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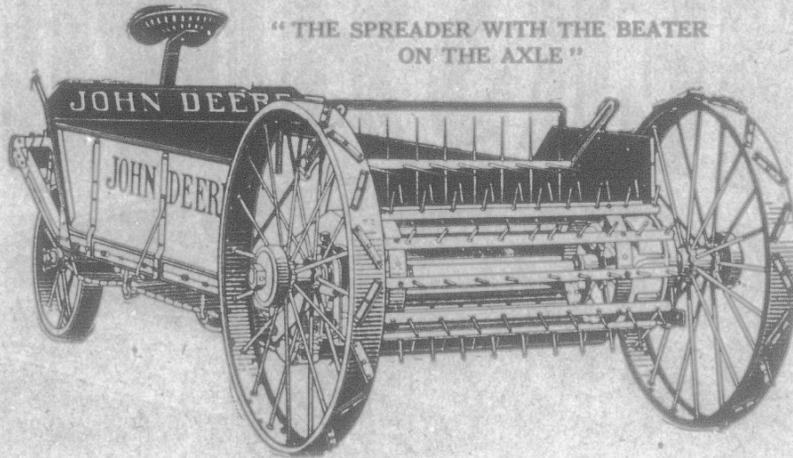
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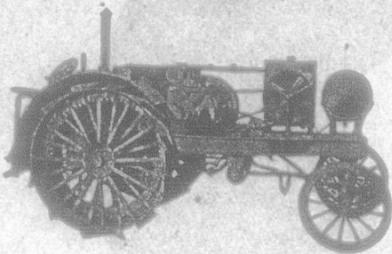
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