monday the trade was better. Tuesday best lambs sold at \$11.25; Wednesday tops made \$11.50, and Friday choice lots





**The Lake Isle of Innisfree.**

BY W. B. YEATS

I will arise and go now, and go to Innisfree,  
And a small cabin built there, of clay and  
wattles made;  
Nine bean rows will I have there, a hive  
for the honey bee,  
And live alone in the bee-loud glade.

And I shall have some peace there, for  
peace comes dropping slow,  
Dropping from the veils of the morning  
to where the cricket sings;  
There midnight's all a-glimmer, and noon  
a purple glow,  
And evening full of the linnet's wings.

I will arise and go now, for always night  
and day  
I hear lake water lapping, with low  
sounds by the shore;  
While I stand on the roadway, or on the  
pavements gray,  
I hear it in the deep heart's core.

**The Farmer's Wife.**

SO often the "hard" lot of farm women  
has been ranted over, and so much  
unasked pity has been lavished upon  
them by people who have never known  
an hour of actual farm life, that it is  
rather refreshing to read the outcome of  
a recent investigation in the United  
States, where conditions are very much  
the same as here in Canada.

Some months ago the home editor of  
*Farm and Home*, Springfield, Mass.,  
asked the women among the subscribers  
of the paper to write letters telling what  
they thought about reports that the  
"poor farm woman on lonely farms toils  
wearily with scant reward, and grows old  
and gray before her youth is gone."

Here are some of the replies:

"How many women living in crowded  
quarters in cities, with scarcely room to  
breathe and no real freedom, would ex-  
change places with me and many others  
situated as I am? As I write, my bonny  
baby of fourteen months lies asleep in his  
crib on the screened porch free from noise  
and dust. The older children are play-  
ing in the yard with their dog, kitten and  
dolls. They have oceans of fresh air to  
breathe and unlimited freedom. Pro-  
viding meals is no problem, for I have  
fresh vegetables growing right at hand, a  
tender young chicken prepared from my  
own flock (no cold-storage products for  
us!) We have plenty of fresh milk and  
butter, and many other good things to  
eat and grow on. I can look out on fields  
of ripening grain and beautiful flowers  
and thank God for his blessings."—Mrs.  
C. E. Plummer, a farmer's wife of Okla-  
homa.

"Lonely? Where is there such an  
abundance of life as in the country?  
There may not be crowds of people, but  
nature makes a grander showing. The  
trees, the grass, the flowers, the birds,  
the horses, and cattle—even the crickets,  
locusts, katydids, and frogs—all add to  
the grand symphony of nature. And  
then there are the beautiful bright moon  
and the shining stars at night, when God  
seems so near.

"Where are the members of the family  
nearer and dearer to each other than on  
the farm? Where do they understand  
each other better? How many wonderful  
evenings are spent together with neigh-  
bors around the piano and victrola, sing-  
ing and dancing! How many pleasant  
hours are spent driving through the  
country, going to band-concerts or picnics  
or to church on Sunday! And then there  
are the telephone and the daily visits of  
the letter-carrier with magazines and  
newspapers.

"It is city life that is lonely, where one  
may travel all day through crowded  
streets and be among strangers; where one

may see so many sad-eyed women, and  
dirty children playing in dirty streets!

"Work hard? Of course we work hard,  
but honest work is praise and prayer.  
No other woman on the face of the earth  
is so much a partner and chum to her  
husband as the farm woman, and now-  
where is there such clean, wholesome  
family life as on the farm."—Mrs. H. F.  
Woodrich, of Illinois.

"Believe me, there are no farm women  
around here who work from 4.30 a.m.  
until 10 p.m. I rarely ever get up before  
six o'clock and am usually through before  
eight at night, even though I do all my  
own housework, make all my own clothes,  
even underwear and coats, and very often  
hats, too.

"I have four in the family all the time  
and sometimes more, also have quite  
a lot of company. I do lots of canning  
of fruits and vegetables. In our 'Lizzie'  
I carry the milk three miles to the cream-  
ery every morning, Sundays included.  
I do not consider myself overworked in  
the least, neither am I bent or faded,  
neither are my hands reddened or work-  
worn. I have time to go for pleasure  
rides, and once or twice a week we go to  
the 'movies' in the nearest town, which  
is nine miles away. Occasionally we  
spend a day at the lake. Fully 75 per-  
cent of the farmers in this locality own  
their own motor-cars. We nearly all  
have telephones and almost without  
exception are great readers, and when  
weather permits we have weekly club  
meetings all winter. There is no such  
word as lonesomeness in our vocabulary.

"I am sick and tired of being-pitied  
as a farm woman, when I don't need it,  
because I truly think we are happier  
than any other class of women in the  
whole United States. We have work  
enough so that we can appreciate our  
pleasures, and we have pleasures enough  
so that the work never becomes drudgery.  
Personally, I would rather be hanged  
than to have to wear some of the 'latest  
fads and fancies of fashion.' Neither  
would I change the 'same familiar land-  
scape' for the side of some one else's  
house, as people, living in city houses  
have to do, if they 'look out of their  
windows at all.'"—Mrs. A. Hewins, Mass.

A school-teacher who worked and  
lived among farmers adds her testimony  
as follows:

"I am an unmarried woman, a teacher  
in the public schools. Last year I  
taught a rural school, and I never had  
a happier year. The children were good  
and kind and sincere and intelligent.  
In fact, the school as a whole was the  
finest class of children that I ever taught.  
I went there to get experience that  
I had never had teaching in city and  
village schools. I am in a position to  
compare the children in the country with  
those in the city. What I think is proved  
by this fact is that I will never willingly  
teach in the city again. In the country  
we have parties, community sings, com-  
munity picnics, and other community  
social affairs, and I never met with such  
hearty co-operation as I received from  
the parents of my country pupils.

"I remember one home distinctly.  
One of my pupils, a bright little girl  
in the fifth grade, invited me to her home  
to spend the night. It was as beautiful  
a home as I have ever been permitted  
to visit—a home, not a house only.  
It was lighted by electric lights, and  
when I looked out of the windows it  
was upon a beautiful orchard. The  
mother was a graduate of the Ohio  
State University, the father had been  
one of the professors of agriculture there,  
and the children were well trained. The  
father is now raising registered Guernsey  
cattle.

"I venture to say that there are few  
city homes that could compare with this  
country home in culture, refinement, and  
happiness. However, that was not the  
only happy home. Happy children can

not come from unhappy homes. The  
boys and girls were all happy and con-  
tented. Of course, I realize that it  
was an unusually beautiful and rich  
farming region, but I will always re-  
member my first year there as one of the  
happiest of my school-teaching years."

It is true that, in Canada as well as  
the United States, farm folk are con-  
tinually trying to lessen their work by  
procuring labor-savers and working out  
step-savers in the house as well as on the  
farm, but the pity lavished by outsiders  
upon the farm and its home are usually  
quite uncalled for. Even to work hard,  
early and late, may be a pleasure, when  
the place is one's own and the work is  
all for improvement.

**Your Health.**

By "MEDICUS".

**Hardening of the Arteries.**

FOR "X. Y. Z." Your condition  
should be carefully investigated to  
make sure that there is no other  
disease present in addition to hardening  
of the arteries. We formerly thought  
that if a person has high blood pressure  
he was in a serious condition. Now  
we believe that it is Nature's solution of a  
difficult problem. Nature can maintain  
a more efficient circulation, when the  
arteries are hardened if the blood pressure  
is high. The patients as a rule do not  
feel as well when their blood pressure  
has been lowered by drugs as they do  
when their blood pressure is higher.  
In fact we have no drugs that will per-  
manently lower blood pressure. The  
treatment, then, is to regulate the general  
health and habits of the patient.

Most patients are hearty eaters, so  
advise them to eat less in amount  
but do not restrict them to any particular  
foods,—the quantity, not the quality  
of the diet is the essential thing. Of course  
you should not eat meat more than once  
a day. On the other hand, I do not think  
it is wise to stop eating meat altogether.  
Your body needs a certain amount, and  
you should take some every day or two.  
It is better to undereat meat than over-  
eat meat.

Your daily life should be regulated—a  
quiet, sane life, without excesses of work  
or worry, plenty of sunshine, "a mile of  
oxygen a day," a love of flowers and  
chickens and music and children. Your  
arteries will not stand up very well under  
sudden strains, either physical or mental.  
On the other hand, if you use a certain  
amount of care and common sense, your  
hardened arteries will not necessarily  
shorten your life.

If you could give me some additional  
information it is possible I might be  
able to tell you more about your condition.

Kidneys—Up night to pass water?  
Swellings of hands or feet or beneath  
the eyes? Do your rings get tight on  
your fingers? Are your corsets tight or  
loose?

Eyes—Do your glasses suit you? Can  
you see as well as you did six months ago?  
Specks in front of the eyes?

Rheumatism in Hips and Back—  
Teeth—pyorrhoea? Crowns? Tonsils—  
repeated attacks of sore throat? Appendix  
—attack of appendicitis? Shortness of  
breath on going upstairs hurriedly?

Fainting Attacks—Time of day?  
Number in a week? Or month? Any  
previous warning that an attack is coming  
on? Any vomiting? Do they follow  
excitement?

**Nasal Polypi.**

Mrs. L., Peel Co., Ont.: "I have had  
a discharge from my left nostril ever since  
I was a child. At 17 I was taken to a  
doctor and had a polypus removed. It  
gave me much relief, but as time went on  
I found it necessary to cleanse my nostrils  
and throat from time to time with salt

and water, soda and water, and sometimes  
a solution of water, salt, glycerine and  
carbolic acid, because the mucus hardens.  
The discharge now seems heavy and  
yellow; also my right eye runs a sticky  
water every morning. During last spring  
I awoke every morning with pains in my  
back, between my shoulder blades.  
With the return of cold weather the  
aches have come again, in my legs this  
time. After my fifth baby was born  
my doctor said I had valvular trouble of  
the heart. I take nervous spells every  
month."

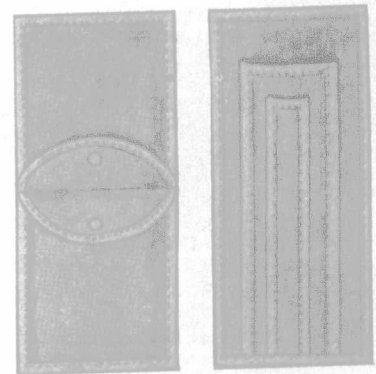
Ans.—I would recommend that you  
consult a competent nose specialist.  
In the meantime continue your douche  
of salt and water. You have done wonder-  
fully well to have tolerated your dis-  
comfort for such a long time (twenty-  
five years). It would appear as if the  
infection from your polypus has travelled  
up the tear duct and affected your right  
eye. Your "rheumatism" should dis-  
appear following treatment of your nose.  
It is possible the poison from your nose  
may account for your heart condition.

**Christmas Gifts.**

SOCRATES, the old Greek philosopher,  
one of the wisest men who ever lived,  
declared that no gift is worthy which  
does not truly benefit as well as please  
the recipient. If everybody remembered  
that, when making Christmas gifts, the  
world would be spared a lot of junk.

Two gifts which are sure to please,  
—if given to the right person, of course,  
—are a travelling-case and a pair of  
candle shades.

The travelling case may be made  
of denim, cretonne, chintz, etc., nicely  
bound about with braid. The compart-  
ments in the first figure shown in illustra-  
tion are for toothbrush and comb. The  
second figure shows the top that is  
fitted on and fastened along one edge.  
The top, as you see, is equipped with



Picture Shows Both Sides of a Hand-  
some Travelling Case.

two compartments, fastened with dome  
fasteners, for the wash rags. An ap-  
propriate card to enclose with this gift  
would be:

If on a journey you should go  
To Timbuctoo or Kokomo,  
In fact to any earthly place,  
Be sure to take this travelling case.

—But even for a week-end visit the  
travelling-case will be just as much ap-  
preciated as on a trip to Timbuctoo. Of  
course, it is only appropriate for someone  
who goes about a great deal.

The little candle-shades make a delight-  
ful gift for anyone who has candlesticks,  
—for what can be prettier on the tea-  
table, if one wants to have it especially  
pretty, than a pair of candles with pretty  
pink or amber-colored shades? And  
what can be more cosy, on a stormy  
winter night, than a room with a bright  
fire in the stove or grate, and no other  
light, perhaps, but three or four

**Live Stock Markets.**

December 29. Cattle.—  
Market very slow with  
very few sales. One load of  
775 lbs., was sold at \$7.  
Odd animals that might  
be sold at \$8 and \$9, nearly all  
under \$7. Common,  
and early on the market  
over. Canners and bulls  
Quotations: Butcher  
\$7.50 to \$8.50; common,  
canner heifers, common,  
cows, medium, \$4.50  
to \$5.50; cutters, \$3 to  
\$4 to \$5.  
Hogs, 788. Grass calves  
quoted at \$5 to \$5.25.  
Market for veal calves.  
Veal, \$13 to \$15; grass,  
\$3,795. Prices estab-  
lished market, which seemed  
to be the week previous,  
sold for \$11.  
Pigs, 1,550. A few hogs  
at \$16.50, with \$16 as  
top. Sows, \$4 less than  
others, off-car weights:  
\$12.  
December 29. Cattle.—Re-  
noiced cattle, 25 to 50  
head steady.  
Hogs, 12,800. Best grades,  
top, \$11.75 to \$12.  
Lamb, 8,000. Best lambs,  
\$5.50.  
Pigs, 3,000. Top price,  
\$11.  
December 29. Cattle.—Re-  
with a small run of cattle  
better quality, trade in  
choice cattle are strong;  
medium grades, steady.  
Feeders is noticed, but  
is not up to require-  
ments. Quotations: Heavy  
steers, \$9.50 to \$10; medium,  
\$8.50 to \$9.50; common,  
\$7.50 to \$8.50; medium,  
\$6.50 to \$7.50; common,  
\$5.50 to \$6.50; butchering  
steers, good, \$9.50 to  
\$10.50; Stockers, good,  
\$7.50 to \$8.50.  
Hogs, 198. The calf trade  
Choice veal, tops, 17  
to 18 cents.  
Pigs, Choice, \$15 to \$17;  
common, \$5 to \$10.  
Lamb, \$100 to \$150. Spring-  
calves, \$155.  
Hogs, 5,717. Lambs are  
stronger than  
last week, selling at \$12.75 to  
\$13.  
Lamb, 3,894. In spite of  
prices, hogs are steady  
at \$15.25 to \$15.75, fed  
steers, \$15.25 to \$15.75;  
heavies, \$13.75 to \$14.25;  
light, \$11.25 to \$12.75.

**Markets.**

Market, on Saturday,  
best Eastern cheese sold  
at New York, State,  
held, average run, sold  
at \$1.25; fresh, average run,  
sold at \$1.15.

Continued on page 2074.

such shaded candles about the room? What a time for story telling!

The square shades shown in our illustration were made of heavy black paper, cut out in a design, carefully pasted together at the corners, lined with bright thin paper or silk, and slipped over wire frames. The round ones are still easier to make, since, if the paper is heavy enough, they need no wire frame except the little support to rest on. If the heavy black paper cannot be got, pasteboard, painted black, will do as well, but is not quite so easy to manage. Put the sides together by pasting strips of heavy paper over the corners. Another excellent medium for shades is an old window-blind. With a little can of paint you can do wonders with either window blind or pasteboard. Of course the

paint does not have to be black. Black paint goes best, perhaps, with a brilliant orange, or flame-colored lining; brown may look better with light yellow or amber lining; while gray will go delightfully with a pink lining. The color you choose must depend, of course, upon the color-tones of the room in which the candles are to be placed.

Very attractive candle shades may be made of wire frames covered carefully with plain chintz or with "Jap" silk softly gathered on. Finish the edge with narrow fancy braid of the same color, or with fringe.

Shades such as the above are very pretty over ordinary electric light bulbs. If intended for wax candles a wire rest must be provided for.



### The Rabbits and the Pup.

CAM peeped through the slats of the big box in the yard, and growled under his breath. Mary and Doug, the pair of wee rabbits, were not nearly so frightened of him as he had expected.

"Who are you?" asked Mary saucily, for Mary was a bold rabbit.

"I'm Camouflage, Gerald's pup," Cam answered proudly.

"That's nothing. We are his rabbits," Mary spoke up.

But I am a Boston terrier and a very nice one too," said Cam. "You just ought to see my mother—she's a real prize winner!"

"Pooh, that's nothing," sneered Mary, and Doug "poohed" too.

That made Cam very angry for his dignity was hurt. From that minute he resolved to wage war on the rabbits—not that he dared to hurt them, for his master would have felt sad had harm come to his rabbits, but what a life the poor creatures had after that! Every time they were allowed out to eat clover, Cam chased them.

"Don't you dare to touch me," Mary had shrieked every time Cam hove in sight, but she might just as well have saved her breath for the pup nipped at her heels and caused her to hurry. Poor little Doug was served just as badly. It was not at all nice being out in the yard and having a dog chase one, so Mary and Doug kept in their small pen most of the time.

"If mother were here she would thrash you," Mary called through the bars of her pen one day, after Cam had chased her to a place of safety.

"My mother would eat your mother up in one gobble," Cam laughed.

"You haven't seen our mother. She's twice as big as you," little Doug spoke up meekly.

"Ha, ha," laughed Cam again, for he had no respect for rabbits, big or small.

It was just about dusk this night, and after Cam was sure he had given Mary and Doug a good scare, he started for the house. Just inside the door, he stopped. Gerald's laugh could be heard quite plainly. The pup's young master was enjoying himself some way. With a bark and a bound Cam started for the dining-room. How dark it was there! Oh! Staring him right in the face was a great big animal, an animal half as big as the wall. A rabbit! Mary and Doug's mother! Her mouth was open and she was coming right for him. With a squeal of fright Cam turned and fled. The back door was still open and he dashed from the house. Out of the yard and down the street he ran. With every step he was sure the big rabbit was right on top of him. Quite plainly he could hear heavy steps pursuing him. There! In his excitement and because of the heavy supper he had eaten, Cam fell prostrate on the sidewalk. The next thing he knew he was seized in a strong grip and lifted into the air.

"Why Cam, what's the matter?" It was Gerald. How thankful the pup was. "Did my picture-projector scare you?" asked Gerald. "That was just

a rabbit-picture on the wall. The machine made it look big like that."

How ashamed Cam felt when he knew the truth. Just the same, he had learned his lesson. He knew now how it felt to be chased by something much bigger



Doug and Mary.

than himself, so he was sorry for Mary and Doug. After that the rabbits had no cause to worry, and they lived happily together until Gerald gave them to another little boy who had no dog to torment them.

The End.

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### For the Christmas Entertainment.

By ETHEL ROBSON.

HERE is something a little different to help out with the Christmas entertainment; it is a Mother Goose Party and gives plenty of opportunity

to the kiddies to "dress up," which they so dearly love to do. They can hunt up the styles for their costumes themselves from the illustrations to their own children's stories and rhymes, and thus have no end of excitement beforehand, all of which helps to create the atmosphere for the evening of the concert. This little play can also be carried out without much practice together beforehand, which is a great advantage in the country where getting together is often so difficult. One teacher who used this in her entertainment last Christmas constructed the costumes mainly of crepe paper; however, diligent search in the various homes will usually uncover the necessary material.

#### "Mother Goose."

"Tis ne'er complete at Christmas time,  
Without a Mother Goose's rhyme,  
And so to-night I've summoned here,  
My children dear from far and near;  
They'll fill your hearts with childhood's grace,  
And for a time the years efface;  
For everything there is a use,  
You're ne'er too old for Mother Goose.

#### "Jill."

"Jack and Jill went up the hill,  
To draw a pail of water,  
But Jack ran away with boys to play,  
And here am I with the water.

But when he gets home he'll be seen alone,  
Then maybe he'll be wishing,  
He's stayed with me to make the tea,  
Instead of going off fishing."

#### "Little Red Riding Hood."

I'm a child you all know of story-book fame,

Little Red Riding Hood is my name;  
My mother sent me through the wood,  
To my dear sick grandma with a basket of food;

An old wolf met me by the way,  
And stopped to bid me the time of day,  
Then said he would run me a merry race,  
To see who would come first to grandma's place;

But I lingered to pick the pretty flowers,  
And loitered away some precious hours;  
Then when I knocked at grandma's door,  
Her voice did not sound as it did of yore;

I slipped across to grandma's bed,  
Where she lay with the covers up over her head;

But her eyes looked out so fierce and bright,  
They really gave me quite a fright;

And her teeth looked awful when she smiled,

Then she snapped, "They'll eat you up my child;"

'Twas the wolf I had met away back in the wood,  
And I screamed and screamed as hard as I could;

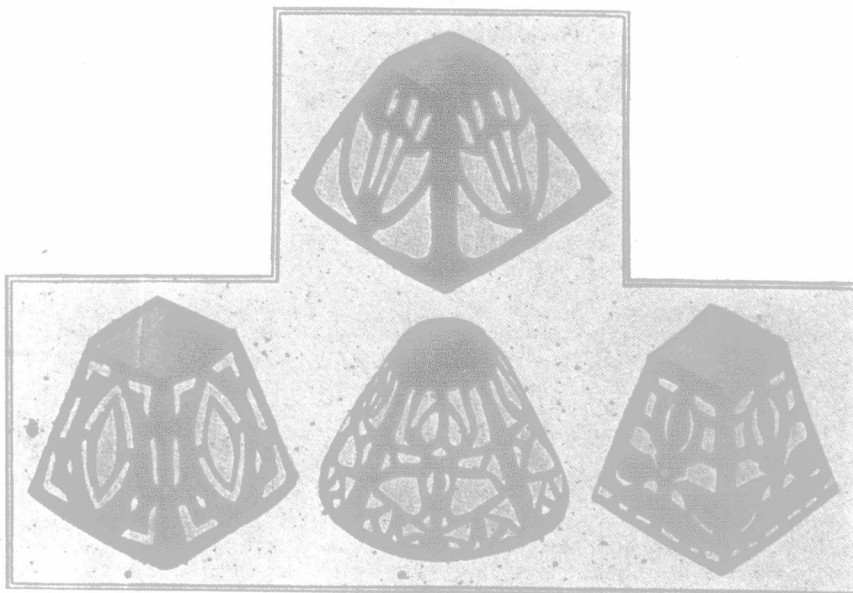
A kind woodman heard me and rushed through the door,  
And soon the old wolf lay dead on the floor,

Then the strangest thing you could contrive,  
My dear old grandma stepped out alive;

Now in Story-Book Land we ever dwell;  
And all the children love us well;

To-night we wish you good Christmas cheer,  
And to everyone a bright New Year.