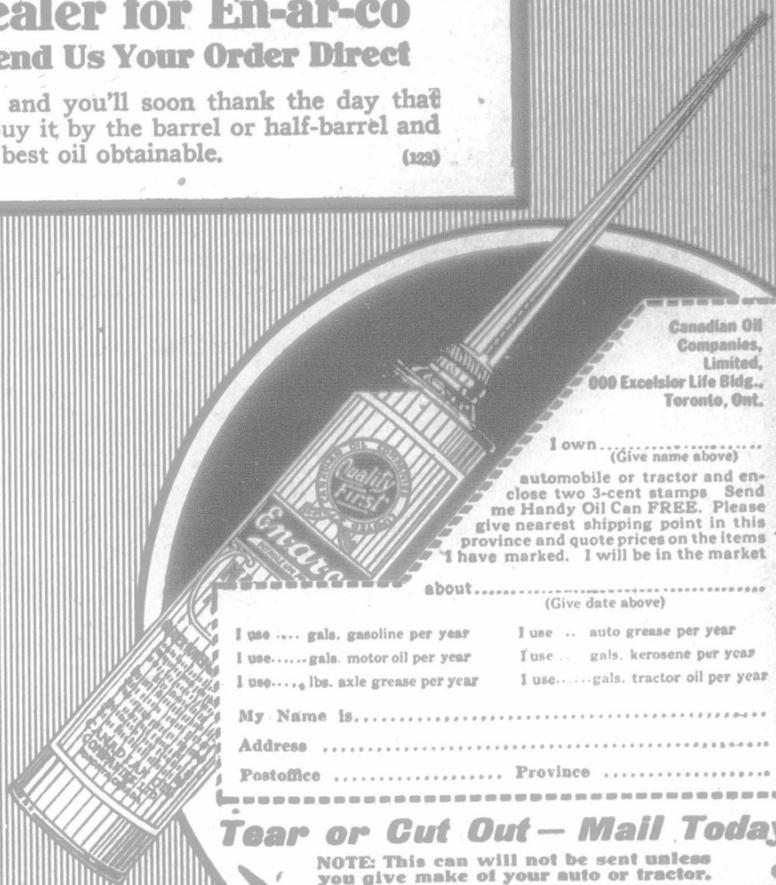
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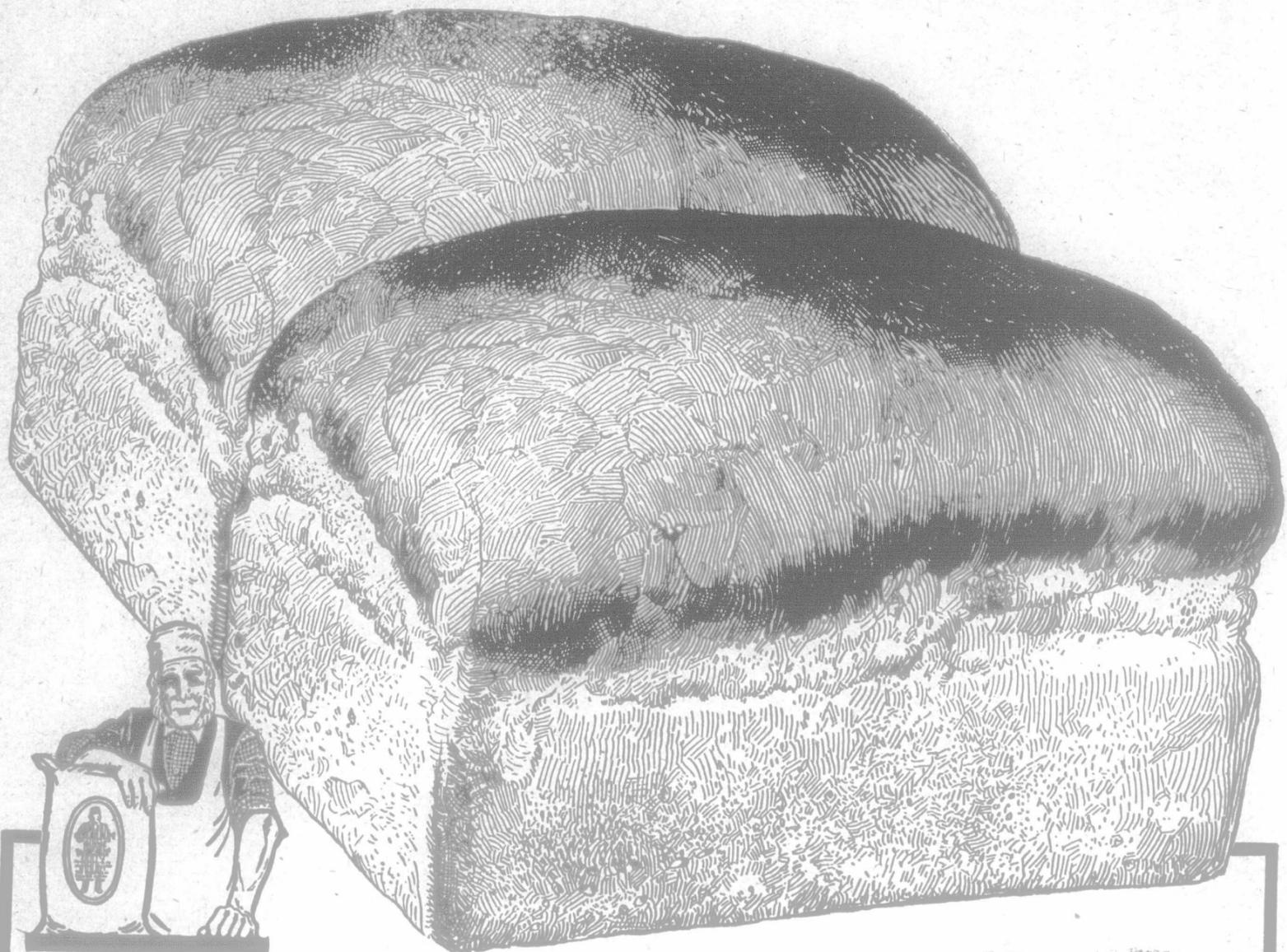
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The Farmer's Advocate and Home Magazine