And to everyone a bright New Year.



Candle Shades Make Acceptable Christmas Presents.

#### "Little Jack Horner."

Little Jack Horner sat in a corner,  
Eating his Christmas pie,  
And why he was there the girls all declare,  
Was just because he was shy.

But when he is older our John will be bolder,

From the girls he will not run,  
Where ever they are he'll be there with his car,

To take home the prettiest one.

#### "Silverlocks."

I am that little Silverlocks that would not stay at home,

But in the forest dark and drear I dearly loved to roam;

One day when out there walking I saw an old bear's house,

No one was home so in I crept as quiet as a mouse;

I ate the old bear's dinner up, I broke Wee Tiny's chair,

And then I felt a little tired and so I climbed the stair;

I lay me down on Tiny's bed and soon was fast asleep,

When suddenly within my dream I heard the stairway creak,

The Father Bear was standing there with looks so very grim,

My heart it gave an awful thump when I looked out at him;

A window near was open wide, I made a sudden bound,

And very soon a little girl was sprawling on the ground.

Since then I've been a different child,  
I do as I am told,

My mother says that I've become almost as good as gold.

#### "Humpty-Dumpty."

I'm Humpty Dumpty on the wall,  
I'm not afraid I'll get a fall;

And here I'll watch till Christmas night,  
And give old Santa quite a fright.

#### "Little Miss Nettlecoat."

Little Miss Nettlecoat, in her white petticoat,

No longer serves us at night,  
Instead of a candle that's dangerous to handle,

We turn on electric light.

#### "Little Tommy Tucker."

Little Tommy Tucker  
Cries for his supper,

But he turns his nose up  
At bread and butter;

Don't you think he  
Would be better far,  
If he wasn't quite  
So par-tic-u-lar?

#### "Cinderella."

Cinderella, Cinderella, rags and dirt were mine,

Until my fairy godmother dressed me up so fine;

My sisters were unkind to me, and my stepmother too,

But now the charming prince is mine their cruel ways they'll rue;

I wonder what he thought last night, as hurrying after me,

A ragged girl and scampering mice were all that he could see;

But ere the magic hour had struck. I left upon the floor,

For him to find when I was gone, the slipper that I wore;

And now he swears that no one else will ever be his bride,

But she who can that slipper wear;  
my sisters both have tried,

But only on my foot 'would go, for theirs were much too large.

The dirty pots and greasy pans no more shall be my charge,

For I shall be the princess and ride in a golden car;

So now you see there's hope for you no matter who you are;

But ladies dear, if you desire to win your own dear love,

If you can't leave your shoe behind,  
then why not try your love?

#### "Simple Simon."

They call me Simple Simon,  
But I'm wiser than I look,

For half the things they say of me  
We're just to fill a book.

And if I tried to carry  
Fresh water in a sieve,

'Twould have been ice in winter,  
As surely as I live.

ack Horner."  
 er sat in a corner,  
 tmas pie,  
 ere the girls all declare,  
 e he was shy.  
 ilder our John will be  
 he will not run,  
 e he'll be there with his  
 e prettiest one.  
 rlocks."  
 verlocks that would not  
 e,  
 est dark and drear I  
 d to roam;  
 there walking I saw  
 ouse,  
 e so in I crept as quiet  
 dinner up, I broke Wee  
 a little tired and so I  
 stair;  
 Tiny's bed and soon  
 ep,  
 within my dream I  
 airway creak,  
 as standing there with  
 y grim,  
 an awful thump when  
 him;  
 s open wide, I made a  
 d,  
 ittle girl was sprawling  
 d.  
 een a different child,  
 told,  
 that I've become al-  
 as gold.  
 -Dumpty."  
 pty on the wall,  
 'll get a fall;  
 a till Christmas night,  
 ta quite a fright.  
 s Netticoat."  
 coat, in her white  
 us at night,  
 e that's dangerous to  
 ic light.  
 my Tucker."  
 ker  
 per,  
 ose up  
 ter;  
 e  
 far,  
 erella."  
 ella, rags and dirt  
 odmother dressed me  
 kind to me, and my  
 oo,  
 ng prince is mine their  
 ey'll rue;  
 ough last night, as  
 er me,  
 scampering mice were  
 ould see;  
 hour had struck. I  
 floor,  
 when I was gone, the  
 wore;  
 that no one else will  
 ide,  
 n that slipper wear;  
 oth have tried,  
 t 'would go, for theirs  
 too large.  
 and greasy pans no  
 my charge,  
 princess and ride in a  
 ere's hope for you no  
 you are;  
 ou desire to win your  
 e,  
 ve your shoe behind,  
 t try your love?  
 e Simon."  
 mple Simon,  
 an I look,  
 they say of me  
 a book.  
 ry  
 eive,  
 ce in winter,  
 e.

This proves I'm not so foolish,  
 I think you will agree,  
 As half the people round you  
 Whom every day you see.

And now I've said my little piece,  
 I'll make my bow to you,  
 Your old friend, Simple Simon,  
 Will bid you all adieu.

In "Jack and Jill" only Jill appears,  
 carrying a large pail. Humpty-Dumpty  
 stands on a box and waves his arms, of  
 course he is well stuffed to make him look  
 very round. Miss Netticoat carries a  
 lighted candle, and a flashlight; at the  
 end of the third line she blows out the  
 candle, and at the end of the fourth line  
 she turns on the flashlight. Characters  
 may be added on or left off, according  
 to the number of children to be worked  
 in. Other nursery rhymes can be utilized  
 for the small kiddies.

Mother Goose comes on the stage  
 first and after repeating her lines retires  
 to a seat at the back of the stage. The  
 others come in in order and after finishing  
 their lines Mother Goose rises and with  
 her stick points to their places alternately  
 on either side of her. When all are  
 finished they form in pairs and march  
 around the stage with Mother Goose in  
 the center, then all join hands and circle  
 to the left, then pairs facing each other,  
 grand right and left twice around and  
 go off the stage in pairs. Mother Goose  
 remains and when they are all out she  
 repeats the following lines:

My children have flashed across your  
 sight,  
 And filled your hearts with a child's  
 delight;  
 They've proved that old is always new,  
 And memories sweet may they leave with  
 you. Curtain.

### Hope's Quiet Hour.

#### Buying up the Opportunity.

Look therefore carefully how ye walk,  
 not as unwise, but as wise: buying up  
 the opportunity. Eph. 5:15, 16 (R. V.  
 margin.)

I meant, each brimming hour, to send  
 That promised letter to my friend;  
 The moments flashed and broke like spray  
 And I forgot that all things end;  
 That golden hour was yesterday—  
 I cannot reach my friend to-day.

He may have thought I did not care—  
 My friend so sensitive, so rare—  
 I failed him, I who loved him well!  
 Dear God, how do Thy children dare  
 To trifle with Thy Gift, To-day—  
 That fades, so soon to Yesterday!  
 E. N. HEPBURN.

Another year has almost slipped away.  
 Its record is faithfully noted down in the  
 books of God. "To-day" soon becomes  
 "Yesterday,"—it has a startling way of  
 slipping out of our hands and flying  
 entirely out of reach,—and "this year"  
 will very soon be "last year." You  
 may be young or old or middle-aged;  
 but, wherever you stand on the road of  
 life, the present hour will soon be left  
 behind you forever. We can't go back  
 and gather up the opportunities neglected  
 yesterday. The present is ours, the  
 future offers us its unknown possibilities,  
 but the past is as much out of our reach  
 as the sun in the sky—even though it  
 may have been in our grasp a minute ago.  
 I remember a story that I read about  
 forty years ago. It was the story of a  
 man making his perilous way along a  
 mountain path. The way in front some-  
 times looked difficult and dangerous,  
 but he had to go on. The path crumbled  
 beneath his feet and only a precipice  
 was visible if he looked back. We must  
 buy up the opportunity now, if we are  
 to do it at all. We can't hold the hours.

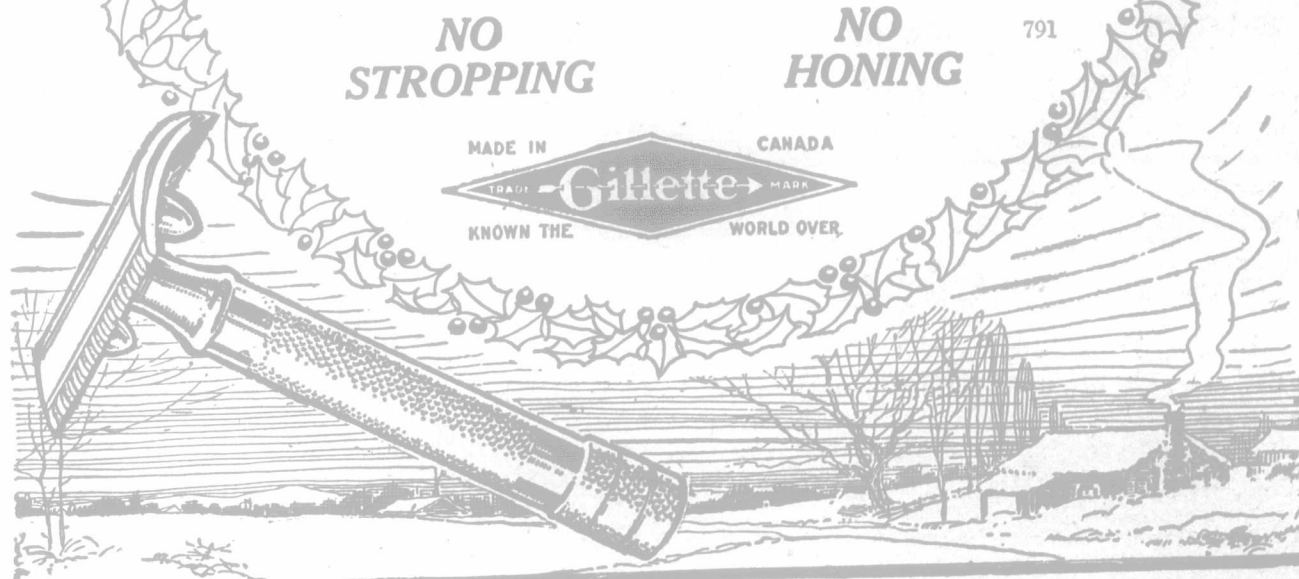
St. Paul told the Ephesian Christians  
 to look carefully how they walked, buy-  
 ing up the opportunity while it was pos-  
 sible. He said that was done by all who  
 were wise. In his letter to the Colossians,  
 he pleads for the prayers of his friends—  
 prayers that his work for his Master  
 may be fruitful—and then he uses the  
 same expression as we find in our text.  
 "Walk in wisdom toward them that are

# Gillette Safety Razor For Christmas—

His Christmas Gillette Safety Razor is at the stores  
 now, and it is worth a special trip to town. The  
 earlier you make your choice, the bigger the  
 selection.

The Gillette Safety Razor is one of the few gift  
 articles on which it is impossible for you to go  
 wrong. No matter what style you may select for  
 him—"The Big Fellow," "The Bulldog" or "The  
 Standard"—it can be nothing but the best working  
 razor that money can buy—handsome, practical  
 and serviceable.

There are Gillette Safety Razors at all prices from  
 \$5.00 up, but the difference is solely in the styles.  
 The blade is responsible for the world-wide fame  
 of the Gillette Safety Razor and, no matter what  
 you pay, the blade and the shaving service are  
 always the same—the final word in shaving science.



without, buying up the opportunity." They have an opportunity of helping to bring spiritual blessings to people in darkest ignorance. They may not be able to go out as missionaries to the heathen, but they can strengthen the heart and hands of St. Paul. It is like our own war-days. The soldiers at the front would have been helpless without a constant stream of supplies from home, and both letters and prayers helped tremendously to "win the war." That vexed question—"Who won the War?" is a foolish one. It is like saying: "What ray of sunshine or drop of water gave us our bountiful harvest?" The war was won by the steady faith, courage and effort of many millions of people, on both sides of the sea. They were buying up the opportunity all the time. They did not wait until the war was over to begin. The battle of life—the war against evil—is on now. We must not let the opportunity slip away unregarded. Soon—perhaps during the year 1921—you

or I may be called away. Then, if we have spent our years in self-seeking, we shall wish in deepest penitence that we could again have the opportunities we treat so lightly now. The "fool" in the parable thought he was a successful man. He had gathered in tremendous crops and was rising in the opinion of his neighbors. But he had lost the opportunity of a lifetime. His barns and money and crops slipped out by his weak grasp, and he had to give account for his stewardship. His life had been worthless. He had lost the chance of being kind. Perhaps he was waiting until he had saved a little more money—and a little more—and just a little more! Then he intended to buy up his opportunity and use some of the gifts of God to help his less fortunate neighbors—that is, if he could do so with no inconvenience to himself. I heard one day of a little girl who was accustomed to pray for China. One night she was "too tired" to pray. Soon

after she heard that there was a famine in China. Instantly she exclaimed: Doesn't that just serve me right! I wouldn't pray for it the other night, and now I'm just going to pray." She expected her prayers to be of real use to the far-away neighbors she had never seen. St. Paul knew that he could not work effectively unless his friends helped him with their prayers. So he pleaded with them to buy up the opportunity. I have been given the great privilege of writing this Quiet Hour each week; but its value depends very largely on you. Sometimes I have the joy of receiving a letter which says that a "reader" is praying for me; and always I am trusting that your prayers go up at least once a week for our Corner. The power of prayer is a mystery, but "more things are wrought by prayer than this world dreams of." If this page is to carry God's messages to any of His children, regularly and effectually, it is because the words go out on the wings of prayer.

**SEND TO London, Eng., FOR YOUR SUIT & SAVE MONEY**



**The WELL-DRESSED MAN**

inspires confidence. To be well-dressed is not to be over-dressed, but to be attired in suitable clothing.

THIS is where we specialise. We are practical tailors, who have given years of study to the question of men's clothes. That is why our business is so large to-day. We make friends and customers; which is not very difficult, but we do even more—we keep them.

**SUIT or OVERCOAT TO MEASURE \$22.50**

OUR CLOTHING to Measure has gained for us a world-wide reputation. This is not altogether surprising, because the value is marvellous. Every garment produced by us is an embodiment of grace. Our garments are really tailored. Apart from the quality of the fabric, the "Curzon" tailoring alone imparts an air of distinction to a man's clothes. It is something to be "CURZON" CLAD.

**WRITE FOR FREE PATTERNS**

We invite you to write us at once for free patterns, when by return you will receive a collection which, for beauty and variety, are unequalled by any selection in any tailor's shop or store. These patterns are sent carriage paid free of cost.

Together with patterns you will receive Latest Fashion-plates and an interesting Booklet explaining our methods of business. Included in this Booklet is a Self-Measurement Form, cleverly arranged, whereby you may take your own measurements in your own home with the certainty of accuracy. We will also send you a testimonial Booklet, incorporating letters of appreciation from clients all over the world.

Gentlemen requiring Urgent delivery of a London Made Suit can have same despatched in 10 to 14 days after order reaches us, on giving us particulars of shade and kind of cloth desired and enclosing remittance for the value.

**READ**

Hotel Griswold, Detroit, Mich. September, 1926.  
To THE EDITOR.—As a subscriber and a close reader of your daily, and noting the hits you are having with profilers of many varieties, let me give you an experience in the purchase of clothing. To a London firm on July 3rd I sent a draft for six pounds sterling, for which I paid my bank \$34.26. I sent my measure for clothes in detail as my local tailor would have them, describing about the patterns as I could, and left the balance to them, realizing that for that money I could not lose much at the most. Every clothing expert to whom I have submitted the goods placed the cost at \$35 to \$38. Wife declares I will never wear the suit out, its quality is so good; and for a fit there can be no criticism. The London tailors are CURZON BROS. LTD., and anyone can get their samples and prices on application, and prove what I have stated for themselves.  
HENRY VINCENT.

**THIS**

**OUR GUARANTEE** If our garments fail to give absolute and unqualified satisfaction, we undertake to refund money in full. This is our guarantee.

**SUIT or OVERCOAT To Measure**  
CARRIAGE AND DUTY PAID, \$22.50, \$25.50, \$28.00, \$31.00.

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A. X. CO. 61-64 CITY ROAD, LONDON, E.C. 1, ENGLAND.

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20th Century Piano  
"The Piano worthy of your Home"

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Made in Canada

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**Sherlock-Manning Piano Company**  
London :: Canada

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Will you make it one of your New Year resolutions to ask God to make me one of His stenographers? I have no message of my own to send you, but I do most earnestly desire to write the words from His dictation, gladly and faithfully.

We are rather inclined to think that a year has been successful if we have been prosperous in business or have had an exceptionally pleasant time. But, after all, we are not put in this world to get rich or to have a long holiday. The farmer who planned to make bigger barns for his overflowing crops thought himself prosperous and wise, yet our Lord called him a "fool"—and His verdict is the word of Truth. The man who lived in luxurious ease, and thought his own comfort was the most important business of life, discovered his folly—too late.

Our life on earth will soon be past, and it is of vital importance to each of us to make the best use of this time of probation and opportunity. One man said that when he became a Christian he made up his mind that he wasn't called into the Lord's vineyard to eat grapes, but to hoe. "And," he remarked, "I've been trying to hoe ever since."

When the call came, in 1914, our young men offered their lives eagerly and unreservedly. They never thought of waiting until the best of life should be over and then to give the dregs to their country. It is a very inglorious thing to spend the best years of life in selfishness, intending to bring the tattered remnants to the Leader Who died for love of us.

The prophet Malachi told his people that if they offered worthless gifts (the blind, lame and sick) to an earthly governor, he would not accept their offerings; yet they ventured to bring to God such shabby and worthless sacrifices. A religion which costs us nothing is worth very little—to ourselves or God.

Some men will say: "What's the use of planting an orchard when you are not likely to live long enough to see the fruit of it?" Why, you might just as well say that it is foolish for the father of a family to insure his life, because he has to deny himself constantly in order to pay the premiums and he will not reap any benefit from it. If we only care for ourselves—if we want to eat a box of candy alone—then we are only cumbering the ground. The fig-tree that looked flourishing, but bore no fruit, was not worth anything and was forced to give place to better stock.

A travelling umbrella mender, who was doing his work very faithfully, was asked why he was taking such pains. The questioner said: "The people you are working for wouldn't know whether your stitches would hold—at best, until you are gone. You don't expect to come this way again. Then why are you so particular?" The umbrella mender was old and shabby, but he intended to make the most of his opportunity as he went along. He answered: "I want to make it easier for the other fellow—the next one who comes along. If I do bad work, the next umbrella man will get the cold shoulder or the bull-dog—see?"

We are not called to do things which the world will admire; but we are all called to make use of daily opportunities of service.

"Do a kindness; never mind;  
What you lose the angels find.  
Do a kindness, small or great;  
'Twill come back in double weight.  
Do a kindness; never fret;  
No good deed has been lost yet."

DORA FARNCOMB.

**For the Sick and Needy.**

A Lambton Reader (Eva A.) sent \$2 for the needy, and Mrs. Leslie H. has put into my care a very handsome winter coat to "pass on." Many packages of papers for the shut-in have also found their way to 6 West Ave., Toronto. All these tokens of goodwill have a flavour of Christmas cheer. It is surprising how the Christmas season flashes radiance over November as well as December. I find it necessary to get my own preparations made very early, so that my hands may be free to direct the stream of kindness which flows through my little flat from other people.

DORA FARNCOMB.

**The Ingle Nook**

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

**New Movements Afoot.**

THIS morning shall we continue the talk about the subjects brought up at the recent W. I. Conventions? Even if you are not a member of the Institute you will agree with what I said last week, I think—viz. that the matters discussed in the Women's Institute meetings really do not for the most part, concern the Women's Institute alone, but all the members of the community besides. The same thing may be said of the United Farm Women's organizations in the various Provinces, and I am quite anxious to hear what will be the program at the U. F. W. O. Convention, which is to meet this month. No doubt it will be along lines very similar to those discussed at the W. I.

Last day we left off, I think, at "Community work."

Looking back to the London Convention, and passing over the "Health" and "Child Welfare" work, which was "reminisced" over last day, it seems to me that the most outstanding address upon community work was that given by Mrs. Gray of Lobo; at least she told of something definitely accomplished. When a rural district needs High School instruction and gets to work and founds a continuation school, as was done at Lobo, it shows that higher education of the children and young folk is a subject deep in the hearts of the people. When that same district comes together in united religious services, it shows that the people of that community are realizing that the spirit of brotherhood is really the spiritual and Christian thing, and that they are giving to it a higher place than that of mere sects and divisions which often have no reasonable reason for existence.

Surely all this—this endeavor for general health, the welfare of the child, higher education, brotherhood, is big community work. Concerts, drama, folk-games, sports all have their place in community work, an important place, were it only to bring people together—but there must also be the more serious work, that requires a little more effort, perhaps, but will be richest of all in satisfaction, in the end. Anything that extends information, opens a new vision or stimulates genuine, hard thinking, falls in this order, whether it be a high school for the past-entrance age, or University-Extension lectures for those out of school. All of these things come into the sphere of community work.

I cannot tell you the pleasure with which I heard the report from the Committee on Schools and Education (read by Miss McIntosh) at the recent W. I. Convention in London.—Because, perhaps, that has been one of my pet schemes for years. Several years ago I wrote to Wisconsin University for an article on this very thing recommended by the W. I. Committee, University Extension. The article was cheerfully submitted, and appeared in one of our Christmas numbers—perhaps some of you remember it. It told all about the very perfect system worked out in Wisconsin, where everybody in the whole state has the chance of hearing university lectures given, right in their own "little red schoolhouses," if there is nothing better. Also, with that article pictures were shown of out-of-door groups listening to lectures under the trees, and there was a map which showed, by dots, the great numbers of "centers" for this work all over the State. Sometimes, the writer explained, to vary the lectures, concert and dramatic companies are sent out—and so the general taste in music and the drama is being educated in Wisconsin. Also, for those who wish it, extra-mural study courses are arranged, and papers are sent in by students all over the state and examined at the University.—I use the present tense, you see, because this work still goes on, has been greatly extended indeed, since the time when the article to which I refer was published.

Since that Christmas time I have been anxiously watching and waiting

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for some sign of a similar development in Canada, and here at last the W. I. Committee on Schools and Education for Western Ontario comes right out, out-and-out for it!

It seems to me that this is a work for which all organizations—both men's and women's—should unite. University lectures are not things outside of life, and concerned only with "musty, fusty" things, as some suppose. They are for everybody, and they concern life itself—were it only that they make it infinitely more interesting. Every time a window is opened for the mind, life becomes more interesting, because it has more to look out at; and this task of opening windows is just one of the things the university lecturer has to do.

Sometimes I wonder if we appreciate even to the smallest degree of what we should, the things these trained, educated men of science and art have done for us, all the things they have given us. Were it not for them, we should still be little better than savages—no agriculture, no science of stock-raising, no understanding of the human body and its needs for health, no X-ray no architecture, no music, no books—as the small boy says "no nuthin'." And—bless their hearts—these trained folk do not want to keep the knowledge and vision to themselves; they want to give it to us. You may hear of a miser who wants to keep all the money he can get his claws on for himself and his own family,—but did you ever hear of a man or woman of education who did not want to give out? Now did you?

So isn't it up to us to reach out hands (the Committee has started already) towards the Universities, to let them know our friendliness, and that we shall be glad for the help they can give us out in our own communities? The Western University at London, has already intimated its willingness to help in this way, and no doubt, Toronto University and "Queen's" at Kingston, and the O.A.C. at Guelph, may soon see a way to do likewise. The O. A. C., indeed, has already sent out men from time to time. In any case, send your request for lecturers, if this appeals to you, and let it be known that you expect something worth while.

I fear I have been talking altogether of Ontario. If anything along this line has been done in the other Provinces I shall be very glad to hear from any reader who wishes to write about it.

But before leaving this subject, don't you think this movement for University Extension just great community work? It seems to me that if, during the next few years, the Women's organizations (joining with the men's organizations) accomplish nothing more than just this and solve one other problem in addition, they will have amply justified themselves.

That other problem is: what to do with the feeble-minded, so that they cannot reproduce their kind. I was a little surprised that the subject was passed over at the London Convention.

If any of you are especially interested just now I hope you will turn over your old "Advocates" until you come to the reports of Dr. Eric Clarke's lectures at the School of Rural Leadership, Guelph, which were published in these pages some weeks ago. Dr. Eric Clark is an authority. You can help him in his great work, perhaps, and he will likely be pleased to lecture at some of your Conventions if you invite him.

Another subject touched upon very wisely, I think, at the Conventions, was "Sanity in Dress" (I wonder if speaking of the feeble-minded made me think of that!) This is wintry weather, and, although woollen stockings (costing \$2.50 to \$3 a pair!) happen to be fashionable just now, one still sees girls going about over drafty floors with pumps and silk stockings. The evil of the silk stocking mania was even more impressed upon me just before snow fell, when the weather was not exactly cold, yet far from warm. One morning the rain fairly came in sheets, driving slantwise, too, so that it beat upon one's feet. I was obliged to go through it for about five minutes walk before reaching a car, which I finally accomplished, feeling rather dampish in spite of high boots and rubbers. But at the car, I was really somewhat aghast to see at least three girls (of about 16 to 18) getting on, who wore no better protection to their feet than silk stockings and Oxfords, while a fourth "went one" worse by braving the weather with

pumps! It seemed to me then that the action of the W. I. in bringing up the question of sanity in dress was amply justified by that one example. Of course people usually develop common sense as they grow older, but surely at least one of those four girls had a mother to advise. What are mothers for, if not to teach wisdom? You can't compel people to dress any one way or another, but surely much may be done by persistent public education on such things as this. When looking at those girls, who all wore just suits above the silk stockings, it seemed that a few silk stockings less and one raincoat more might have been the course of wisdom—yes and "looks" too, for silly things are never really beautiful. Of course these happened to be city girls, but nowadays fashions in city and country are astonishingly alike, and, anyhow, every city is just full of country girls who have drifted in to do stenographers' work, or nursing, or one of the many other things for which the city gives opportunity. So the fashions in dress affect all—at least all except those who have independence enough to fix upon their own fashions.

Sanity in dress: That means warm clothes when warm clothes are needed; skirts short enough to escape soil from the ground or sidewalks; a pattern requiring no waste of cloth; comfort everywhere.—And surely all that does not shut out beauty of coloring or grace of line.

Just now the most fashionable dress, for any occasion except evening wear, happens to be made of serge, with long sleeves. Even for evening or state occasions, crepe de Chene is the favorite—and that, of course, permits one to wear long-sleeved underwear (I am not talking about ball-dresses, which, I suppose, are as "skimpy" as ever). Georgette crepe, for waists, etc., is quite out of the running. In short the fashions this winter are more sensible than they have been for a long time. Can't we adopt them for "good and all?" JUNIA.

**Worth Thinking Over.**

"The preachers should stop preaching theology, and with a broad view preach the gospel of love and forgiveness. That is the need of the world to-day."—Gen. Smuts, Premier of South Africa.

**Mincemeats.**

**Mincemeat Without Meat.**—Three lbs. chopped suet, 3 lbs. raisins, 3 lbs. currants, 2 chopped lemons, 2 chopped oranges (rind of both is used as well as inside,) chopped apples, peel and spice to taste, brown sugar to sweeten sufficiently.

**Another.**—Take 2 lbs. chopped suet, 4 lbs. fine bread crumbs, 4 lbs. currants, 4 lbs. raisins, 5 lbs. brown sugar, 1½ lbs. mixed peel, 6 lbs. apple weighed after chopping, 2 tablespoons cinnamon, 2 tablespoons cloves, 1 tablespoon mace, 1 tablespoon salt, 2 quarts boiled cider. Will keep all winter in a cold place. Do not boil. This recipe is highly recommended.

**Mincemeat With Meat.**—One lb. chopped beef suet, 1 lb. chopped apples, 1 lb. chopped raisins, 1 lb. currants, quarter lb. each of sugar and sliced citron peel, 2 oz. sliced lemon peel, 2 oz. sliced orange peel, 1 grated nutmeg, quarter oz. each of salt, ginger, allspice and cloves, grated rind of 2 lemons, also strained juice, 1 cup fruit juice, ¼ lb. cooked chopped beef or tongue. Put all into a large earthen crock and mix well. Cover, and stir before using. Does not need cooking. Should be made at least one month before required.

**Manitoba Mincemeat.**—Four cups meat chopped fine, 2 cups suet shaved fine, 4 tart apples, 2 cups sugar, 2 cups molasses, 3 lbs. currants, 3 lbs. raisins, 6 tablespoons cinnamon, 4 tablespoons cloves, 2 grated nutmegs, 2 glasses apple jelly. Mix well and cook until the apples are well done. Peach pickle or any kind of fruit juice may be added.

**Seasonable Cookery.**

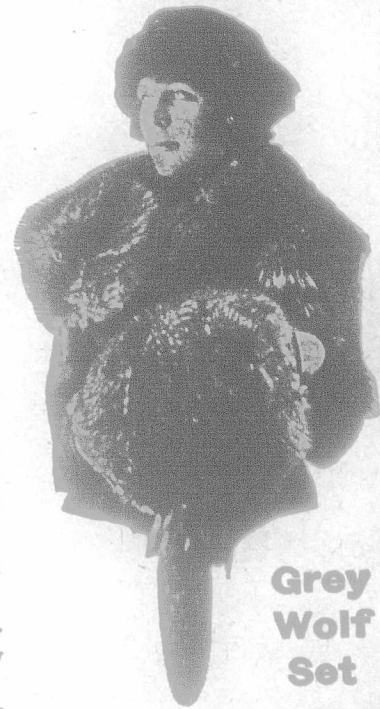
**Clear Beef Soup.**—Take 2 lbs. shin of beef, 1 carrot, 1 onion, 2 cloves, pepper, 1 large stalk celery, 2 tablespoons barley, 3 pints water, salt, ½ teaspoon caramel (browned sugar), 1 tablespoon corn-starch. Cut the meat into small pieces,

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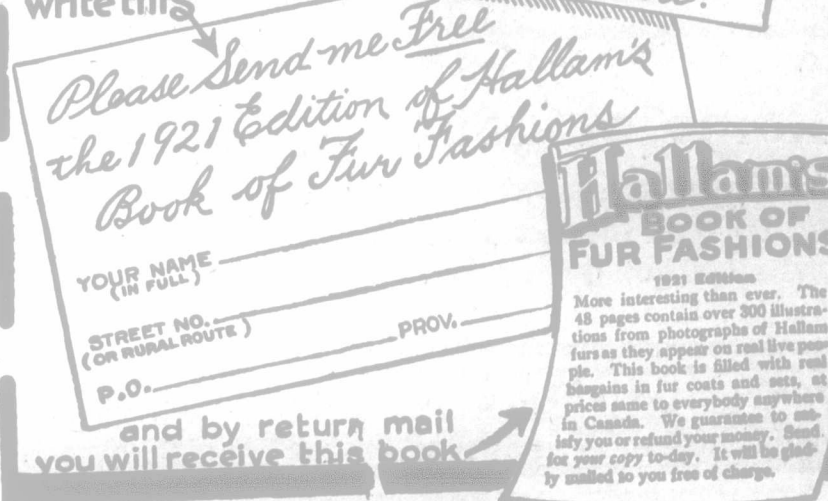
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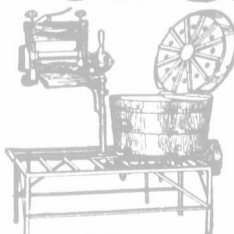
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removing all the fat. Clean the vegetables, and place vegetables and cloves also a bay leaf if you have one in a cheesecloth bag. Place the cup up meat and cracked bone in a saucepan, add the water (cold), and the vegetables and cook very slowly until boiling. Skim and then add the barley. Cook all slowly until meat and vegetables are tender seasoning when about half done. Add a little water from time to time to keep the quantity about the same as when starting. Remove meat and vegetables, color the soup with the caramel, and thicken it with the corn-starch moistened with a little cold water. Be careful not to make it too thick. This soup is better if made the day before so all the fat can be skimmed off when it is cold. It may be served clear, or the vegetables may be diced, returned to the soup, reheated and served hot.

**Baked Onions.**—Peel the onions, cover with boiling salted water and cook till tender. Drain and chop. Melt 2 heaping tablespoons butter in a saucepan; add 2 tablespoons flour, stir till smooth, thin add salt and pepper to taste. Gradually add 1½ cups stock or milk, stir till boiling, then add 2 tablespoons finely chopped parsley and 5 tablespoons bread crumbs. Boil for 8 minutes; add 1 egg well beaten and the chopped onion. Cool, and add the stiffly beaten whites of 3 eggs. Bake in a buttered casserole dish (or covered baking dish of any kind) for 20 minutes in a moderate oven. Nice baked in individual ramekins. This is a very nourishing dish.

**Gingerbread Apple Pudding.**—Take 6 apples, ½ cup sugar, ½ teaspoon powdered cinnamon, 1 cup molasses, ½ cup butter, ½ cup boiling water, 1 teaspoon soda, ½ teaspoon ginger, pinch salt, some sweet pudding sauce or whipped cream, flour. Peel and slice the apples, then add the salt, sugar and cinnamon to them, and place in a buttered pudding-dish. Melt the butter and add it to the molasses with the ginger, the soda dissolved in a very little boiling water, and enough flour to make a thin batter. Pour this mixture over the apples and

bake in a moderate oven for half an hour. Serve with the sweet pudding sauce or with some whipped cream.

### The Scrap Bag.

#### Pickled Apples.

Pickled apples are as good a relish with meat as pickled peaches. Peel the apples, stick a few cloves in them and cook very gently in a syrup of sugar water and vinegar. Apples that will not break up are best.

\* \* \* \* \*

#### Cushion Filling.

Ravelled yarn from worn-out stockings and underwear, cut into bits, makes a soft filler for cushions. Use only bits than cannot be used for other purposes.

\* \* \* \* \*

#### Hints About Potatoes.

Before peeling potatoes plunge them into boiling water in a wire basket. Much less of the potato will adhere to the skin. If potatoes turn black in cooking add a few drops of vinegar to the water.

\* \* \* \* \*

#### A Family Educator.

Keep a map, of Canada somewhere on the wall of your home if possible. It will be found a great educator for the family. If you can also have one of the globe all the better. Sometimes very good paper maps can be bought at small expense, and, when pasted on cotton with a strip of wood at each end, will last a long time.

#### Bags for Waists.

Old hat-bags, or bags made of old cotton are splendid for keeping delicate crushable waists in, as the waists will keep clean instead of being soiled as they almost always do if left uncovered on a hanger. Put the waist on the hanger, slip the bag over and tie tightly at the top leaving the hook of the hanger free to slip over the clothes-pole.

## Our New Serial Story.

### "THE MONEY MOON."

BY JEFFERY FARNOL.

Serial rights secured from Dodd, Mead & Company, New York.

#### CHAPTER VII.

WHICH CONCERNS ITSELF AMONG OTHER MATTERS, WITH "THE OLD ADAM."

BELLEW awakened early next morning, which was an unusual thing for Bellew to do under ordinary circumstances since he was one who held with that poet who has written, somewhere or other, something to the following effect:

"God bless the man who first discovered sleep. But damn the man with curses loud, and deep, who first invented—early rising."

Nevertheless Bellew, (as has been said), awoke early next morning, to find the sun pouring in at his window, and making a glory all about him. But it was not this that had roused him, he thought as he lay blinking drowsily—nor the black-bird piping so wonderfully, in the apple-tree outside,—a very inquisitive apple-tree that had writhed, and contorted itself most unnaturally in its efforts to peep in at the window:—therefore Bellew fell to wondering, sleepily enough, what it could have been. Presently it came again, the sound,—a very peculiar sound the like of which Bellew had never heard before, which, as he listened, gradually evolved itself into a kind of monotonous chant, intoned by a voice deep, and harsh, yet withal, not unmusical. Now the words of the chant were these:

"When I am dead, diddle, diddle, as well may hap,  
Bury me deep, diddle, diddle, under the tap,  
Under the tap, diddle, diddle, I'll tell you why,  
That I may drink, diddle, diddle, when I am dry."

Hereupon, Bellew rose, and crossing to the open casement leaned out into the golden freshness of the morning. Look-

ing about he presently espied the singer,—one who carried two pails suspended from a yoke upon his shoulders,—a very square man; that is to say, square of shoulder, square of head, and square of jaw, being, in fact, none other than the Waggoner with whom he had fought, and ridden on the previous afternoon; seeing which, Bellew hailed him in cheery greeting. The man glanced up, and, breaking off his song in the middle of a note, stood gazing at Bellew, open-mouthed.

"What,—be that you, sir?" he enquired, at last, and then,—"Lord! an' what be you a doing of up theer?"

"Why, sleeping, of course," answered Bellew.

"W'ot—again!" exclaimed the Waggoner with a grin, "you do be for ever a-sleepin' I do believe!"

"Not when you're anywhere about!" laughed Bellew.

"Was it me as woke ye then?"

"Your singing did."

"My singin'! Lord love ye, an' well it might! My singin' would wake the dead,—leastways so Prudence says, an' she's generally right,—leastways, if she ain't, she's a uncommon good cook, an' that goes a long way wi' most of us. But I don't sing very often unless I be alone, or easy in my mind an' 'appy-hearted,—which I ain't."

"No?" enquired Bellew.

"Not by no manner o' means, I ain't,—contrari-wise my 'eart be sore an' full of gloom,—which ain't to be wondered at, nohow."

"And yet you were singing."

"Aye, for sure I were singin', but then who could help singin' on such a mornin' as this be, an' wi' the black-bird a-piping away in the tree here. Oh! I were singin', I don't go for to deny it, but it's sore 'earted I be, an' filled wi' gloom sir, notwithstanding."

"You mean," said Bellew, becoming suddenly thoughtful, "that you are

oven for half an hour  
get pudding sauce or  
cream.

**Crab Bag.**

**Apples.**  
As good a relish  
as peaches. Peel the  
cloves in them and  
in a syrup of sugar  
Apples that will  
st.

**Filling.**

Worn-out stockings  
into bits, makes a  
ions. Use only bits  
d for other purposes.

**But Potatoes.**

potatoes plunge them  
in a wire basket.  
potato will adhere to  
toes turn black in  
drops of vinegar to

**Educator.**

Canada somewhere  
ur home if possible.  
great educator for the  
also have one of the  
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**Waists.**

bags made of old  
for keeping delicate  
as the waists will  
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and tie tightly at the  
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New York.

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black-bird a-piping  
Oh! I were singin',  
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lled wi' gloom sir,

Bellew, becoming  
," that you are

haunted by the Carking Spectre of the—er  
Might Have Been?"

"Lord bless you, no sir! This ain't no  
spectre, nor yet no skellington,—which,  
arter all, is only old bones an' such,—  
no this ain't nothin' of that sort, an' no  
more it ain't a thing as I can stand 'ere a  
maggin' about wi' a long day's work afore  
me, axing your pardon, sir." Saying  
which, the Waggoner nodded suddenly  
and strode off with his pails clanking  
cheerily.

Very soon Bellew was shaved, and  
dressed, and going down stairs he let  
himself out into the early sunshine, and  
strolled away towards the farm-yard  
where cocks crew, cows lowed, ducks  
quacked, turkeys and geese gobbled and  
hissed, and where the Waggoner moved to  
and fro among them all, like a presiding  
genius.

"I think," said Bellew, as he came up,  
"I think you must be the Adam I have  
heard of."

"That be my name, sir."  
"Then Adam, fill your pipe," and  
Bellew extended his pouch, whereupon  
Adam thanked him, and fishing a small,  
short, black clay from his pocket, pro-  
ceeded to fill, and light it.

"Yes sir," he nodded, inhaling the  
tobacco with much apparent enjoyment,  
"Adam I were baptized some thirty odd  
years ago, but I generally calls myself  
'Old Adam.'"

"But you're not old, Adam."

"Why, it ain't on account o' my age, ye  
see sir,—it be all because o' the Old  
Adam as is inside o' me. Lord love ye!  
I am nat'rally that full o' the 'Old Adam'  
as never was. An' 'e's alway a up an'  
taking of me at the shortest notice.  
Only t'other day he up an' took me be-  
cause Job Jagway ('e works for Squire  
Cassilis, you'll understand sir) because  
Job Jagway sez as our wheat, (meanin'  
Miss Anthea's wheat, you'll understand  
sir) was mouldy; well, the 'Old Adam'  
up an' took me to that extent, sir, that  
they 'ad to carry Job Jagway home,  
aterwards. Which is all on account o'  
the Old Adam,—me being the mildest  
chap you ever see, nat'rally,—mild? ah!  
sucking doves wouldn't be nothin' to me  
for mildness."

"And what did the Squire have to say  
about your spoiling his man?"

"Wrote to Miss Anthea, o' course, sir,—  
he's always writing to Miss Anthea about  
summat or other,—sez as how he was  
minded to lock me up for 'sault an'  
battery, but, out o' respect for her,  
would let me off, wi' a warning."

"Miss Anthea was worried, I suppose?"

"Worried, sir! 'Oh Adam!' sez she,  
'Oh Adam! aven't I got enough to bear  
but you must make it 'arder for me?'  
An' I see the tears in her eyes while she  
said it. Me make it 'arder for her!  
Jest as if I wouldn't make things lighter  
for 'er if I could,—which I can't; jest as  
if, to help Miss Anthea, I wouldn't let  
'em take me an'—well, never mind what,  
—only I would!"

"Yes, I'm sure you would," nodded  
Bellew. "And is the Squire over here at  
Dapplemere very often, Adam?"

"Why, not so much lately, sir. Last  
time were yesterday, jest afore Master  
Georgy come 'ome. I were at work here  
in the yard, an' Squire comes riding up  
to me, smiling quite friendly like,—  
which were pretty good of him, consid-  
ering as Job Jagway ain't back to work  
yet. 'Oh Adam!' sez he, 'so you're  
'aving a sale here at Dapplemere, are  
you?' Meaning sir, a sale of some bits,  
an' sticks o' furnitur' as Miss Anthea's  
forced to part wi' to meet some bill or  
other. 'Summat o' that sir,' says I,  
making as light of it as I could. 'Why  
then, Adam,' sez he, 'if Job Jagway should  
appen to come over to buy a few o' the  
things,—no more fighting!' sez he. An'  
so he nods, an' smiles, an' off he rides.  
An' sir, as I watched him go, the 'Old  
Adam' riz up in me to that extent as it's  
a mercy I didn't have no pitchfork  
'andy."

Bellew, sitting on the shaft of a cart  
with his back against a rick, listened to  
this narration with an air of dreamy  
abstraction, but Adam's quick eyes  
noticed that despite the unruffled serenity  
of his brow, his chin seemed rather more  
prominent than usual.