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LIV.

LONDON, ONTARIO, JANUARY 9, 1919.

1372

EDITORIAL.

Store ice early and store plenty.

New year honors this year were fortunately bestowed on those whose rights to them few will dispute.

We have a new year now in which to build and progress, and a careful survey of the past will help to guide us in the future.

Lloyd-George might be able to lick Germany and score a remarkable triumph in the British elections, but Ireland is another question.

The result of the British elections is construed to mean a blow to Bolshevism and any semblance of such in this country should be stamped out as one would a fire.

Don't miss the convention which has to do with your particular line of farming. It does one good to mix with others in the same occupation and exchange ideas with them.

The list of dates for the Breeders' Meetings is published in this issue. Important subjects will be up for discussion, and a breeder of pure-bred stock should not fail to attend.

The cost of production should be determined on farms and in communities. Such information will be of immense value when the producer's rights, in regard to prices, are being fought for.

The proposed increase in express rates, if authorized, will strike production a heavy blow, and should not be allowed until after the most thorough and complete investigation proves them warranted.

Build up—don't tear down. Make use of the good which already exists and discard the bad. Progress and development have been slow enough, and we cannot afford to ignore the foundations already laid if they are safe upon which to build.

Now that the British Elections are over, the Kaiser's case should be taken up and definitely settled. Everyone is pretty well agreed on what should be done with him, but it must be carried out constitutionally, and that is where the trouble hinges.

Junior Farmers' organizations have existed in name only for the last year or two, owing to severe disorganization due to the war. Steps should be at once taken to revive interest in these organizations and utilize them to the fullest extent for the improvement of agriculture.

The county agricultural representatives in Ontario could well pay more attention to live stock at this time and have the whole subject thrashed out at club meetings and special gatherings. Instances have already come to our attention where the Representatives are arranging for such meetings with the object of improving quality and standardizing type.

There is an encouraging amount of interest displayed in rural districts regarding parliamentary representation. For half a century "The Farmer's Advocate" has exhorted rural ridings to select a candidate from amongst themselves and elect him as their representative. Happily the wisdom and justice of this practice are being recognized, and we can at last look forward to an adoption of this principle.

The Proposed Increase in Express Rates.

Application has been made to the Board of Railway Commissioners for Canada, on behalf of the Express Companies for a rate increase "sufficient to enable the Companies to conduct their business at a reasonable ratio of profit." It is claimed that for some time past the Express Companies operating in Canada have not earned their operating expenses and that they now face further increases in operating expenses. This application will be heard at Toronto on January 13 and at Montreal on January 16, where representatives from bodies not favoring the increase, because of injury to their business will also be heard in opposition.

Agriculture should be well represented at these sittings of the Board of Railway Commissioners. Agriculture is represented on the Board, and it will be unfortunate if this Commissioner should have to allow a ruling to be made, unfavorable to agriculture, for lack of protest from those directly concerned. Fortunately this matter has already been taken up in several quarters and resolutions from the Canadian Creamery Association and from the United Farmers of Ontario have already been passed, while active steps have already been taken to protest on behalf of the dairy and fruit industries. Possibly these two branches of the industry would be as adversely affected as any by an increase which ranges all the way from 28 per cent. on short hauls to 100 per cent. on long hauls. The express business in both the shipping of milk and cream and in fruit is immense. In the former case milk and cream is shipped in to the creameries and city milk distributors in very large quantities, and every increase in transportation charges works back inevitably to the producer. Producers already are receiving too little for their product, and any further reduction in reward for labor and investment would be disastrous. The fruit industry would be no less affected since, with truck crops and small fruits, a very large express business has been developed, which is practically the backbone of this branch of fruit shipping. Express shipment of tender fruits and truck crops provides the only practicable method as yet devised of getting small shipments to the consumer with the least delay, and with the minimum amount of deterioration in quality. We sincerely hope that the agricultural interests affected will make due representation of their case, and that the Board of Railway Commissioners will be able to find the request of the Express Tariff Association unwarranted.

Prospects for Permanent Peace.

It is somewhat generally thought that the proposed League of Nations, if brought into existence, would settle the matter of armament and the people of this earth could enjoy an unprecedented immunity from wars, by having international disputes settled by arbitration. Premier Clemenceau of France has expressed approval of Britain's freedom-of-the-seas program and the maintenance of her fleet. President Wilson, we are also told, agreed with Clemenceau in assenting to the proposal, but at the same time it appears that Secretary of the Navy Daniels, of the United States, was working on his \$600,000,000 three-year program, which he introduced to the House Naval Committee on December 30. This, in brief, suggested a navy second to none in the world, so the United States could contribute as large a unit to the proposed police force, if the League of Nations came into existence, as any other nation, and that the pledge to support small nations unable to protect themselves might be carried out. These are worthy objects, and no one can deny the neighboring Republic the right to construct and maintain as large a navy as is deemed necessary. However, if Mr. Daniels was reported correctly some of his remarks were not in keeping with the spirit of the times, particularly when he said: "Unless we have a