"So that was why you were feeling  
gloomy, was it, Adam?"

"Ah! an' enough to make any man feel  
gloomy, I should think. Miss Anthea's  
brave enough, but I reckon 'twill come  
nigh breakin' 'er 'eart to see the old stuff  
sold, the furnitur' an' that,—so she's  
goin' to drive over to Cranbrook to be  
out o' the way while it's a-doin'."

# This Furnace Pays For Itself!

THE "Hecla" Pipeless Fur-  
nace has a firepot ribbed  
with steel flanges. These  
steel ribs add 200 per cent to  
its radiating surface. Natur-  
ally that means more heat  
from less fuel.

"Hecla" Pipeless owners say that  
this exclusive feature saves them  
from one-quarter to one-third of  
their fuel bills.

With coal averaging twenty dol-  
lars a ton, it doesn't take long for a  
"Hecla" Pipeless Furnace to pay  
for itself.

And the "Hecla" Pipeless offers  
you other patented features no other  
furnace can give.

For instance, the radiator of the  
"Hecla" Pipeless is made with Fused  
Joints—not simply bolted and cem-  
ented as in other furnaces. This ex-  
clusive process fuses the parts to-  
gether. So long as the furnace lasts  
these joints will remain one piece—  
tight against leaks of gas or dust.

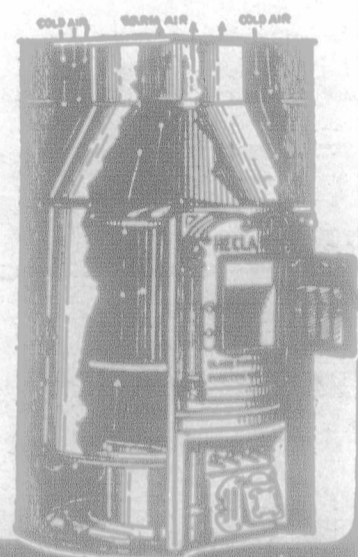
That feature alone would make it

worth your while to insist on the  
"Hecla" Pipeless. You'll also like  
the "Hecla" Pipeless because of the  
extra large waterpan which com-  
pletely encircles the furnace—ensur-  
ing a proper supply of healthful  
moisture to the air in every room.

Years of scientific experiment  
have perfected this heating system.  
You take no chances. We guaran-  
tee it absolutely.

Installed in a day—in any home,  
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walls to tear up. **Burns Coal or Wood**  
No pipes in the cel-  
lar. And because all  
heat goes upstairs  
the cellar is ideally  
cool for storing fruit  
and vegetables.

Why not have the  
comfort of this fur-  
nace now? Let it  
begin to pay for it-  
self this winter.  
Write for booklet  
"Buying Winter  
Comfort."



CLARE BROS. & CO., Limited - PRESTON, ONT.  
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### The High Cost of Luxuries

The people of this con-  
tinent spent for Life In-  
surance premiums in 1919  
about one billion dollars.  
At the same time they  
spent for tobacco and  
candy products about  
three billion dollars.

A saving of only 72c. per day  
would assure to the wife of a  
man aged 35, she being the same  
age, a monthly income for life  
of \$50. Every month through-  
out her life the remittances  
would continue and in the event  
of her death within 20 years, the  
monthly payments would be  
continued to the wife's estate—  
that is 240 monthly payments  
would be guaranteed.

**The Mutual Life  
of Canada  
Waterloo-Ontario**

### Percherons FOR SALE

Percheron Stallion rising four years, also  
some good mares. For further particulars  
apply

**PHAEN. J. WIGLE & SON,**  
Cedarlawn Farm,  
Kingsville - R. R. 1 - Ont.

"And when does the sale take place?"

"The Saturday arter next, sir, as ever  
was," Adam answered. "But—hush,—  
mum's the word, sir!" he broke off, and  
winking violently with a side-ways motion  
of the head, he took up his pitch-fork.  
Wherefore, glancing round, Bellew saw  
Anthea coming towards them, fresh and  
sweet as the morning. Her hands were  
full of flowers, and she carried her sun-  
bonnet upon her arm. Here and there a  
rebellious curl had escaped from its  
fastenings as though desirous (and very  
naturally) of kissing the soft oval of her  
check, or the white curve of her neck.  
And among them Bellew noticed one in  
particular,—a roughish curl that glowed  
in the sun with a copperlight, and peeped  
at him wantonly above her ear.

"Good morning!" said he, rising and,  
to all appearance, addressing the curl in  
question, "you are early abroad this  
morning!"

"Early, Mr. Bellew!— why I've been  
up hours. I'm generally out at four  
o'clock on market days; we work hard,  
and long, at Dapplemere," she answered,  
giving him her hand with her grave, sweet  
smile.

"Aye, for sure!" nodded Adam, "but  
farmin' ain't what it was in my young  
days!"

"But I think we shall do well with the  
hops, Adam."

"Ops, Miss Anthea,—lord love you!—  
there ain't no 'ops nowhere so good as  
ourn'be!"

"They ought to be ready for picking,  
soon,—do you think sixty people will  
be enough?"

"Ah!—they'll be more'n enough, Miss  
Anthea."

"And, Adam—the five-acre field should  
be mowed to-day."

"I'll set the men at it right arter  
breakfast,—I'll 'ave it done, trust me,  
Miss Anthea."

"I do, Adam,—you know that!" And

### Diamond Dyes Dye It Right

Colors Never Streak, Spot, Fade, Run-  
or have that "Dyed-Look"



Each package of "Diamond Dyes" con-  
tains directions so simple that any wom-  
an can diamond-dye a new, rich, fadeless  
color into worn, shabby garments, draper-  
ies, coverings, everything, whether wool,  
silk, linen, cotton or mixed goods.  
Buy "Diamond Dyes"—no other kind—  
then perfect results are guaranteed even  
if you have never dyed before. Druggist  
has color card, showing 16 rich colors.

### Opportunity for Young Women The Homeopathic Hospital of Buffalo, N. Y.,

offers a complete course to young women  
wishing to enter the nursing field. Pleas-  
ant surroundings. Allowance \$12.00-  
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Put a spoonful of Bovril into your soups, stews and pies. It will give them a delicious new savouriness and you will be able to get all the nourishment you require without making a heavy meal.

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**BEAUTIFUL PURE-BRED WHITE ROCK** Cockerels from heavy laying strain; five dollars each. Sam. Hastings, Schomberg, Ont.

**CHOICE AFRICAN GEESE FOR SALE**—Wm. J. Connolly, R.R. 2, Strathroy, Ont.

**FOR SALE—PURE - BRED MAMMOTH** Bronze Toms fine specimens. C. Lorne Liddle, R. R. No. 2, Leamington, Ont.

**FOR SALE—LARGE TOULOUSE GEESE AND** Mammoth Bronze Turkeys. Frank Weekes, Varva, Ont.

**FOR SALE—PURE - BRED MAMMOTH** Bronze Turkeys. Howard J. Ritchie, Elmvalle, Ont.

**LAYERS, PAVERS AND BEAUTY COMBINED** in Barred Rocks, and Light Brahmas. Good strong cockerels either breed, five dollars each. Walter Bennett, Box 43, Kingsville, Ont.

**LARGE PURE-BRED TOULOUSE GEESE.** Bred from exhibition stock. Prices reasonable. E. E. McCombs, Fenwick, Ont.

**MY BARRED ROCK WON THE CANADIAN** Laying Contest, Ottawa, laying 272 eggs. Cockerels and hens for sale. F. Coldham, Box 12, Kingston, Ont.

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**S.-C. BLACK MINORCAS OF SIZE AND** quality; cockerels for sale, prices right. Clifford Woolcott, Bright, Ont.

**\$5.00 EACH—O. A. C. BRED - TO - LAY** Barred Rock Cockerels for sale from our School Fair Breeding Stations. These are from culled flocks which are each year mated with O.A.C. males. They are growthy and good. Smaller ones at \$3.00. Cash with order, money refunded on return of bird if not as advertised. R. Schuyler, Dept. of Agriculture, Paris, Ont.

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**Crate-fed Chickens Large Hens**  
(Dressed) (Alive)  
Poultry of all kinds. Write for price list.

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## 100-Acre Canadian Alfalfa Stock-Farm With

Ideal location amid best neighbors; convenient R.R. town; 60 acres heavy crops tillage, 20-cow spring-watered wire-fenced pasture, woodland, many cords; big orchard, variety fruit; warm 6-room house, southern exposure, big basement barn, poultry house; owner in failing health, realized income \$2,000 last year; if taken now \$5,250, part cash, easy terms. Details this and in any other farms Ontario, Alberta, Nova Scotia, and 33 States, page 95 *Sussex's Big Illustrated Catalog*. Copy free.

**STROUT FARM AGENCY**  
306 S. Manning Chambers, Toronto, Ontario

with a smiling nod she turned away. Now, as Bellew walked on beside her, he felt a strange constraint upon him such as he had never experienced towards any woman before, and the which he was at great pains with himself to account for. Indeed so rapt was he, that he started suddenly to find that she was asking him a question:

"Do you—like Dapplemere, Mr. Bellew?"

"Like it!" he repeated, "like it? Yes indeed!"

"I'm so glad!" she answered, her eyes glowing with pleasure. "It was a much larger property, once,—Look!" and she pointed away across corn-fields and rolling meadow to the distant woods. "In my grandfather's time it was all his—as far as you can see, and farther, but it has dwindled since then, and to-day, my Dapplemere is very small indeed."

"You must be very fond of such a beautiful place."

"Oh, I love it!" she cried passionately, "if ever I had to—give it up,—I think I should—die!" She stopped suddenly, and as though somewhat abashed by his sudden outburst, adding in a lighter tone: "If I seem rather tragic it is because this is the only home I have ever known."

"Well," said Bellew, appearing rather more dreamy than usual, just then, "I have journeyed here and there in this world of ours, I have wandered up and down, and to and fro in it,—like a certain celebrated personage who shall be nameless,—yet I never saw, or dreamed, of any such place as this Dapplemere of yours. It is like Arcadia itself, and only I am out of place. I seem, somehow, to be too common-place, and altogether matter-of-fact."

"I'm sure I'm matter-of-fact enough," she said, with her low, sweet laugh that, Bellew thought, was all too rare.

"You?" said he, and shook his head.

"Well?" she enquired, glancing at him through her wind-tossed curls.

"You are like some fair, and stately ladye out of the old romances," he said gravely.

"In a print gown, and with a sun-bonnet!"

"Even so!" he nodded. Here, for no apparent reason, happening to meet his glance, the color deepened in her cheek and she was silent; wherefore Bellew went on, in his slow, placid tones. "You surely, are the Princess ruling this fair land of Arcadia, and I am the Stranger within your gates. It behoves you, therefore, to be merciful to this Stranger, if only for the sake of—er—our mutual nephew."

Whatever Anthea might have said in answer was cut short by Small Porges himself who came galloping towards them with the sun bright in his curls.

"Oh, Uncle Porges!" he panted as he came up, "I was 'fraid you'd gone away an' left me,—I've been hunting, an' hunting for you ever since I got up."

"No, I haven't gone away yet, my Porges, you see."

"An' you won't go—ever—or ever, will you?"

"That," said Bellew, taking the small hand in his, "that is a question that we had better leave to the—er—future, newpew."

"But—why?"

"Well, you see, it doesn't rest with me—altogether, my Porges."

"Then who—" he was beginning, but Anthea's soft voice interrupted him.

"Georgy dear, didn't Prudence send you to tell us that breakfast was ready?"

"Oh yes! I was forgetting,—awful! silly of me wasn't it! But you are going to stay—Oh a long, long time, aren't you, Uncle Porges?"

"I sincerely hope so!" answered Bellew. Now as he spoke, his eyes,—by the merest chance in the world, of course,—happened to meet Anthea's, whereupon she turned, and slipped on her sunbonnet which was very natural, for the sun was growing hot already.

"I'm awful glad!" sighed Small Porges, "an' Auntie's glad too,—aren't you Auntie?"

"Why—of course!" from the depths of the sunbonnet.

"'Cause now, you see, there'll be two of us to take care of you. Uncle Porges is so nice an' big, and—wide, isn't he, Auntie?"

"Y-e-s—Oh Georgy—what are you talking about?"

"Why I mean I'm rather small to take care of you all by myself alone, Auntie, though I do my best of course. But now that I've found myself a big, tall Uncle Porges,—under the hedge, you know,—

## INSTALLED IN ONE DAY

The absence of pipes in the "Banner" Furnace which adds warmth to the home also makes it easy to instal.

Whether your home is built or is just being built makes no difference; you can equip it with a Banner Pipeless Furnace in less than 12 hours. No walls have to be cut, no partitions torn down, no pipes to clutter up the cellar and waste heat that should go to warm the up-stairs. Nothing to do but to run the single register directly above the furnace to the hall floor, and the job is done. You save one-fifth of your coal bill and enjoy a cosier, warmer home into the bargain.

Your dealer will gladly show you how the Banner saves you money and inconvenience. Send a rough plan showing location of rooms and dimensions of house and our heating engineers will specify a furnace best suited to your needs. We will also send you a copy of our booklet "WINTER COMFORT IN YOUR HOME"—which describes the Banner Pipeless Furnace in detail.



Galt Stove & Furnace Company, Limited

Galt, Ontario  
CANADA

# BANNER PIPELESS FURNACE

## ONTARIO PROVINCIAL WINTER FAIR GUELPH

### Dec. 3rd to 9th

Do not fail to visit this, Canada's Largest Winter Fair.

The Best in Horses, Cattle, Sheep, Swine, Seeds and Poultry will be there.

Ask your Railway Agent about Railway Rates and Train Service.

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President.

J. E. RETTIE,  
Secretary.

## Holsteins at Auction

If you are thinking of buying Holsteins it will pay you to attend J. B. Wylie's dispersal sale of thirty head at

### Almonte, Wednesday, Dec. 15th

In this offering there will be a thirty-pound cow, several others with creditable R.O.M. and R.O.P. records, the grand champion female at the Central Canada Exhibition, 1920, and included in the lot will be 14 daughters of Sir Riverdale Echo Lyons, and 1 daughter of Sir Echo, two great May Echo bred bulls, also three daughters of Fairview Korndyke Boy.

Six head already freshened, and seven more due in February and March.

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We have for sale five young bulls of service able age, from imported and Canadian bred cows. One, a Missie, sired by the \$12,000 Gainford Matchless. Inspection invited. Station is one hour and a half from Toronto, C.P.R. or G.T.R.

RIDDEL BROS.

BETON, ONT.



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**ETTIE,**  
Secretary.

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s' Bridge, Ont.

five young bulls of service  
ported and Canadian bred  
sire, sired by the \$12,000  
Toronto, C.P.R. or G.T.R.  
ONT.

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23.57 & 9 H.P. On Skids or Truck.  
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Write for price  
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5 H.P. Lister  
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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.

**C. P. R. FARM 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 per 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—PERSIAN KITTENS, BEAUTIFUL** orange males. Lovely Xmas gift, \$15.00 each, also white wyandotte cockerels. Mrs. R. Pinhey, Dunrobin, Ont.

**WANTED—A WORKING FARMER FOR A** farm of about eighty acres, located near Derby, N.Y., on Lake Erie about twenty miles from Buffalo. Must be a man of wide farm experience, and understand live stock, poultry, grain, grapes, etc. Liberal pay for right person. State your age, experience, references, habits and size of family. Address: H. J. Aldrich, 98 Delaware Avenue, Buffalo, N.Y.

**WANTED—MALE BULL PUP (BOB-TAIL).** State breed and price. Lowell Matthews, Box 35, Alberton, P.E.I.

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

**WANTED—MAN FOR DAIRY FARM NEAR** Toronto (married). Wife to be experienced butter maker. Good position for capable couple. Apply giving all particulars as to experience, salary wanted, to Box 76, Farmer's Advocate, London, Ont.

**WANTED—POSITION AS HERDSMAN.** 18 years experience with registered dairy cattle. Best of references. Box 10, St. Ann's, Ont.

**Clover Huller For Sale**

A second-hand Victor Clover Huller for sale, fully equipped with feeder, blower and recleaner. Recently overhauled by Geo. White & Sons, London, Ont., in first-class running condition. Apply  
**J. W. SANGSTER - Listowel, Ont.**

we can take care of you together, can't we, Auntie Anthea?"

But Anthea only hurried on without speaking, whereupon Small Porges continued all unheeding.

"You 'member the other night, Auntie, when you were crying, you said you wished you had some one very big, and strong to take care of you—"

"Oh—Georgy!"

Bellew heartily wished that sunbonnets had never been thought of.

"But you did you know, Auntie, an' so that was why I went out an' found my Uncle Porges for you,—so that he—"

But here, Mistress Anthea, for all her pride and stateliness, catching her gown about her, fairly ran on down the path and never paused until she had reached the cool, dim parlor. Being there, she tossed aside her sunbonnet, and looked at herself in the long, old mirror, and, —though surely no mirror made by man, ever reflected a fairer vision of dark-eyed witchery and loveliness, nevertheless Anthea stamped her foot, and frowned at it.

"Oh!" she exclaimed, and then again, "Oh Georgy!" and covered her burning cheeks.

Meanwhile Big Porges, and Small Porges, walking along hand in hand shook their heads solemnly, wondering much upon the capriciousness of aunts, and the waywardness thereof.

"I wonder why she runned away, Uncle Porges?"

"Ah, I wonder!"

"Specks she's a bit angry with me, you know, 'cause I told you she was crying."

"Hum!" said Bellew.

"An Auntie takes an awful lot of looking after!" sighed Small Porges.

"Yes," nodded Bellew, "I suppose so,—especially if she happens to be young, and—er—"

"An' what, Uncle Porges?"

"Beautiful, nephew."

"Oh! Do you think she's—really beautiful?" demanded Small Porges.

"I'm afraid I do," Bellew confessed. "So does Mr. Cassilis,—I heard him tell her so once—in the orchard."

"Hum!" said Bellew.

"Ah! but you ought to see her when she comes to tuck me up at night, with her hair all down, an' hanging all about her—like a shiny cloak, you know."

"Hum!" said Bellew.

"Please Uncle Porges," said Georgy, turning to look up at him, "what makes you hum so much this morning?"

"I was thinking, my Porges."

"'Bout my Auntie Anthea?"

"I do admit the soft impeachment, sir."

"Well, I'm thinking too."

"What is it, old chap?"

"I'm thinking we ought to begin to find that fortune for her after breakfast."

"Why, it isn't quite the right season for fortune hunting, yet—at least, not in Arcadia," answered Bellew, shaking his head.

"Oh!—but why not?"

"Well, the moon isn't right, for one thing."

"The moon!" echoed Small Porges.

"Oh yes,—we must wait for a—er—a Money Moon, you know,—surely you've heard of a Money Moon?"

"'Fraid not," sighed Small Porges regretfully, "but—I've heard of a Honey-moon—"

"They're often much the same!" nodded Bellew.

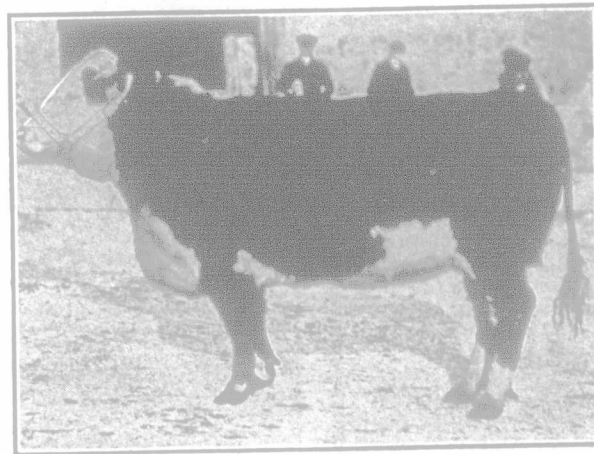
"But when will the Money Moon come, an'—how?"

"I can't exactly say, my Porges, but come it will one of these fine nights. And when it does we shall know that the fortune is close by, and waiting to be found. So, don't worry your small head about it,—just keep your eye on your uncle."

Betimes they came in to breakfast where Anthea waited them at the head of the table. Then who so demure, so gracious and self possessed, so sweetly date as she. But the Cavalier in the picture above the carved mantel, versed in the ways of the world, and the pretty tricks and wiles of the Beau Sex Feminine, smiled down at Bellew with an expression of such roguish waggery as said plain as words: "We know!" And Bellew, remembering a certain pair of slender ankles that had revealed themselves in their hurried flight, smiled back at the cavalier, and it was all he could do to refrain from winking outright.

To be continued

THE ONTARIO  
**Hereford Breeders' Association**  
**Third Annual Sale**  
WINTER FAIR BUILDINGS, GUELPH  
**Friday, Dec. 10th, 1920**  
**40 Females 10 Bulls**



The Hereford cattle consigned to this sale represent the best individuals from some of the most noted herds in Ontario, both from a breeding and show standpoint. The blood-lines carried through the entire offering recommend each animal as a highly-bred individual worthy of your consideration.

Many of them will be shown at the Winter Fair, and may be judged on their own merit on sale day.

Write for your catalogue now.

**JAMES PAGE, Secretary, Wallacetown, Ont.**

**50 REGISTERED 50**  
**HEAD Holstein-Friesians HEAD**  
**THURSDAY**  
**December 16th, 1920**  
AT STRATFORD, ONTARIO

**Perth District Holstein Breeders**

Will sell by Auction at their

**FOURTH CONSIGNMENT SALE**

Ten young males ready for light service. Forty young cows and heifers that have been especially selected for winter production. Nearly all freshening about date of sale.

*We will use this space next week.*

**T. Merritt Moore, Auctioneer**

**Chas. Baird** **D. M. Arbogast**  
President Sales Manager

## 100 (ONLY) FARM ENGINE BARGAINS

This is an odd lot of engines of various types which we are listing at bargain prices in order to make quick disposal both prompt and certain. For example—

- .....3 h.p. Engines for \$ 95
- .....4 h.p. Engines for \$150
- .....12 h.p. Engines for \$495

**REMEMBER**—This opportunity will not occur again. This is an odd lot of reliable engines, which must be cleared out before stocktaking. It is

### NOW OR NEVER!

Sizes 1½ to 14 horsepower. Some with battery ignition; some with magnetos; some gasoline; some kerosene burning.

**ALL STANDARD MAKES**  
Repairs carried in stock.  
Every engine guaranteed.

Send for Bargain List No. 70 as these engines will go out quickly.

**R. A. Lister & Co. (Canada) Limited**  
58-60 Stewart St. - Toronto

## THE MOLSONS BANK

Incorporated 1855  
Capital and Reserve, \$9,000,000

Over 130 Branches

Your son's education will make a big call on your purse.

Start saving to meet the expense without difficulty. Open a Savings Account with the Molsons Bank.

## FARMERS!

When in London next time be sure and call at our warehouse, 398 Clarence St.—just one block east from corner Richmond and Dundas Sts., turn to your right and you will see the right place to buy your

**Elastica**  
Paints and Varnishes

If you want paint it will pay you—Be sure and introduce yourself as a farmer.

**SCOTT PAINT-VARNISH COY.**  
398 Clarence St. :: London, Ontario

**For Sale**—One Reg. Holstein heifer three years old, with heifer calf by side 7 days old; well bred and good size. Also two extra good, young Shorthorn bulls, rears. All priced to sell. Reasonable offer not refused.  
**A. WATSON & SON,** Forest, Ont.  
John Doughty, Secretary to Ambrose Small, the missing Toronto theatrical man and millionaire, was arrested in Portland, Ore., where he was working in a paper mill, and the \$15,000 set on his head will be divided between the policemen who made the discovery. Doughty confessed that the missing \$100,000 in Victory Bonds are in a bank in Chicago but declined to say anything regarding Small's disappearance.

## Current Events

Mr. S. S. McDermand, U.F.O. candidate for the House of Commons, in the East Elgin by-election, was elected by a large majority. Mr. McDermand is the first Farmer party representative sent by Western Ontario to join Crerar's forces.

Hon. Peter Smith stated, in Stratford, last week, that a man may be selected in Ontario to give all his time to censoring moving pictures.

The Dominion Government has passed an order-in-council limiting the maximum which may be staked in the newly-discovered oil fields near the Mackenzie River, to 640 acres.

York Co., Ont., is to procure options on more than 1,000 acres of land for reforestation.

California has ratified a law barring aliens from holding or leasing California lands. The measure is aimed chiefly against the Japanese.

United States students in the Universities of England now number 354.

The Home Rule for Ireland Bill is under debate in the British House of Lords.

Fourteen officers, all connected with the Administration of Justice in Ireland, were murdered in their homes by Sinn Feiners on Nov. 12th. In the afternoon, in reprisal the police, after being fired on by Sinn Fein pickets, fired on a crowd, killing ten. Subsequently, on Nov. 26th, Arthur Griffiths, founder of the Sinn Fein, two Sinn Fein members of parliament and others, were arrested in Dublin by the auxiliary police. On Nov. 24th Sir Hamar Greenwood, Chief Secretary for Ireland, said, in his speech on the Irish situation, in the House of Commons, that Sinn Fein plots for the destruction of docks in Liverpool and a large power house in Manchester, had been discovered.

The Assembly of the League of Nations favors sending 60,000 troops to the aid of Armenia.

Greek troops in Asia Minor are said to be now divided into two factions—fighting against each other over the return of King Constantine to the throne. The plebiscite to choose a king will take place on Dec. 5th.

The Bolshevik troops are making great advances in Siberia; several of Semenov's units have surrendered to them and others are fleeing into China.

## Markets

Continued from page 2063.

### Montreal.

Horses.—Heavy draft horses, weighing from 1,500 to 1,700 lbs., were quoted at \$225 to \$300 each; light draft, weighing from 1,400 to 1,500 lbs., \$225 to \$250 each; light horses, \$175 each; culls, \$75 to \$100 each, and fine saddle and carriage animals, \$250 to \$300 each.

Dressed Hogs.—A much more active demand is reported for dressed hogs, and prices were firm. Fresh-killed, abattoir-dressed stock was quoted at 26c. per lb., and country dressed at 23c. per lb.

Potatoes.—There is an excellent demand for good, sound potatoes, and sales of this class of Quebec stock have been made at as high as \$2 per bag of 90 lbs. ex-track, in car lots. The general price, however, was \$1.85 to \$1.90 per bag of 90 lbs. Green Mountains were quoted at \$2. In a wholesale jobbing way Quebec stock was quoted at \$2.25 per bag of 80 lbs. ex-store.

Poultry.—The demand for poultry was good, and prices were steady; Turkeys were quoted at 48c. to 50c. per lb.; chickens, 35c. to 40c.; fowl, 30c. to 32c.; roosters, 23c. to 25c., and ducks, 30c. to 32c.

Maple Products.—The market for maple syrup was easier, the quotation standing at \$1.65 to \$1.90 per gallon in wood, and at \$1.90 to \$2.20 per tin of one gallon, according to quality. There was a moderate demand for white clover comb honey at 18c. to 25c. per section.

Eggs.—The demand for eggs continues good, and the undertone of the market

## MAPLE GROVE YORKSHIRES BY AUCTION

A very fine offering: 6 boars, fit for use; 6 boars, four and five months old; 12 young sows, bred and safe in pig; 34 pigs, 6 weeks old; 4 choice brood sows; also the stock boars

Sale at the farm, SHEDDEN, ONT., on

**Tuesday Afternoon, 2 p.m., December 7th**

Terms of sale, 10 months credit on furnishing approved joint notes or a discount of 6% off for cash.

Write, phone, or wire your bid, or come yourself.

H. S. McDIARMID

SHEDDEN, ONT.

## FEEDS

Cotton Seed Meal (43% protein).  
Linseed Oil Cake Meal (35% protein).  
Hominy Feed, Feeding Cane Molasses.  
Feeding Corn Meal.

ASK FOR PRICES.

Car lots or less.

**KELLEY FEED & SEED CO.,**  
780 Dovercourt Rd.,  
TORONTO

## CATTLE



Sheep and horse owners all need our FREE BOOKLET. It gives valuable pointers on Dehorning, Castrating, Horn Training, Tables, etc., also a complete list of Stockmen's supplies.

Write today for Booklet "A". It is free.  
**Ontario Veterinary & Breeders Supply Limited,**  
72 Dundas St., E. - Toronto

was firm. Strictly new-laid eggs were quoted at 85c. to 90c. per dozen; selected C. S. stock, 68c. to 70c.; No. 1 C. S. stock, 60c. to 62c., and No. 2 C. S. stock, 50c. to 52c.

Butter.—The market for butter was featureless, trading on the whole being quiet. Finest creamery was quoted at 52½c. to 53c. per lb., and fine at 50c. to 50½c.

Cheese.—No change is reported in the market for cheese. Some business is being done over the cable, but the volume is small.

Grain.—A more active demand is reported in the local cash grain market, and a good business has been done for domestic and country account. No. 2 Canadian Western oats were quoted at 76c.; No. 3 Canadian Western at 71c.; extra No. 1 feed at 70c.; No. 1 feed at 68c., and No. 2 feed at 66c. per bushel, ex-store.

Ontario No. 3 white oats, in transit, were quoted at 66c. per bushel, ex-track. Ontario extra No. 3 barley was \$1.02 per bushel, ex-track, Portland.

Flour.—The outstanding feature of the flour market is the announcement of a further reduction in prices of spring wheat grades of 50c. per barrel. First patents were now quoted at \$11.10; second patents, \$10.70, and strong bakers, \$10.40 per barrel in jute bags, ex-track, less 10c. per barrel for spot cash.

Prices of winter wheat flour were also lower, the reduction consisting of 25c. per barrel. The quotation on choice grades was \$10 to \$10.25 per barrel, in second-hand jute bags, ex-store, in broken lots, while car lots were \$9.50 to \$9.75, ex-track. Winter-wheat patents were \$10.75 to \$11 per barrel, in new cotton bags, ex-store.

Millfeed.—The demand for millfeed is good. Bran was quoted at \$40.25, and shorts \$42.25 per ton, including bags, ex-track, less 25c. per ton for spot cash.

The market for other lines of feedstuffs was weak with pure barley meal quoted at 52c.; dairy feed, \$45, and mixed mouille at \$42 per ton, including bags, delivered to the trade.

Standard grades of rolled oats were quoted at \$3.90 per bag of 90 lbs., delivered with car lots at \$8.80, ex-track.

Baled Hay.—No. 2 timothy hay, in car lots, was quoted at \$31; No. 3 timothy

at \$29, and lower grades at \$25 to \$27 per ton, ex-track.

Hides and Skins.—Trade in hides and skins continued very dull and prices were unchanged. Steer and cow hides were quoted at 10c. per lb.; bull hides, 7c.; calf skins, 14c.; kips, 10c.; lamb skins were 50c. each, and horse hides, \$2.50 to \$3 each.

## Gossip.

### Coming Events.

Dec. 1-3.—Ontario Beekeepers' Annual Convention, O. A. C., Guelph, Ont.

Dec. 3-9.—Ontario Provincial Winter Fair, Guelph, Ont.

Dec. 9 and 10.—Toronto Fat Stock Show, Union Stock Yards, Toronto.

Dec. 9 and 10.—Canadian Creamerymen's Association Annual Meeting, Toronto.

Dec. 13-14.—Dominion Grange, Carls-Rite Hotel, Toronto.

Dec. 14-17.—U. F. O. Convention, Toronto.

Jan. 6-7, 1921.—Eastern Ontario Dairymen's Convention, Cobourg.

Jan. 12-13, 1921.—Western Ontario Dairymen's Convention, London.

Jan. 17-21, 1921.—Ottawa Winter Fair, Ottawa.

Jan. 25-28, 1921.—Corn Show, Chatham.

### Sale Dates Claimed.

Dec. 3, 1920.—Marshall-Russell & Watt, Exhibition Grounds, Toronto, Ont.—Shorthorns.

Dec. 3, 1920.—Frank Brown, R. R. 2 Dundas, Ont.—Shorthorns.

Dec. 10, 1920.—Ontario Hereford Breeders' Association at Guelph. Jas. Page, Wallacetown, Sec'y.

Dec. 11, 1920.—Moote-Shaver Combination Holstein Sale, Canboro, Ont.

Dec. 14, 1920.—Brant District Holstein Breeders, Brantford, Ont.

Dec. 15.—Oxford Holstein Breeders' Club, Woodstock, Ont.—Holsteins.

Dec. 15, 1920.—J. B. Wylie, Almonte, Ont.—Holsteins.

Dec. 16.—Perth District Holstein Breeders, Stratford, Ont.

Dec. 21, 1920.—Elgin Pure-bred Holstein Breeders', St. Thomas, Ont.

Jan. 26-27, 1921.—Peninsular Live Stock Breeders Association, Chatham, Ont.—Shorthorns, Aberdeen-Angus, etc.

Feb. 2, 1921.—Dryden-Miller Sale, Toronto, Ont.—Shorthorns.

Feb. 3, 1921.—Robt. Miller, Toronto, Ont.—Shorthorns.

In a story of the Gesta Romanorum the wisdom of Christmas is written above the dead: "What I kept I lost; what I spent I had; what I gave I have."

"Having found that men are nobler than we fancied, we are led to hope that our individual destiny may be larger than we suspect. The effect of any glimpse of splendor—whether the splendor of courage or of tenderness—is the same; it makes us want to share. The sharing spirit is the Christmas spirit."—Coningsly Dawson.

On a Returnable Basis.—Mr. Sophie—"Well, Willie, your sister has given herself to me for a Christmas present. What do you think of that?"

Willie—"That's what she did for Mr. Bunker last year, and he gave her back before Easter. I expect you'll do the same."—London Tit-Bits.

Questions and Answers.

Condensed advertisements will be inserted under this heading at five cents per word each insertion. Each initial counts for one word and insertion for two words. Names and addresses are figures for two words. Cash must always accompany the counted. Cash 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.

Veterinary.

Unthrifty Mare.

Mare rising 4 years is out of condition and sweats easily. She has a few pin worms. She eats well, I had her teeth dressed. Her hair seems dry. F. H.

Ans.—It is probable she has other worms than pin worms. Mix 3 ozs. each of powdered sulphate of copper, sulphate of iron and tartar emetic, and 1 1/2 ozs. calomel. Make into 24 powders and give her a powder every morning and night. After the last has been taken give her a purgative of 8 drams aloes and 2 drams ginger.

Weak Knees, etc.

1. Mare is getting weak in her knees. 2. Is cracked wheat and barley, or boiled potatoes liable to cause indigestion in a horse? N. N.

Ans.—1. This can be corrected to some extent by standing her in a stall a little lower in front than behind, or in a box-stall with level floor. The use of local applications is ineffective.

2. Any sudden change in food is liable to cause digestive derangement. The wheat and barley is very liable to cause trouble in any case unless fed in very small quarters. Boiled potatoes might also cause the trouble. We have never before heard of feeding them to horses.

British Government Sells Its Frozen Meat Stocks.

The British Government has recently announced the sale of its entire frozen beef stock to Vestey Bros. This gigantic deal, which is reported to amount to well over 1,000,000 quarters, is said to comprise the whole of the Government's stocks of frozen beef in that country, Government Australasian beef cargoes on the water, and any Government-owned stocks and killings up to the end of November, 1920.

Considerable criticism has been voiced by English importers, meat agents, and wholesalers respecting this deal, which, they assert, is a digression on the part of the Ministry of Food from its arrangements with the frozen-beef agents. Under their agreement with the Food Ministry these traders became, during the latter part of the war, the avenue for the disposal of Government-purchased meats to the British public on an all-round 2% commission. The trade maintains that under these arrangements it is entitled to a 2 per cent. commission on the vast stocks included in the present transaction.

It is stated on behalf of the Government that the beef stocks as a whole were offered to the trade as a body prior to the sale to Vestey Bros.

It is said that Vestey Bros. control about 2,000 retail frozen-meat shops in the United Kingdom, which will form an outlet for the stocks they have acquired, while their branches and business connections in Europe, America, and the Far East are also available for the disposal of this meat.—U. S. Market Reporter.

Guatemala Organizes Department of Agriculture.

The Government of Guatemala has recognized agriculture as being of sufficient importance in that country to warrant the establishment of a separate department directed by a cabinet officer, according to the American consul at Guatemala City. Guatemala is fundamentally an agricultural country and coffee is the important export crop. As a result of the extremely low prices being quoted for coffee, the demand for extensive Government supervision has become imperative. It is believed that one of the first moves of the new Secretary of Agriculture will be in the direction of diversification of agricultural production and importation of improved live stock.—U. S. Market Reporter.



What Makes Beaver Boarding So Simple and Easy

Only three steps—nailing, painting and paneling—all three easy and pleasant, is what makes the building of walls and ceilings of Beaver Board such a simple operation.

And Beaver Boarding is quick work. The big, flawless panels of this good lumber product cover large spaces, no time is needed for drying, one step follows the other in rapid succession. The reclaiming of an attic is completed in an unbelievably short time. The building of a new house is speeded through to quick completion. The muss and litter that invariably follows a plaster job is entirely eliminated when Beaver Board is used. And Beaver Board is as easy to get as it is to use. Your nearest lumber dealer will deliver it, or you can take it out next trip.

With all these conveniences there is a sureness about the Beaver Board result—provided genuine Beaver Board, with the trademark plainly printed on the back of each panel, is used. Beaver Board will last as long as the building. It cannot crack. It is as permanent as the woodwork and hardwood floors.

Our book, "Beaver Board and Its Uses," fully explains the simple operations and gives many practical and decorative suggestions. Write for a free copy to-day.

THE BEAVER COMPANY, LIMITED 505 Beaver Road, Thorold, Ont.

Timber Operations at Frederictonhouse and Charlton, Ont. Mills and Plants at Thorold and Ottawa, Ont. Distributors and Dealers Everywhere.

BEAVER BOARD



FOR BETTER WALLS & CEILINGS

MADE IN CANADA

Advertisement for Aladdin lamps. Text includes: 'New COAL OIL Light Beats Electric or Gasoline', '10 Days FREE—Send No Money', 'BURNS 70 HOURS ON ONE GALLON', 'Get One FREE', 'PATENT SOLICITORS—Fetherstonhaugh & Co.', 'PATENTS Canadian, Foreign Booklets Free', 'Sell Your Poultry to the Best Market'.

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

PATENTS Canadian, Foreign Booklets Free (EGERTON R. CASE, M. C. I. P. A. Lond.) 10 Adelaide East TORONTO

Sell Your Poultry to the Best Market We can handle any quantity of good poultry, either live or dressed, at good prices. It will pay you to sell to C. A. MANN & Co. 78 King Street London, Ontario

When writing advertisers will you kindly mention The Farmer's Advocate.



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

**BE AT THE TOP**

Aberdeen - Angus Cattle will put you there in beef production.

**Why?**

1. They are most economical feeders.
2. They produce a well marbled, high quality flesh, with the highest percentage of natural flesh.
3. They dress out the highest percentage.
4. They are polled and there is not any damage from horns.
5. They out sell all others on the Commercial Market.

When the market drops Aberdeen-Angus cattle will save you.  
Write for free information and literature just published.  
Get your name on our mailing list.

**CANADIAN ABERDEEN-ANGUS ASSOCIATION**

F. W. Crawford, Secretary, Brandon, Man.

**Pure-Bred Breeder Wanted**

Wanted: A retired farmer, preferably an experienced pure-bred dairy cattle breeder, to visit pure-bred stock breeders as special representative. Salary \$40.00 per week and expenses. Applicants would be admitted as partner in the business by taking a reasonable amount of stock. This is an old established concern paying splendid profits.

Give full description in first letter, with bank references, and personal interview will be arranged. All information strictly confidential. Apply

**Desbarats Advertising Agency**  
45 Jarvis St. Toronto

**Aberdeen - Angus**

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

**Shropshire and Southdown Sheep**

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

Inspection invited, satisfaction assured.

**Larkin Farms - Queenston, Ont.**

**Sunny Acres**

**Aberdeen - Angus**

Present offering—A few young bulls ready for service.

**G. C. CHANNON, Oakwood, Ontario**  
Telephone—Oakwood, Railway—Lindsay,  
G. T. R. and C. P. R.

**Aberdeen-Angus**

Meadowdale Farm  
Forest, Ontario

**Alonzo Mathews** Manager  
**H. Fraleigh** Proprietor

**ALLOWAY LODGE STOCK FARM**

**Angus--Southdown--Collies**  
Recent addition of Imp. Idealist of Malmesbury 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**—Bulls and heifers for sale from a Toronto prizewinning sire. It pays to keep a pure-bred sire.  
**A. Dinsmore, Mgr., "Grape Grange" Farm, Clarksburg**  
1 1/2 miles from Thornbury, G.T.R.

**Questions and Answers. Miscellaneous.**

**Material for Silo.**

How much cement and gravel will it take to build a silo 12 by 30 feet, with an 11-inch wall at the base and a 6-inch wall at the top?  
**H. W. M.**

Ans.—It will require approximately 26 barrels of cement and 30 yards of gravel.

**Lumber for Silo.**

How much lumber will it take to build a silo 12 by 28 feet? What is the usual thickness of lumber?  
**R. C.**

Ans.—It is usual to build a silo of 2-inch lumber. It would require approximately 2,112 feet to build a silo of the dimensions mentioned.

**Developing High Stepping.**

I have a carriage horse which has not sufficient action for the show-ring. Can anything be done besides shoeing to make high-steppers, or does it all come through the breeding?  
**A. F.**

Ans.—While a good deal of it is in the breeding, training is necessary. If the horse is of show calibre, it might be well to place him in the hands of a professional trainer to train and fit.

**Tuberculosis.**

1. Is there any cure for tuberculosis in poultry?  
**E. T. H.**

Ans.—Tuberculosis is generally considered to be incurable in poultry. Preventive measures should be taken to ward off the disease. Disinfect the pens frequently, and any birds which you suspect of being infected should be removed from the main flock. This disease is a great deal more prevalent than most people have any idea of, and the loss each year is heavy.

**Breeding Diseased Bulls.**

In your issue of November the fourth I noticed these few lines, "no penalty is too heavy for the man who deliberately takes a cow that has aborted to a neighbor's bull and does not mention the condition of the cow." What about a farmer who has a bull and takes in his neighbors cows, and does not mention that his bull has the same disease as mentioned above? Is there penalty heavy enough for such?  
**FARMERS.**

Ans.—The same would apply in this case. It is not to any man's credit that he will deliberately permit disease of this kind to be spread.

**Plowing Sod.**

Is sod better set up on edge or turned over flat, when plowed in late fall? Which is preferable in the spring? Will the sod rot quicker if turned flat? What width furrow and depth do you recommend in clay-loam soil?  
**R. C. S.**

Ans.—When the sod is set fairly well on edge it possibly works down better in the spring, but for spring plowing, we like to have it turned flat. In both fall and spring plowing the jointer should be used so that no grass will be showing. Sod will probably rot quicker when turned flat, but this depends quite a bit on the weather. Personally, we like to plow about six inches deep, and the width of furrow depends on the width of share which we are using on the plow. The ground should be all cut and not plowed so wide that part is cut and two or three inches merely broken over.

**Gossip.**

Volume 103 of the American Shorthorn Herd Book is off the press, and through the courtesy of the Secretary, F. W. Hardy, a copy has been received at this office. It contains the pedigrees numbering from 817001 to 817000.