navy which can lick any other navy in the world, we might as well have none." This unfortunate observation is hard to reconcile with the actions and utterances of the President, who, we believe, voices the sentiments of the American people. France, Great Britain with her Overseas Dominions, and the United States are now linked together in bonds of friendship which the free peoples of those democratic countries will desire to have more closely cemented as years pass, and as the "new-world idea," which has made Canada and the United States good neighbors for more than a century, gains a foothold in the Old World.

Premier Clemenceau, with his eye yet on Germany, and wisely so, still has more faith in the "Balance of Power" than the League of Nations, and one who hopes for an effective league of all powers with confidence in each other cannot derive any great amount of encouragement from the news which has been lately received. It is to be hoped that something really promising will be determined upon at the Peace Conference, so that nations in the end will not have to fall back upon Cromwell's injunction to "Trust in the Lord but keep your powder dry."

The Wheat Situation.

The guarantees made by various countries in regard to wheat prices now constitute a problem that will lead to interesting circumstances in the coming months. Australia now has accumulation amounting to around 200,000,000 bushels, and the Argentine has a similar supply. The prices paid by the Imperial Government for portions of this are translated by W. Sanford Evans in the Ottawa Journal to mean around \$1.60 per bushel at a north Atlantic sea port. In Canada the guaranteed and fixed price is good until August 31, 1919, but in the United States the guarantee extends up to June 1, 1920, thus covering next season's crop. In both cases the fixed price ensures the producers in the neighborhood of \$2.00 to \$2.15 per bushel. Farmers in England have been guaranteed a minimum price of \$1.59 per bushel during 1918 and 1919 for home-grown wheat, and during 1920, 1921 and 1922 a minimum price of \$1.30 per bushel. There still remains in Australia a large quantity of wheat purchased by the British Government in 1916 at \$1.19 per bushel, and Australia has offered an additional 37,300,000 bushels at the same figure. Exportable surpluses in Canada, United States, Argentina and Australia are large, and the United States, on account of her increased plantings, might possibly have over 400 million bushels out of next year's crop that she will not require at home. No one can prophesy what will happen, but the problem will surely cause Governments considerably anxiety so long as the guaranteed prices remain in force.

A joint committee, made up of representatives from the U. S. Department of Agriculture and the Food Administration recently recommended to Congress that the time even be extended beyond June 1, 1920, in order to handle in full the wheat produced in 1919. In submitting the Memorandum, Secretary of Agriculture Houston said: "The Government has made a guarantee, and it goes without saying that it must be made effective." The Memorandum, further says: "It will be impossible to carry out the guarantee as it is intended by June 1, 1920, and if producers cannot sell their wheat to the United States before that date and are left with wheat on hand, it will be felt that the obligation of the United States has not been carried out in good faith." Evidently the price of wheat to the producer in 1920 will depend largely on where it is grown, but its value on the markets of the world will be a different matter. Full consideration should be given to the subject by the Governments interested, and producers should be taken into their confidence and made acquainted with the probable outcome. This is of vital importance in many large sections in Canada where plans for the future must soon be made.

The Farmer's Advocate and Home Magazine.

THE LEADING AGRICULTURAL JOURNAL IN THE
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JOHN WELD, Manager.

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THE WILLIAM WELD COMPANY (Limited),
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National Dairy Council.

The report of the First Dominion Dairy Conference, which appeared in our issue of December 5, reviewed the first definite steps taken toward the formation of a National Dairy Council for Canada. Provisionally, the organization of the Council is already an accomplished fact, with a President from Ontario, a Vice-President from Manitoba, an Eastern Executive of five men, and a Western Executive of four men and an additional twenty-five members representing every branch of the dairy industry, including milk distributors and manufacturers of butter, cheese, ice cream and condensed milks. It still remains for the eighteen organizations from which these members are drawn, to officially provide for their representation on the Council and for the Council to provide itself with a Constitution and By-laws as well as to arrange the matter of finances. With regard to the latter matter we consider it very regrettable that, to bring all the provinces into line, it should have been found necessary to ask the Dominion Government for a grant of \$5,000. Very happily, the majority of those directly concerned seem to be strongly against Government support and in favor of strict independence, certainly the most progressive attitude. We hope all such requests will cease with the initial one. A policy of continued assistance to agricultural organization is quite contrary to growing public opinion, especially in Ontario and the Western provinces.