In strong competition at the American Jersey Cattle Club Show, in Louisiana, a number of Jerseys that had been purchased from B. H. Bull & Son, Brampton, were among the prize winners. Brampton Patricia's Prince won first in the senior calf class and was made junior champion. Brampton Radiant Fanny was sixth in the four-year-old class, and second in the milking contest. Fern's Hawthorne Jess, winner of the grand championship on the Island of Jersey, was second. This cow was showing at a disadvantage, owing to having been in milk since May. Several of the young things that were high up in their class came from the Brampton herd.

**ONTARIO PROVINCIAL WINTER FAIR**

**GUELPH**  
**DECEMBER, 6th, 7th, 8th, & 9th**

We will be there, as usual, at our regular stand in the main building, to meet our old friends and all others interested in

**Sydney Basic Slag Fertilizer**

This is the best value obtainable in fertilizers—the constantly increasing demand for Sydney Basic Slag is the best proof of its merits. During the past season our sales in this country amounted to just 35,057 tons. No other Canadian concern can show anything like this.

Of course, we know the combination of other fertilizer sellers, jealous of our success, eternally disparages our goods. In reply we merely ask intending buyers to allow us to put them in personal touch at the Fair with Ontario farmers who have been using Sydney Basic Slag for years, men of the highest reputation and whose names are household words. The experience of such men should be of more value to you than the statements of any professional agriculturist employed to boost the sale of other goods.

Now is the time to arrange for your spring requirements. If you are not coming to the Fair you should write us at once, and we will gladly send you some interesting literature, which is free.

**THE CROSS FERTILIZER CO., LTD., Sydney, Nova Scotia**

Address our General Sales Agent  
**A. L. SMITH, Dept. A, 220 Alfred St., Kingston, Ont.**

**Premium Clydesdales**

—Premium Horses for Sale or Hire—We invite you to inspect our Clydesdale stud before purchasing a stallion or hiring a premium horse for next spring. Give us a chance to show or tell you what we have. Watch this space in future issues.

**BRANDON BROS., Forest, Ont.**

**For Sale—Six head of Pure-bred Aberdeen-Angus Cattle** Three cows one yearling heifer, one heifer calf, six months old; one bull calf, six months old. These are an exceptionally fine lot of cattle, in fine condition, and will be sold at a bargain if sold at once as our stables are full and must make room for our next crop of calves. **C. C. KETTLE, Phone 7936, Waterford.** **W. A. WOOLLEY, Manager, Wilsonville P.O., R. R. No. 1.**

**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**

**Shorthorns**

For Sale—One three-year-old herd sire imp. in dam; one good yearling bull, imp. in dam, his breeding and individuality is extra; one yearling bull, imp. sire and dam; two choice red 10-months bull calves. Also offer for sale number of good dual-purpose cows, 2-year-olds and heifer calves, and one yearling bull from extra milking dams.

**R. M. MITCHELL, R.R. 1, Freeman, Ont.**

**Plaster Hill Herd Shorthorns**

**DANADAS OLDEST DUAL-PURPOSE HERD ESTABLISHED 1859**

Herd sires: Green Leaf Record 96115. Sire and dam imported of best English breeding. Commodore 130056, bred by late S. A. Moore. His two nearest dams average 12,112 lbs. Seven young bulls from R.O.P. cows. Tubercular free herd. **ROSS MARTINDALE, R. R. 3, Caledonia, Ont.**

**Pleasant Valley Farms**

Herd headed by Imp. Newton Grand Champion and New Year's Gift—two of the greatest bulls of the breed. Our females comprise the best families obtainable. Young bulls of herd heading type. Also farmers bulls and females bred to above herd sires. Inspection invited.

**GEO. AMOS & SONS, Moffat, Ont.**

**Willow Bank Stock Farm**

—Established 1855—Shorthorn Cattle and Leicester Sheep. Bulls in service: Brownale 80112, by Avondale, and Brownale 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.**

**Shorthorn Bulls and Females**

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

**PRITCHARD BROS., R.R. No. 1, Elora, Ont.**

**Welland River Shorthorn Offering**

—We have at present only two young bulls in the stable, but would price within the next few weeks a half dozen or more young cows or heifers bred to our present herd sire, Sunnyside Model. This is a Cruickshank Lovely-bred son of Right Sort (Imp.). The families are Kilblean Beauty, Missies, Rosemary, Seaward, Rosebud, Ballenchin Daisy, etc. Fifty head to select from.

**W. H. CROWTHER, Fonthill, Ont.**

**Spring Valley Shorthorns**

—Herd headed by Sea Gem's Pride 96365. We have a number of good bulls for sale, including the Champion Ivanhoe 122760, and his full brother also, an extra well-bred Rosewood, and others. Write for particulars.

**KYLE BROS., Drumbo, Ont.**

**SPRUCE GLEN SHORTHORNS**

Seven choice well bred, thick, deep, mellow, young bulls, from 14 to 22 months; also heifers in calf to Nonpareil Ramsden = 101081 =, a show bull, and a good one.

**JAMES McPHERSON & SONS**

**DUNDALK, ONTARIO**

**Morrison Shorthorns and Tamworths**

—FOR SALE—Seven dandy bulls from 10 to 13 months old, of Scotch breeding, and choice females of the deep-milking strain. Also choice Tamworths of both sexes from prizewinning and champion stock.

**CHARLES CURRIE, Morrison, Ont.**

**Pear Lawn Farm**

Offers Three Beautiful Black Percherons For Sale. One Stallion rising three, inspected and enrolled in Form 1; one Stallion rising two years; one Imp. mare rising three, a winner of six first prizes; one Hackney rising two years. These are A1 show horses. A choice lot of Shorthorn heifers in calf and calves at foot.

**HERBERT J. MILLER, Peterboro' Co., Keene P.O.**

**Fairview Pure Scotch Shorthorns**

—Our herd is headed by "Royalist" who sired the \$3,109 top-priced bull in the Dryden-Miller Feb. sale and we now have several more of his sons which are ready for service. Our females are all Scotch and comprise the following families: Augustas, Lavenders, Mary Anne of Lancasters, Miss Ramsdens, Duchess of Gloucester, Village Girls, Minas, Missies, etc. We are also offering females and a few choice Clydesdale show mares. **ROBERT DUFF & SON (C.P.R.—G.T.R.) Myrtle, Ont.**

**Irvinedale Scotch Shorthorn Heifers**

—For the present we are all sold out of bulls of serviceable age, but we have the largest and strongest offering of Scotch-bred heifers and young cows we have ever had on the farm. Call and let us show you our breeding herd of cows, headed by Marquis Supreme, that great son of Gainford Marquis (Imp.).

**JNO. WATT & SON, Elora, Ontario.**

WINTER FAIR

& 9th  
the main building, to

Slag

constantly increasing  
merits. During the  
st 35,057 tons. No

tilizer sellers, jealous  
reply we merely ask  
uch at the Fair with  
lag for years, men of  
old words. The ex-  
nan the statements of  
e of other goods.  
rements. If you are  
d we will gladly send

dney, Nova Scotia

St., Kingston, Ont.

ale or Hire—We invite you to  
d before purchasing a stallion  
e for next spring. Give us a  
ues.

N BROS., Forest, Ont.

ngus Cattle Three cows  
one yearling  
if, six months old. These are  
at a bargain if sold at once as  
C. C. KETTLE, Phone 2930,  
R. No. 1.

Shorthorns

'S PREMIER SIRE.  
have won more  
ose of any  
fer, as  
ire.

Elora, Ontario

herd sire imp. In dam; one  
am. his breeding and ind-  
ing bull, imp. sire and dam;  
od dual-purpose cows. 2-year-

R. R. 1, Freeman, Ont.

DUAL-PURPOSE HERD  
ISHED 1859  
English breeding. Commodore  
2,112 lbs. Seven young bulls  
R. R. 3, Caledonia, Ont.

ORTHORNS OF MERIT  
p. Newton Grand Champion  
g—two of the greatest bulls of  
g bulls of herd heading type  
vited.

& SONS, Moffat, Ont.

855—Shorthorn Cattle and  
Bulls in service: Browndale  
dale, and Browndale Banner,  
and females to offer. Write

UGLAS, Caledonia, Ont.

d by Ruby Marquis, a son of  
infant Marquis (Imp.). Our  
males in calf to him. Get our

R. R. No. 1, Elora, Ont.

wo young bulls in the stable,  
ext few weeks a half dozen or  
Model. This is a Cruickshank  
Beauty, Missies, Rosemarys,

WITHER, Fonthill, Ont.

Sea Gem's Pride 96365. We  
good bulls for sale, including  
ranhoe 122760, and his full  
culars.

BROS., Drumbo, Ont.

ORNS  
months; also heifers in calf to  
good one.

DUNDALK, ONTARIO

even dandy bulls from 10 to  
of Scotch breeding, and choice  
sexes from prizewinning and

E, Morriston, Ont.

ack Percherons For Sale.  
ected and enrolled in Form 1;  
one Imp. mare rising three, a  
show horses. A choice lot of

Peterboro' Co., Keene P.O.

y "Royalist" who sired the  
n the Dryden-Miller Feb. sale  
Our females are all Scotch and  
Lancasters, Miss Ramsdens,  
offering females and a few  
G.T.R.) Myrtle, Ont.

ll sold out of bulls of service-  
largest and strongest offering  
Call and let us show you our  
Gainford Marquis (imp.).

& SON, Elora, Ontario.

Maple Shade

25 Bulls—6 to 18 months of age.  
Half imported

Shorthorns

The price won't stop you  
write

W. A. DRYDEN,  
BROOKLIN - ONTARIO

English Dual-Purpose  
Shorthorns

We have some Grand Bulls, different ages.  
English bred. Ideal individuality.  
Combining milk and beef.  
Reasonable prices.

English Large Black Pigs

a breed of merit, hardy and thrifty. Write  
or call.

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

Scotch Shorthorns

The most fashionable families only

Herd Bulls—Escana Right For'ard (Right  
Sort—Favorite Missie).  
Browndale Banner—Grand Champion, Canadian  
National Exhibition, Toronto, 1920.

Families—Nonparell, Lancaster, Brawith Bud  
Jilt, Kinellar Rosebud.

Four Young Bulls for Sale—all  
winners, Toronto, 1920, at  
reasonable prices.

W. P. FRASER, Meadowvale, Ont.

Choice Scotch  
Shorthorns

Herd sire: Escanna Champion—a Broad-  
hooks-bred son of the great  
Right Sort (imp.).

We now have several sons of the above  
sire that are show calves and just ready  
for service. See these if you are looking  
for a real herd bull.

Can also spare a few Scotch-bred heifers,  
safely settled in service to herd sire.

GEO. GIER & SON

Waldemar :: Ontario  
(L. D. Phone, C.P.R. Shipping Station)

Shorthorns

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

CHAS. GRAHAM, Port Perry, Ontario

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 13,509 lbs. milk,  
474 lbs. butterfat. He is one of the greatest living  
combinations of beef, milk and Shorthorn char-  
acter. All priced to sell. Write, call or phone.  
Thomas Graham, Port Perry, R.R. 3, Ontario

Mount Victoria Farms

T. B. MACAULAY, Esq., Owner  
Hudson Heights, Que.

Dual-Purpose Shorthorns, High-Stepping Shet-  
lands, Yorkshire Swine, Shropshire Sheep.  
R. 1, Reds, Stagle and Rose Combs.  
Address all correspondence to

J. E. CHANDLER, Hudson Heights, Quebec

Red Polled Cattle

Dual-Purpose, milk, beef, hornlessness,  
uniform red color. The practical breed  
for the farmer. Less work, more profit.  
For bull calves, also Oxford Down ewes  
and rams, write to

RED ARROW FARMS  
Canoto, Frontenac Co. Ontario

Questions and Answers.  
Miscellaneous.

Sweet Clover as Silage.

I have read a good deal about sweet  
clover in "The Farmer's Advocate," but  
have seen very little regarding using  
it as silage. If it makes good silage  
the growing of sweet clover for this  
purpose should be encouraged. I would  
like to hear from someone who is using  
it for silage. T. P.

Ans.—Sweet clover has been ensiled  
and the cattle have eaten the silage quite  
readily. However, we doubt if it is as  
good a crop as corn for this purpose.  
The silo may be used as a means of saving  
sweet clover from spoiling, but we believe  
it can be grown to better advantage as a  
pasture crop than as a silage crop.  
If any of our subscribers have had  
experience in ensiling sweet clover, we  
would be pleased to have them give us  
an account of it for use in these columns.

Moving Black Currant Bushes.

On the place to which I moved this  
fall there are 250 black currant bushes  
which were set out last fall. They have  
not been attended to, and seem to be  
root-bound as they are grown up with tall  
grass. I wish to take them up this fall,  
cultivate the ground and re-plant in the  
spring. How can I keep them over  
winter? Should they be cut back when  
planted in the spring?

2. What causes red streaks and spots  
in the centre of potatoes? H. G.

Ans.—1. Many who have black  
currant bushes that are neglected clean  
the grass away by means of a hoe, instead  
of taking up the bushes. However, they  
may be dug up and heeled-in over winter,  
and then set out again in the spring.  
It will require quite a large trench and  
considerable work to heel-in bushes that  
are four years old. Some of the old  
wood should be cut out in the spring  
and the new wood pruned back.

2. The streaks may be caused by  
several diseases, but in all probability  
the tubers are affected with late blight,  
which may cause them to rot before spring.  
There is nothing that can be done for this  
disease at this season, but care should  
be taken not to plant diseased seed in  
the spring.

Miscellaneous.

1. How do sugar beets, mangels and  
turnips compare for feeding value for  
feeding calves and pigs.

2. Would oats and cornmeal with  
sugar beets make a balanced ration for  
fattening pigs.

3. Would it be advisable to use  
cockerels for breeding next year from a  
batch of chickens that did not do well  
this summer. Chicks hatched splendidly,  
and were vigorous. When about one week  
old chicks took diarrhoea, several died  
and rest recovered. These were the  
only chickens that we lost out of 250, but  
these chickens were put in a shady place  
and all the other chickens were put in the  
sun. I have two very nice cockerels  
from this setting. Would there be any  
danger of the chickens being delicate from  
those cockerels next year.

4. Please give treatment for horse  
when they take colic from drinking too  
much cold water after eating. H. B.

Ans.—1. Mangels and sugar beets  
are preferable to turnips for pigs, but  
one is about as good as the other for  
calves. The main difficulty with turnips  
is that they are a little hard for the calves  
and pigs to chew, and even when pulped  
they are not eaten as readily by the pigs  
as the mangels and beets. As to the  
feeding value, there is not so very much  
difference. The sugar beets would possi-  
bly be the most fattening.

2. Not exactly a balanced ration but  
a very good ration. As the pigs near the  
finishing stage, it is well to drop the  
beets from the ration and feed possibly  
one-third oats to two-thirds cornmeal.

3. It is not advisable to keep birds  
for breeding purposes that were un-  
thrifty during any period of their develop-  
ment. It is possible that these birds  
may be all right, but there is always the  
danger of the chicks being somewhat  
delicate. It would be preferable to secure  
a bird that was known to have had no  
set-back.

4. Drench with 1½ ozs. each of  
laudanum, sweet spirits of nitre and  
tincture of belladonna in a pint of water.  
Repeat in two hours if necessary.

ABORTION IN CATTLE

CAN BE TREATED SUCCESSFULLY AND  
YOU'VE COWS MADE PROMPT. REGULAR BREEDERS BY  
STERILOID



STOP LOSING CALVES  
time and have a healthy calf. If your cows or heifers do not  
come in season, or fail to get with calf, use STERILOID. Cows get with calf after only one  
treatment. Write today for FREE BOOK. It explains the causes and symptoms of Abortion  
and tells how to treat Abortion, and make your cows regular, healthy breeders with STERILOID.  
Also contains letters from breeders who have used STERILOID successfully.  
GUARANTEE: We will refund money in every case when STERILOID FAILS to make  
good. PRICE, \$1.00 plus 4c tax. Mailed Postpaid, in plain wrapper.  
DEPT. F, 398-408 COLUMBUS AVE., NEW YORK  
MARTIN REMEDY COMPANY, City. Reference—Colonial Bank.

Fairholme Scotch Shorthorns

Our herd is headed by a three-year-old grandson of the great "Avondale". We are offering his sons,  
and also have one son of Gainford Marquis (imp.), one son of Edgecote Pradhocks (imp.), and one by  
Secret Light. These calves are all ready for service and are show individuals. Can also spare a few  
bred heifers of Scotch breeding. See our exhibit at the Winter Fair, and have a talk with us regarding  
your next herd bull. We can suit you.

Visitors welcome at all times. PERCY DeKAY (Elmira, C.P.R. and G.T.R.) Elmira, Ont.  
St. Jacob's, G.T.R.

Glenburn Farms Shorthorns

Over fifty head of Imported Scotch bred and Canadian bred Shorthorns.  
Herd headed by Rex Augustus—128232— Breeding cows, heifers and  
young bulls for sale. One fine Canadian bred 14-months-old bull, Sittyton  
Chief—138011— Dam, Emeline—83239— Sire, Sittyton Sultan Dale  
—108651—. Prices reasonable.

GLENBURN FARMS 45 minutes from Toronto by rail or motor. UNIONVILLE, ONT.  
H. H. POWERS, Manager Col. F. H. DEACON, Proprietor

SCOTCH SHORTHORNS

My herd is stronger than ever, and I have cows with calves at foot, heifer 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

Imported and Canadian-bred  
Scotch Shorthorns

We now have a number of eight and ten months old calves from imported cows, several of which  
are imported-in-dam. Write us also for bred heifers. We have a choice lot bred to one of the other  
of our three imported herd sires. Prices right and inspection invited.

J. A. & H. M. PETTIT (Burlington Station) FREEMAN, ONT.

Scotch—Scotch-Topped Shorthorn Females

Sire in service—Sittyton Sultan Dale 108651—466391.  
Got by Avondale and dam by the great White Hall Sultan.  
I have at present a number of bred heifers and also a very limited number of young  
bulls which I am pricing easy, quality considered. Some of the heifers are  
Scotch-topped, while the others are of straight Scotch breeding. Write  
me also for breeding cows. I have 15 now with calves at foot.

A. J. HOWDEN, (Myrtle, C.P.R.—G.T.R.; Oshawa, C.N.R.) COLUMBUS, ONT.

Reyburn Milking Shorthorns

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

R. R. WHEATON :: THORNDALE, ONTARIO  
Long-distance phone and telegraph.

Dual-Purpose Shorthorns

Bulls from 5 to 12 months old for sale, also several cows. Inspection of herd solicited.  
WELWOOD FARM, Farmer's Advocate LONDON, ONTARIO

MILKING SHORTHORNS

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

Hillview Dual-Purpose Shorthorns

Two bulls for sale from high-testing R.O.P. dams and sired by a heavy, thick-set bull with officially  
tested milking ancestry.  
D. Z. GIBSON, Caledonia, Ont.

Shorthorns

—Meadow Lawn Farms offer splendid young bulls sired by our  
own good herd bull Escana Ringleader by Right Sort imp.  
These bulls carry the best blood of the breed and are superior  
individuals. Inspection invited.  
F. W. EWING, R. R. 1, Elora, Ont.

Quality HALEY & LEE, Springfield, Ont. Production

HOLSTEINS—If in need of a better herd sire, speak early for a son of one of our great show cows  
and by our 35-lb. bull, a son of Susie Abbecker Colantha, with world's record for 5 month's milk and  
butter. Our cows were foremost in winnings at Toronto and London.

Summer Hill Holstein Females—We are at present crowded for room, and are pricing  
twenty-five head of one and two-year-old heifers of our  
own breeding at prices which any good breeder should be pleased to pay for this sort of quality.  
See these if you appreciate the best. We have one young bull left—a show calf.  
D. C. FLATT & SON, R.R. No. 2, Hamilton, Ont.

Do You Need a Holstein Bull?—I now have in my stables three young bulls which are ready  
for service, and all are choice individuals. Their dams hold  
good 7-day records, and their sire is a son of Victoria Burke (31.30 lbs.) and Ormsby Jane King. This  
being a son of Ormsby Jane Segis Aaggie, 46.33 lbs. The breeding is the best, and as I need the room  
some one else is going to own them soon. Write quick.  
GEORGE SMITH (Myrtle Station, C.P.R. and G.T.R.) PORT PERRY, ONT.

LONG-DISTANCE RECORD HOLSTEIN SIRE  
If you need a herd sire why not get a long-distance one? We have several choice 12 month's old young-  
sters from dams whose yearly records run as high as 25,598 lbs. of milk and 1,108.7 lbs. of butter in the  
year and 32.70 lbs. of butter in 7 days. Also have a bull calf from each of the three heifers that went  
to Carnation Farms and are now on yearly test. Join up with the yearly procession now and be  
prepared. Prices reasonable. WALBURN RIVERS & SON (Oxford Co.) Ingersoll, Ont.

**Hospital for the Insane, Hamilton, Ont.  
HOLSTEIN BULLS ONLY FOR SALE**

Senior sire is from one of the best sons of King Segis Alcartra Spoford. 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.

**Holstein Herd Sire, \$150**—Pontiac Hermes Cornucopia, a choice, well-grown youngster just ready for heavy service—good individual and guaranteed right. Sire, Gipsy Pontiac Cornucopia, a 30-lb. son of May Sylvia Pontiac Cornucopia. Dam, a 21.19-lb. 3-year-old daughter of King Segis Pontiac Duplicate. We are also listing five younger calves, all sired by Gipsy Pontiac Cornucopia.

JOS. PEEL, Elmsdale Farm, Port Perry, Ont.

**Willowbank Holsteins**

Nearly fifty head to choose from, only one animal on the farm over four years of age, and all except two have been born at Willowbank. Better come down to Fenwick Sta., where we will meet you. Have some highly-bred bulls ready for service.  
Bell Phone. Fenwick Sta.

C. V. ROBBINS, Wellandport, Ont.

**Evergreen Farm Quality Holsteins**

Our aim since we began breeding Holsteins has been to develop a producing herd of "Quality" cattle. Records of the show-ring and those for official production show that no herd of the breed has been more successful. If you require type, backed by production, we would very much appreciate your inquiry.

A. E. HULET, Norwich, Ontario

**HOLSTEIN HEIFERS**

bred to a 29.12 lb. son of Avondale Pontiac Echo. These heifers are all well grown, and got by good sires. Their dams also, in most cases, own official records and we feel that there is no stronger lot in Ontario. Quality and breeding considered, they are priced exceptionally low. See these if you appreciate the best.  
JOHN W. MOOTE

CANBORO, ONTARIO

**AUTOMOBILES, FARM MOTORS AND FARM MACHINERY.**

**Lubrication of Engines.**

Nothing is more vital to the life of a tractor than correct lubrication. Lubrication was at one time understood as just oil or grease of any kind, regardless of quality, grade or fitness to meet specific lubricating requirements. Experience, however, taught operators to recognize that just "oil" was not sufficient. Certain lubricating requirements need certain grades of oil, and inferior quality soon proves to be the most expensive sort of lubrication.

The money expended on a new tractor represents a large investment. The long life and useful service of that tractor are the returns on the investment. The highest quality of oils and the correct grades should, therefore, be used exclusively in order to reduce wear and tear to a minimum, maintain full power and insure the high efficiency of the tractor.

Friction may be defined as the resistance of two surfaces in contact. If one examines even the smoothest of metal surfaces with a microscope, he will find little tooth-like projections extending over the entire surface. It assumes the roughness of a grindstone. When two surfaces come in contact these tiny projections interlock, and when the surfaces are moved, resistance with a resulting wear will follow. The greater the pressure the more firmly do these projections interlock and the greater becomes the wear. This is friction. The relation between the force of resistance and the force required to overcome it is called the "Co-efficient of Friction."

To reduce the force of resistance to a minimum is the object of lubrication. In order to keep the surface from coming into direct contact and prevent the microscopic projections from interlocking, sticking together and grinding down with wear, it is essential to place something between them of a smoother substance. This something is a lubricant. It must have a body of sufficient tenacity to form a projecting cushion between the two moving surfaces. It must spread and sustain an even body of oil of equal consistency throughout, and must be of a quality that will maintain its body under pressure.

This, however, does not totally overcome friction, for there is still a fluid friction—the resistance to movement by the lubricant itself.

The problem is to find a lubricant which is exactly fitted to the conditions under which it is to be used. In the main, this may be said to be governed by four chief factors: 1, The weight of the moving body; 2, the speed with which it moves; 3, the working temperature of the bearing surfaces; 4, the clearance between the surfaces. The weight of the moving body is of importance because the oil must support the weight and keep the surfaces apart. If the oil is too thin it will simply be squeezed out from between the metal surfaces, and they will then rub together, resist motion, grind and wear.

The speed with which the bearing surface moves is of importance, and must be taken into consideration in connection with the fluid friction of the oil. It will be readily appreciated that if the fluid friction of the oil is so little that the movement of the oil is faster than that of the moving surface, the oil will flow out and leave the surface exposed. On the other hand, if the fluid friction of the oil is so much that the movement of the oil is slower than that of the moving surface, the oil will offer resistance, and more power will be required to overcome that resistance.

In light duty, high speed work, this becomes a matter of great importance. A lubricant that is too heavy might cause the fluid friction to be greater than the friction of the two surfaces would be were they permitted to rub together without a lubricant. The temperature of the bearing surfaces is of importance for two reasons: first, because all lubricating oils thin out upon being heated. An oil which seems very heavy at 70 degrees Fahrenheit may be very thin when heated to the temperature at which an engine operates. If at a low temperature the oil is too heavy, it will not flow properly, with resultant friction. If when heated it becomes too thin, it will not hold the moving bodies apart, but will flow out from the bearing and permit the moving parts to come together. Obviously, therefore, the oil which undergoes the least change in body at extremes of operating temperatures, thinning the least upon being heated and thickening the least at normal atmospheric temperature, is the best oil to use in the engine, because its effectiveness at low temperature and at high temperature is more nearly the same.

The second reason why temperature is of importance, is because all lubricating oils will burn up at the temperature prevailing in the combustion chamber and at the top of the cylinder head. It is, therefore, plain that the oil which upon burning leaves the least residue, or carbon, in the cylinder is the best oil to use. The

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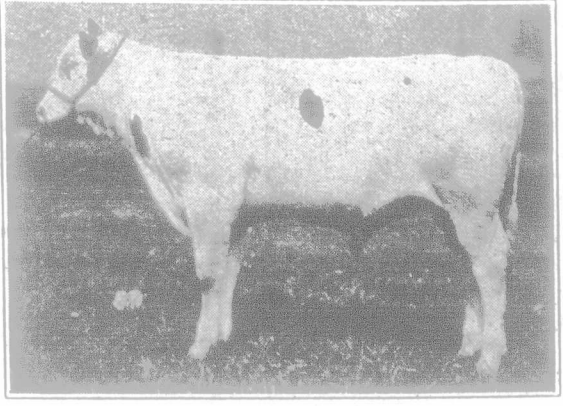
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# Buy Your Holsteins in Oxford County, Ontario "THE HOLLAND OF AMERICA"

We have selected this year for our annual fall sale seventy-five of the choicest things we have ever offered at any of our thirteen semi-annual club sales. These are consigned by the same breeders that have made the Oxford sale the outstanding club sale in all Canada. At the recent Canadian National Exhibition, Oxford County herds won 75 per cent. of all prizes awarded to the breed, and at London, the week following, only two ribbons in the whole show went to herds outside Oxford County. These herds produce show individuals, and also combine production. Oxford County herds at present hold the Canadian championship for yearly production in both the three-year-old and the four-year-old class; second place in the



**Sir Francy Netherland**  
Oxford County bred and owned. Junior Champion Holstein bull at Toronto and London Exhibitions, 1920.

two-year-old class, and fourth place in the mature class. The first 33-lb. cow in Canada was also Oxford bred and owned. Much of this same blood is strongly represented in this sale, and of the fifty-three females selling nearly all are young cows, either fresh or near freshening at sale time. The 22 young bulls include a number of real herd sire prospects. If you want Holsteins bred for type and production come to

WOODSTOCK, ONTARIO,  
**Wednesday, Dec. 15, 1920**

FOR CATALOGUES ADDRESS:

President:  
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## Manor Farm Holsteins

A Producing Herd Where Quality Excels

I have at present just the bull calf you need for your next herd sire. Visit Manor Farm yourself and select him from the choice lot of youngsters now in the pens—all are sired by our great son of Lulu Keyes, King Korndyke Sadie Keyes. The records of the dams of these calves we would like to show you run from 20-lb. two-year-olds to almost 35 lbs. for matured cows—quality and production considered, they are priced exceptionally low.

**GORDON S. GOODERHAM, Manor Farm, Clarkson, Ontario**

## Silver Stream Holstein Herd Sires

WE BREED FOR YEARLY PRODUCTION

We have at present several choice young bulls, nearly all of which are sired by our own herd sire, King Lyons Colantha, whose six nearest dams average 30.10 lbs. of butter for 7 days. These youngsters are all from good yearly record dams and great individuals—probably as strong a lot as we have ever bred. Come and see us also for females.

**JACOB MOCK & SON TAVISTOCK, ONTARIO**

**"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. milk, with 110 lbs. 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.**

clearance between the surfaces is of importance, because if there is very much clearance, and the oil is too thin, it will run out, permitting the metal surfaces to come together. If there is only a small clearance, and the oil is too thick, it will not flow freely between the surfaces, and there will be dry spots which will rub together. Especially does the question of clearance become one of prime importance when considering a lubricant for the piston, for compression depends upon the lubricant, and the efficiency of the engine depends in a large measure upon compression. When the piston is fitted into the cylinder there is usually a clearance between the wall of the piston and the wall of the cylinder about equal to the thickness of a piece of paper. This space must be sealed absolutely air-tight by the lubricating oil and the piston rings.

On the first down stroke of the cycle—the intake stroke—a partial vacuum is created in the combustion chamber above the piston. This has a tendency to suck the oil out from between the piston and the cylinder, past the piston rings and into the combustion chamber, consequently the oil must have sufficient adhesiveness to cling to the cylinder wall and withstand the suction power of the vacuum. The amount of oil which is drawn into the combustion chamber will depend upon the number and fit of the piston rings, and the character and quality of the oil. The next up stroke of the piston is the compression stroke, and its value also depends upon the effectiveness of the piston rings and upon the sealing qualities of the lubricant. When the piston is at the bottom of the intake stroke the valves are closed, and the only way in which there can be a loss of compression on the up stroke is through improperly fitted valves, improperly fitted piston rings, or because of poor lubrication.

It is clear that if the gas is permitted to escape, either through the valves or past the piston, there will be no force to the explosion; the effectiveness of the power stroke being decreased in exact proportion to that of the gas which escapes during the compression stroke. Furthermore, when the explosion takes place the consequent expansion of the gases therefrom produces the power to drive the

## RAYMONDALE FARMS

**Our Junior Herd Sire, King Korndyke Raymondale**  
"One of the best bred bulls of the great Holstein breed."  
His sire, Avon Pontiac Echo, is one of the most noted sons of the world's greatest cows, May Echo Sylvia; while his dam, Korndyke Queen De Kol 6th, is three times a 30-lb. cow, and twice a 35-lb. cow—her best 7-day record being 37.20 lbs. of butter and 781 lbs. of milk. She has 3,101 lbs. of milk and 180.9 lbs. of butter in 30 days, and 10,125 lbs. of milk in 100 days. The dam and sire's milk, 100.35 lbs. of butter in 30 days, and 896.5 lbs. of milk and 39.14 lbs. of butter in 7 days; 3,682.55 lbs. of milk, 100.35 lbs. of butter in 30 days, and 137.30 lbs. of milk for one day. He is a splendid individual, and is proving himself a great sire. Let us send you particulars regarding the few bull calves we have by this young sire. All are from good record dams in our own herd.

**RAYMONDALE FARMS D. RAYMOND, Owner**  
Vandreuil, Que. **Queen's Hotel, Montreal**

## Hamilton House Holstein Sires

Our young bulls of serviceable age have all been sold, but we have a number of the best young calves we have ever bred. All are from dams with good combination records for both milk and butter. Several are up to 700 lbs. of milk and 81 lbs. of butter for 7 days. If you are interested in a good calf, write or see them now—they can be purchased at considerably less than we will be pricing them next winter.

**D. B. TRACY COBOURG, ONT.**  
All Railways Bell 'Phone

**For Sale—Hill-Crest Rauwerd Vale,** 4 years old, our herd sire whose two nearest dams average almost 26,000 lbs. of milk and 1,050 lbs. of butter in one year. Am keeping all his heifers in the herd. Will sell one or two cows.  
**W. FRED FALLIS, R. R. 3, Millbrook, Ont.**

## 40 HIGH-CLASS HOLSTEINS

IN UNRESERVED BREEDERS' SALE

A Real Choice Offering of Well-bred, Untested Holstein Females. Selling at FAIRVIEW FARM, near

**Dunnville, Ont., Saturday, Dec. 11th, 1920**

We are cataloguing for this sale forty of the very best females we have, and in three or four instances only are there cows above five years of age. At least twelve will be fresh or near freshening by sale date; others are bred to freshen in early spring, and the remaining numbers are made up of unbred youngsters. Five of these are daughters of the great young herd sire, Elmcree Pontiac Sylvius, who is owned jointly by Mr. Shaver and Mr. Moote. Elmcree Pontiac Sylvius, the sire of these heifers, is got by



be in the neighborhood of twenty females selling that are bred to him, which means that practically every female that is bred is carrying a calf which will be sired by a 29-lb. grandson of May Echo Sylvia. There are also 14 daughters of King Johanna Netherland and 4 daughters of Orvilla Helbon Prince listed.

**In addition to the Holsteins there will also be sold a matched span of Registered Shire Mares (4 and 5 years old), and a Sharples two-unit milking machine.**

**NOTE.**—The cattle will be sold subject to the tuberculin test if purchaser so desires. Those attending the sale are also assured that the sale will be over in plenty of time to allow every one to catch the evening train at Dunnville, where it is possible to make close connections for almost any point in Western Ontario, and arrive there that evening. All requests for catalogues should be addressed to

**JOHN. W. MOOTE, Canboro, Ont.**

All trains met at Dunnville on morning of sale.  
**Owners, JNO. W. MOOTE, M. B. SHAVER**  
**Auctioneers, MOORE, MONTAGUE. Sales Manager, C. T. HOUCK**

engine. If the valves are tight, the rings properly fitted, and the seal is maintained by the lubricant between the piston and the cylinder, none of the force (which should be used to drive the engine) will be lost through leakage.

The troubles resulting from poor compression are well known to every experienced operator, and are generally manifest in hard starting and in loss of power. From the foregoing it will be readily appreciated that if there is a clearance of 4/1000 of an inch between the piston and the cylinder a heavier, more tenacious oil will be required than if there is only one-half that amount of clearance.

The lightest oil which will maintain the piston seal is the best oil to use. It must be fluid enough to spread over the wearing surfaces quickly, leaving no dry spots. It must reach all the close fitting bearings and be free to move with very little resistance to motion. Experiments have proven that oil which is too heavy gives rise to higher temperature in the cylinder walls, and consequent higher temperature to the water in the radiator.

However, if coal oil is used for fuel, heavier oil is required than if gasoline is used, because there are times (such as sudden load changes or light load) when some of the coal oil which is taken into the combustion chamber is not burned. This unburned fuel then mixes with the lubricating oil and thins it out, and unless the right lubricating oil is used it will thin so much that not only will the oil seal be broken, but the lubricant may be almost entirely washed off the piston and cylinder walls, even causing the piston rings to seize or score the cylinder.

The water used so generally in kerosene tractors also has a tendency to destroy the oil film on the piston and cylinder walls. This is especially true when too much water is used or when lubrication is not correct, and often results in cylinder scoring and piston ring breakage.

However, there is a limit to the sealing property of any lubricant. When the piston rings become too much worn or when the cylinder has been scored, or worn at one spot, the only remedy is ring replacement or cylinder reboring.—From "Correct Lubrication for the Farm."

## Don't BLAME your Horse



A horse cannot be expected to pull a load on icy roads or streets if his shoes are dull and smooth.

If you expect him to exert all his pulling power, he must have a foothold. Get

### Red Tip Calks

today and save your horse from danger and yourself from delay and annoyance. On and off in 20 minutes, RED TIP CALKS put you in the always ready class. Compared to injuries sustained by your horse from falling, or possible fatal loss, not to mention damage to wagons and harness, RED TIP CALKS are CHEAP INSURANCE.

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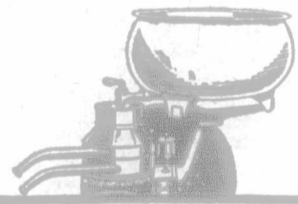
On Body and Face. Red and Itchy. Cried For Hours. Lasted a Year.

"A rash started all over my little girl's body, and she had some on her face. It started in a pimple that was full of water, and it got red and itchy. She cried for hours. This trouble lasted a year.

"Then I started with a free sample of Cuticura Soap and Ointment. I bought more, and I used four cakes of soap and three boxes of Ointment which healed her." (Signed) Mrs. Dora Langly, 1332 Gertrude St., Verdun, Que., August 11, 1918.

The Cuticura Toilet Trio Consisting of Soap, Ointment and Talcum is an indispensable adjunct of the daily toilet in maintaining skin purity and skin health.

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



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## Holstein Bull FOR SALE

Fifteen months old son of Ormsby Jane Burke, ex granddaughter of May Echo. Priced for quick sale.

Write for full particulars.

A. Field-Marshall - Beamsville, Ont.

24,687 lbs. Milk—Butter 1,016 lbs.

Record of sire dam. Write for extended pedigree and particulars of 1920 Holstein Bulls from him and R. O. P. cows.

R. HONEY & SONS - Dartford, Ontario

## TRAPPING

### Mink and Weasel.

BY ROBT. G. HODGSON.

These two animals are closely related; their habits are much alike, and as they are often caught in identically the same sets we shall, for our purposes, consider them together.

The mink is a small animal of about a foot and a half in length with a long, wiry body of a brown color. Sometimes this color runs to pale when they are of little value, but when they are a rich dark brown, such as we find them in northern districts of Canada, they are most beautiful in their rich, glossy coat, and consequently most valuable.

They are great wanderers and travelers and have been known to cover a route of twelve miles in a single night. These routes are, of course, regular and are covered every week or ten days. In their travels in this manner they search every hollow log, muskrat house or rock or brush pile where there is the least possibility of their finding food. They are as much at home in the water as on land, and much prefer the small, winding streams along which to travel, for here under the overhanging banks and the debris that would naturally lodge in such places they find seclusion, and the choicest of delicacies in the way of frogs, crabs, etc., which constitutes a large part of their food.

While they live on frogs, fish, mice, small herbs, crabs, rabbits, muskrats, partridge and poultry, as well as some other foods, no better natural bait can be used to entice them than speckled trout, muskrat flesh, partridge or poultry.

In the past much publicity has been given to the statements that they were afraid of human scent, and that to be successful in taking them one must use gloves which had been dipped in blood in setting for them. It is unnecessary to go pro and con, into this here for it would take up too much space; sufficient is to say that such proceedings are entirely unnecessary and nothing is to be gained by it. Writers who claim this is necessary, if they are at all experienced in trapping, know these statements are not true, and that for the ordinary run of mink no such precautions are necessary; such writers do nothing but handicap the novice in his attempts to trap, for naturally he being impressed with the necessary precautions pays more attention to this and the skill and care that should be given the actual setting of traps, and kindred points are transferred to the ridding of this human scent idea, and as a result he secures poor results.

So the better way is to use care in setting your traps, leaving the surroundings after the sets are made as natural as possible, and forget all about the human scent idea—and you will be more successful in taking mink than the fellow who uses so much of his time in wearing bloody gloves and following other piffle.

The mink traps are: 1½ Newhouse or No. 1 Newhouse, 91½ Newhouse, No. 1 Giant, No. 91½ Victor or 91½ Jump; the No. 1 Giant being the preference among amateurs and even professionals.

Go along a steep stream bank and if you cannot find a hole already made make one with the aid of a paddle or a flat, fairly thin stick about eighteen inches deep and four inches in diameter at the mouth. Have the hole sloping upwards and the water coming nicely up to the mouth but not in. Now take the intestines of a muskrat or a hen and post on a stick at the mouth of the hole, having it out of water of course. Set your trap just in front in an inch or so of water. If you have scent to use do not put it on the bait; rather you will find it best to put on some bushes or grass just above the bait.

Around old bridges are good places to catch mink, for here they like to explore for food, and if there are good places they often make their home here. It is hard to describe a certain set at such a place as this for the set would depend largely on the condition of the bridge, etc. Common sense will tell you where to set at this and other such places, and whether or not to use bait or scent, or both.

Tile drains afford good sets for them, as they delight to fool around the mouths and look for food that may be washed down. Set your trap just outside the mouth of drain, and put some bait, a

## More Eggs!

It's not what hens eat but what they actually digest and assimilate that counts. Lazy hens won't lay—poor conditioned hens can't lay—but give them INTERNATIONAL POULTRY TONIC, and note the difference. It will tone up the digestion and strengthen the egg-producing organs, it will bring back the "scratch and cackle" and you soon will have a healthy, laying flock.

### INTERNATIONAL POULTRY TONIC

The Famous "Egg Producer," with a Reputation of More than 30 Years.

Makes healthy, red-blooded, thriving hens and assures you of a plentiful egg supply throughout the winter. INTERNATIONAL enables hens to get all the good out of feed; their bodies are well nourished and egg production is increased. Try it—your flock will quickly respond to its beneficial action.

Sold from coast to coast in 40c., 75c. and \$1.25 packages, and in 25 lb. pails at \$3.75. INTERNATIONAL is unequalled for geese, ducks and turkeys.

INTERNATIONAL STOCK FOOD CO., LTD., Toronto

## PICKERING FARMS WHITBY, ONT. JERSEYS

The enquiries, as a result of our recent advertisements, have been so great that we have been cleaned right out of bulls.—RALEIGH MEADOWGRASS is certainly the popular sire, if ever there was one.—Not a son of his of serviceable age left on the farm.

We have a few bull calves by Raleigh Meadowgrass born since the first of July. These are the last. Every one of them should go into a picked herd, where they will have the greatest opportunity.

And while we are discussing these calves, let us not forget that they are all grandsons of the most sensational Jersey cow that has ever been shown in Canada, and that their sire was never defeated at Canada's greatest Jersey show.

Breeders who are striving to free themselves of the ravages of tuberculosis will appreciate the advantage of dealing with a farm that has been running under the strictest accredited system for years.

ROBERT J. FLEMING

92 King St., East, Toronto

### Prospect Farm Jerseys

—Herd sire, Toronto of Prospect Farm 12094, whose sire Lous Toronto 106614, dam and both grandams, have an average R.O.M. record of 14,261 lbs. milk and 996 lbs. butter, 85 per cent. fat. Lous Toronto is a grandson of Hood Farm Pogis 9th, 55553, and Hood Farm Toronto 60326, both Gold Medal bulls. Toronto 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 Toronto 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 Toronto of Prospect Farm and from R.O.P. cows, also choice young bulls sired by Brampton Bright Togo 5780, and cows and heifers bred to Toronto of Prospect Farm, due to calve Sept. and Oct. Pure-breds and high-grades. The high-grades will make choice family cows.

R. & A. H. BAIRD, R. R. 1, New Hamburg, Ont.

## BRAMPTON JERSEYS

THE LARGEST JERSEY HERD IN THE BRITISH EMPIRE

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

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

### All Bulls of Serviceable Age Sold

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

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

### The Woodview Farm Jerseys

London, Ontario JNO. 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.

### TEN THOUSAND DOLLAR JERSEY BULL

They have sold that high alright but we are not asking that money for ours. We now have ten youngsters, half of which are of serviceable age and all from good record R.O.P. dams, including one from our Canadian Champion, 3-year-old. They run from \$125 up. We guarantee the price and guarantee the bull. Write us also for females. PAPPLE BROS., Brantford, Ont., R.R. No. 1 (Cainsville G.T.R., T. H. & B. Stop 27, Brantford-Hamilton Radial).

### DON HERD OF PRODUCING JERSEYS

We have three young bulls of serviceable age—good individuals and priced right. Could also spare a few choice bred heifers. Visitors welcome.

D. DUNCAN & SON,

TODMORDEN, ONT.

### 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.

### Inglewood Farm R.O.P. Ayrshires

—This herd has passed the first test for accreditation without a reactor. Our foundation cow has a record of 16,038 lbs. milk. Her first daughter was a cup-winner, and her first granddaughter has just completed a 2-yr.-old record of over 10,000 lbs. We cordially invite you to see these females. Present offering: Bull calves only.

WILSON McPHERSON & SONS, St. Anns, Ont.

### Glenhurst Ayrshires

—Headed by Mansfield Maires 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

### SPRINGBANK AYRSHIRE HERD SIRE

We have a few young bulls from R.O.P. dams and sired by Humeshaugh Invincible Peter, our show herd sire. We would also sell this sire guaranteed right in every way. Our herd holds more championship records for production than any other herd in Canada. We would be pleased to send the list. We can also spare a few females—cows and heifers.

A. S. TURNER & SON

(3 miles south of Hamilton)

Ryckmans Corners, Ont.



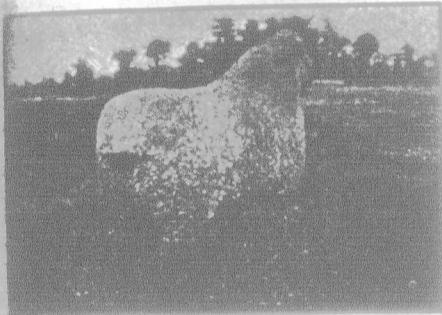
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piece of fish or rabbit or muskrat, back in the tile.

An artificial set from a tile is made in the following manner: wedge a stick in the tile and on or to this stick fasten some bait. Now place this tile in very shallow water (be sure the water is not up to bait) near where mink travel and set a trap at each end.

Take the carcass of a muskrat and anchor it out in shallow water near where mink pass. Have it half under and half above the water as if it were really naturally bait and had really been lodged in shallow water in the manner shown. Set a trap on each side so you will be sure to catch the mink, no matter from which side he approaches.

A good winter set for mink, claimed to deliver the goods by an expert, is this: "In the winter time, chop a small hole in the ice where the water is shallow and has not much of a current. Directly beneath this hole, if the weather is not too cold, place four or five pounds of salt (coarse) tied up in a cloth. The salt will keep the hole from freezing over. A mink coming up or down stream will investigate, and if a trap is properly placed is sure to be caught."

Make a trough about eight inches in width for each half and about three or four feet long. In the top or at least nearest where the ends, when nailed will come together, bore a hole about an inch in diameter. Take this "trough" to such a place as under an old bridge and set it in the mud or water up near the side of the bridge, covering it with mud to make it look natural. Of course, if it is placed in water the water must not be too deep or it will wash the trough away. Through the hole in the top suspend your bait and set a trap at each end.

The novice often makes the mistake of moving his traps too often. This is true when he sees where the mink has passed by. He lifts the trap and sets it in the last trail, and the next time Mr. Mink passes along he takes another or different circuit, but never further than a few feet away from the original trail. Do not be too hasty in changing, for sooner or later he is going to make the mistake of taking the route in which your trap is set—and be caught.

Where you catch one mink is the place to catch another, and the trap should be reset directly. The odor left by captured mink, especially in the spring, seems to attract others to the spot.

WEASEL.—The weasel, termed the stoat in England and some other parts of Europe, here it is termed American ermine; at least in the fur trade, and is one of the most beautiful of furs with its snow white color generally, and the beautiful effect given by the black tip on the tail.

By nature they are one of the cruellest and most blood-thirsty animals for its size in creation and has the habit of sucking the blood out of its victims, by severing the jugular vein and drinking his fill, then leaving the rest of the animal.

Weasel, like mink, have routes they cover with great regularity, and these routes can be found by their tell-tale tracks after the snow comes. They are not difficult to take, all that is necessary is to set your trap, a Victor No. 0 usually being used, at every hollow log, stone pile, etc., near which they pass by or through, and baiting the set with bloody meat of some kind, rabbit, partridge, muskrat, etc.

Questions and Answers.

Miscellaneous.

A Poor Car.

A hires an auto from B for a trip and is to pay by the mile for it, and on the road it is in such poor condition that at one place all but the driver have to get out and push behind to get it up a slight grade and at another place a wagon was ahead and it was necessary to stop and the lights were in such bad condition that the driver could not see and struck the wagon and did a little damage to the car. The light on the side that struck only showed a tiny spark, and the brake did not work good or it would have stopped in time as it was not going over seven or eight miles an hour and had at least fifty feet to stop after sighting the wagon dimly. Is A liable for damages to the car besides the milage. R. J. W. Ontario.

Ans.—We do not think so.

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FEATHERSTON'S YORKSHIRES. If you want a few bred sows you should call and see the present lot I have on hand. I also have several choice young litters and a few young boars. Can furnish pairs or trios not related. J. K. FEATHERSTON, Streetsville, Ont.

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## Our School Department.

### Some Farm Problems.

The manual issued by the Ontario Department of Education mentions, to those teaching agriculture, problems constructed around farm work and rural conditions. The country is full of problems. The little schoolhouse itself suggests dozens of arithmetical tasks. The school garden and the school grounds can be used as the basis for many knotty little problems in arithmetic, and owing to the local flavor these problems can be made interesting as well as educative.

The farm itself, as suggested by the manual, is rich in arithmetical problems. Let us first consider a farmer in the spring of the year computing his seed requirements, and as this paragraph progresses the reader will find many problems, the solution of which will afford good practice in arithmetic. The farmer on a hundred acres will probably be sowing ten acres to oats, either Banner or O. A. C. No. 72, and he will wish to sow in the neighborhood of two and a quarter bushels of seed per acre. He may want some barley for hog feed, and will sow five acres of O. A. C. No. 21, perhaps, at the rate of seven pecks per acre. It is good practice, too, to mix oats and barley when seeding, because the mixture gives a better yield than either grain grown separately, and the best mixture is a bushel of oats and a bushel of barley per acre. This makes splendid chop for hogs or cattle, and the farmer will probably wish to sow ten acres. In corn-growing districts, perhaps the hundred-acre farm should have in the neighborhood of ten acres of corn, seeded at the rate of about twenty-five pounds per acre. Generally speaking, farmers seed down in the spring, or on the fall wheat, and we shall assume that this farmer is going to sow grass seed on the twenty-five acres where grain is to be grown. On ten acres he may put clover, timothy and alfalfa; seven pounds of red clover three pounds of timothy, and three pounds of alfalfa per acre. On the remaining fifteen acres he may seed with the following mixture: Ten pounds of red clover, three pounds of timothy, and two pounds of alsike per acre. This farmer desires to know how many bushels of oats, how many bushels of barley, and how much corn he will have to get ready for the seeding, and he is also anxious to ascertain how many pounds of red clover, how many pounds of timothy how many pounds of alsike, and how much alfalfa he will have to purchase. Can you help him?

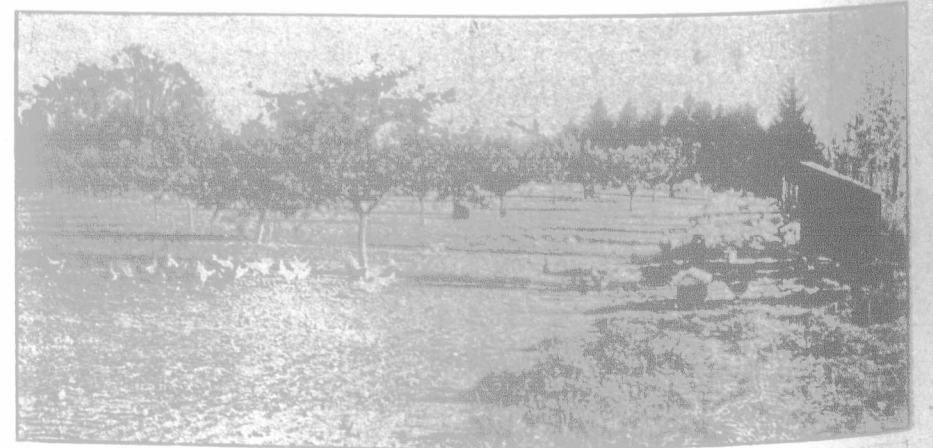
There is often some doubt in the minds of farmers whether hog production is profitable or not. Perhaps with a little figuring we could estimate pretty closely whether that farmer in your neighborhood, who just sold a load of hogs, made or lost on the transaction. Let us assume that when the pigs were weaned, at seven or eight weeks old, they weighed thirty pounds each. Let us also work on the basis that four and a half pounds of feed will produce a pound of gain. This tells us approximately how much grain or millfeeds the hogs consumed. Perhaps to help us a little we may furthermore

assume that the hogs were fed a mixture of oat chop, 100 pounds; barley chop, 100 pounds; shorts, 100 pounds. By looking up market quotations during, say, the early part of September, we can find out what these feeds were worth. We know how much the hogs weighed, how much they sold for per pound; then by placing the cost of production against the selling price we can find out what the profit was.

Every successful dairyman does considerable figuring, and the dairy suggests many arithmetical problems. The herd may consist of, say, six cows. No. 1 only gives 4,000 pounds of milk a year, No. 2 gives 5,000 pounds, No. 3 gives 5,500 pounds, No. 4 gives 6,000 pounds, while Nos. 5 and 6 give 6,500 pounds of milk a year. The average butter-fat test of this milk is 3.5 per cent. Find out what farmers in your district are getting for butter-fat (not butter), and see how much revenue the dairy herd would return if all the cream were sold on the basis of present prices for butter-fat. There would be skim-milk left on the farm, the value of which might be put at around 40 cents per hundred. The returns from cream and skim-milk will give the gross revenue from the herd. Perhaps the milk is sold in the whole-condition for city consumption, or to cheese factories. In this case the problem is a simpler one.

The round silo which stands at the end of a barn can be made the subject of many calculations. Let us consider a few of them, and perhaps at the beginning we shall tell you how to find the capacity of a silo. The bottom of the silo is a circle, and to find the area of this the radius is squared and the result multiplied by  $3\frac{1}{7}$ . This gives us the number of square feet in the bottom of the silo. Then if we multiply this by the height of the silo we find out its cubical contents, or the cubic feet inside the silo. A cubic foot of silage at the bottom will weigh in the neighborhood of 40 pounds, while a cubic foot of silage at the top would weigh considerably less than 30 pounds. When estimating the weight of silage, it is safe to figure that a cubic foot, averaging the whole contents, will weigh 30 pounds. We have told you enough about computing the capacity of a silo; now let us assume that the farmer has eight cows and ten young cattle. The cows are to receive 25 pounds of silage per day and the young cattle will average 15 pounds per day. If silage is fed from the first of December to the first of May, how big must the silo be to hold corn enough for the period mentioned? There is another problem in connection with the building of silos that is a trifle more intricate, and it arises out of the fact that two inches of silage should be taken off the surface each day. With the number of cattle given, and on the basis of the amounts mentioned, what must be the diameter of the silo in order to insure that at least two inches of silage will be required each day to feed the live stock?

These are just a few farm problems. There are hundreds more; some difficult of solution and other quite easily solved. The pupils can bring little problems to school with them and parents can help in making arithmetic in the rural school both interesting and educative.



The Subject of Interesting Calculations.

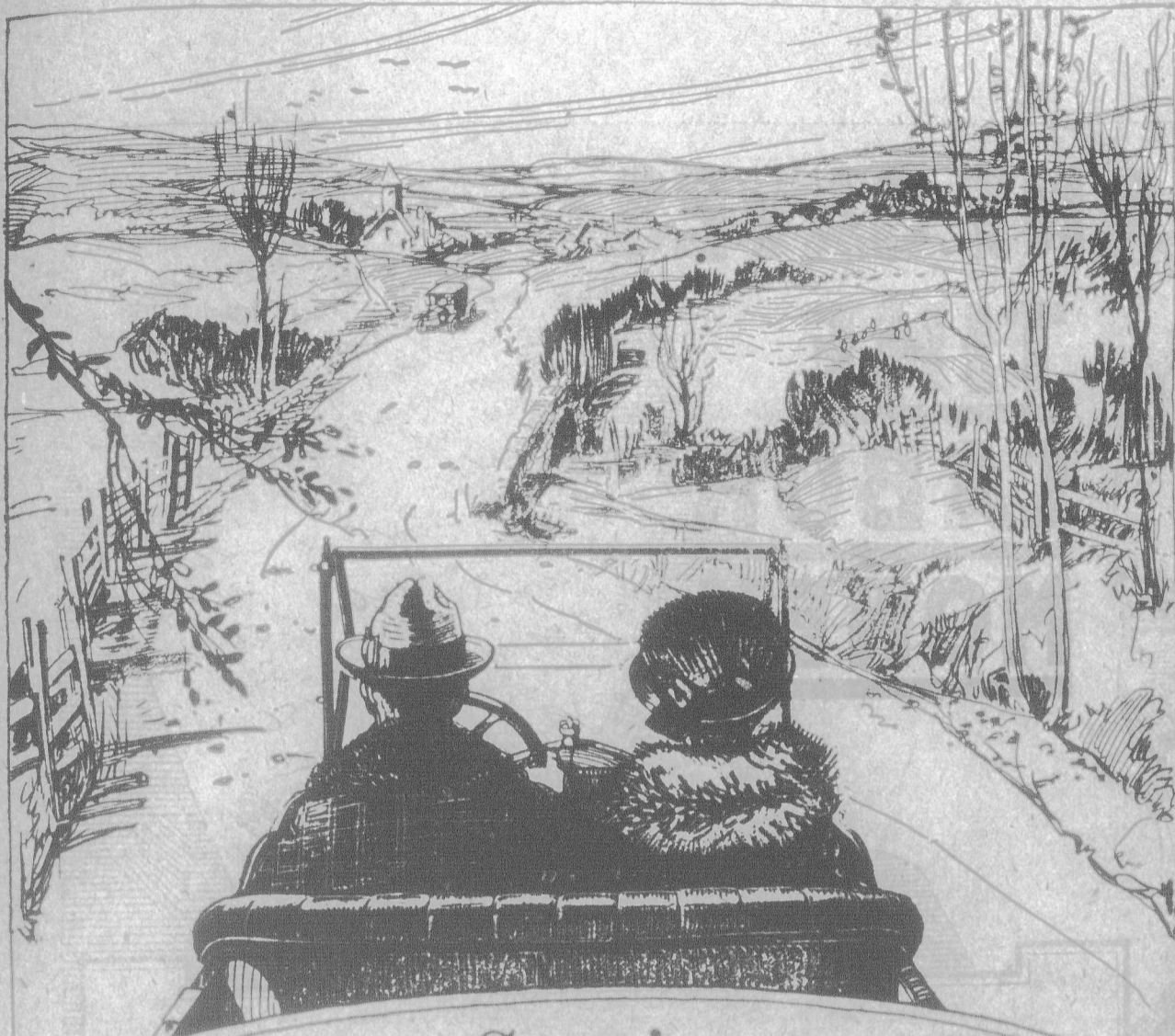
The farm flock can be used as a subject for many interesting arithmetical problems, which can be made as difficult or easy as the teacher desires.

rtment.

the hogs were fed a mixture of 100 pounds; barley chop, 100 pounds, 100 pounds. By looking at quotations during, say, the first of September, we can find out these feeds were worth. We can find out how much the hogs weighed, how much they sold for per pound; then by comparing the cost of production against the price we can find out what the profit was.

A successful dairyman does not consider the dairy as a mere source of milk, but as a business. He looks for the best results, and the dairy suggests many problems. The herd should be of, say, six cows. No. 1 should give 10,000 pounds of milk a year, No. 2, 8,000 pounds, No. 3 gives 5,000 pounds, No. 4 gives 6,000 pounds, and No. 5 and 6 give 6,500 pounds of milk. The average butter-fat in the cream should be 3.5 per cent. Find out what the average is in your district and see how you compare. If you are getting a low percentage (not butter), and see how you can improve the dairy herd. The cream should be sold on the highest price for butter-fat. The skim-milk left on the farm should be put to use. It is worth 10 cents per hundred. The cream and skim-milk will give you more revenue from the herd. The milk is sold in the whole or in city consumption, or to a factory. In this case the problem is to get the best price.

Let us consider a few of the problems which stand at the end of the year. The silo which stands at the end of the year should be made the subject of many articles. Let us consider a few of the problems which stand at the end of the year. Perhaps at the beginning we should consider how to find the capacity of the silo. The bottom of the silo is a good place to find the area of this the silo. The result multiplied by the height of the silo gives us the number of cubic feet in the bottom of the silo. Multiply this by the height of the silo and you find out its cubical contents. The silo is 10 feet inside the silo. A silage at the bottom will weigh about 40 pounds. A foot of silage at the top would weigh about 30 pounds. The weight of silage, to figure that a cubic foot of silage will weigh about 40 pounds, will weigh about 30 pounds. We have told you enough about the capacity of a silo. Assume that the farmer has ten young cattle. The silo will receive 25 pounds of silage. The young cattle will average 100 pounds per day. If silage is fed from the silo to the first of May, the silo will hold corn for the period mentioned. There is a problem in connection with the silos that is a trifle more difficult. It arises out of the fact that the silage should be taken care of each day. With the silage given, and on the basis of the silage mentioned, what must be done to insure that two inches of silage will be left in the silo each day to feed the live stock? This is just a few farm problems. There are hundreds more; some difficult and some quite easily solved. We can bring little problems to you and parents can help them with arithmetic in the rural school. This is a simple and educative.



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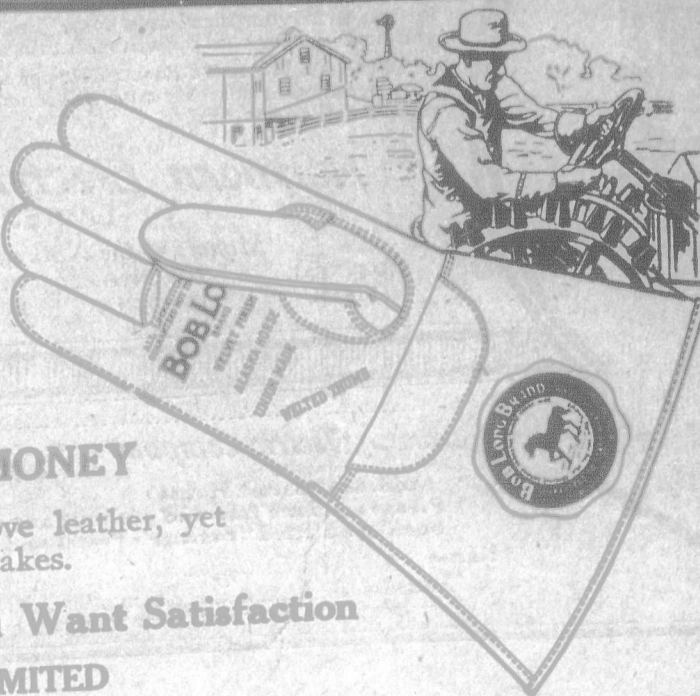
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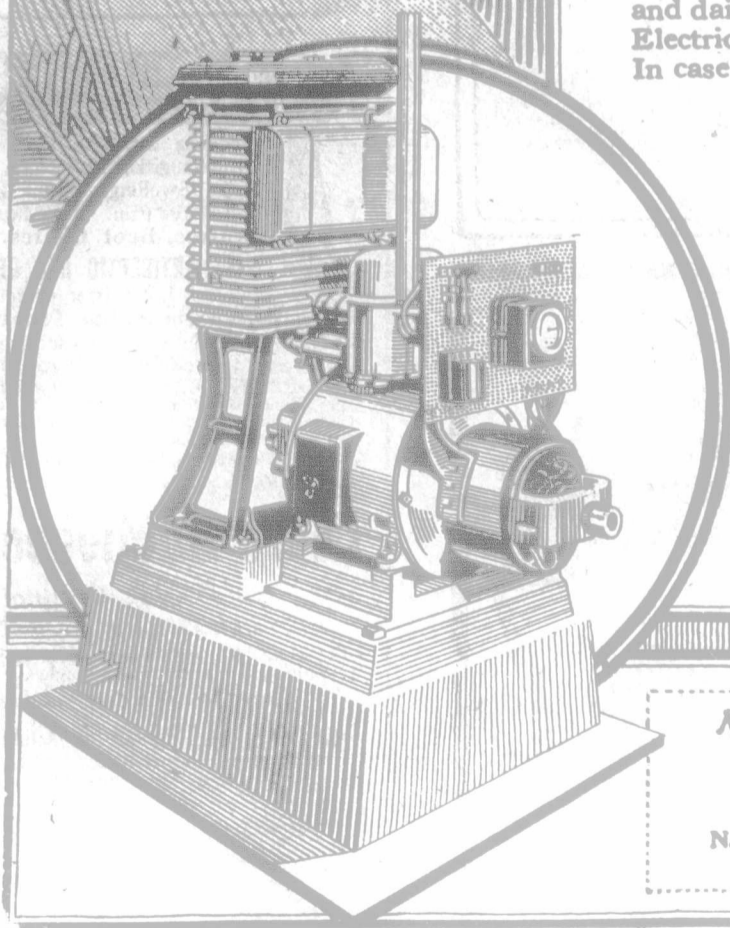
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