The National Dairy Council has a great work before it. Whether or not the present basis of organization will be found workable for long, remains for the future to determine. Certainly, the present representation from each province and branch of the industry seems fair now, although yielding a Council which may prove too large. Already, problems have presented themselves and others are looming upon the horizon, which will require the full force and the best intelligence of the dairy industry. Not the least of the opportunities for effective action lies in the direction of greater publicity in regard to the best value of dairy products, and equally important, although of a different nature, is the necessity for a thorough study of dairy economics.

Success to the Canadian Dairy Industry, and may the various dairy organizations find full support in their new official mouthpiece in *The Farmer's Advocate*, the National Dairy Council.

Problems at the Peace Conference.

BY ALLAN MCDIARMID.

If circumstances permit the carrying out of the world's program, as it has been outlined for the next six months or so, it will do more in connection with the welfare of the human race than any similar period of time that has elapsed since the very beginning of things, insofar as this particular world is concerned, at least. If the different nations of the earth are to have the opportunity of progressing steadily towards the possibility that awaits each of them there are hundreds of problems, each of first-class importance, that will have to be solved within the next half-year by the men who take part in the Peace Conference, soon to meet in Europe. Some of these problems are apparent already, others will arise in the course of the deliberations of the Conference. For instance, one of the things that seems to be bothering a good many people already, is how we are going to make Germany pay the total cost of the war, while at the same time compelling her to hand over to the Allies the greater part of her transportation facilities, which include ships, locomotives and freight cars, and also bringing into operation against her the boycott on all goods that she may manufacture in the course of the next five, ten or more years. How Germany is to pay an indemnity of billions of dollars, to say nothing of her own war debts, if we refuse to do business with her, is certainly some problem. It will be the old puzzle of how to "have our cake and eat it too," over again.

But the greatest task of all that lies ahead of our Peace delegates is the bringing into existence of the "League of Nations," which so many are looking and hoping for at the present time, with the conviction that through it and by it alone can war be prevented in the future.

Never having had a league of all the world-nations on this earth, it is impossible to say how effective it would be in fulfilling the object of its creation. It is pretty hard to see how it could be effective. In case a certain nation in the League considered herself unfairly treated and rebelled, using the limited means at her command to enforce her claims, what would the result be? It would simply mean that the other nations would become involved in a war with her at once. This war might be of short duration, but if, on the other hand, the rebelling nation induced some one of the other countries to become her ally, the said war might be indefinitely prolonged. And there we would be, back where we were before a "League of Nations" was even thought of.

It would seem as if there was just one way to bring war, among the various people of the earth, to an end; and that is to remove the necessity for it.

A good many people doubt the fact that it is, ever necessary, but it is fairly certain that these people are mistaken. Time and again, in the past, war has been necessary that right might triumph. And many a decaying nation has had its vitality renewed and a great future opened up before it through having war forced upon it and having to fight for its life.

War has had its part to play in bringing the world as far along as it is at the present time, we will have to admit; whatever may be said for it as a factor in the more advanced civilization of the future.

As we said, it will depend on to what extent we remove the necessity for it. And while the spirit of selfishness exists in the world to the extent that it seems to be at the present time, there isn't much use holding out the hope that we will escape its natural consequences. The law that makes suffering follow sin is old enough for us to be all pretty well acquainted with it by this time. So we needn't think that any man-made law of ours can cut in ahead of old Mother Nature and help us to escape the penalty of our folly and perversity. If it could, progress would come to an end and man would gradually return to the state of degradation from which he has, with so great an effort, arisen.

Looking at the situation as it appears at the present time, one is inclined to say that what the world most needs is missionaries. Not perhaps the kind of missionaries we are accustomed to send to uncivilized countries, but teachers and preachers who can and will educate our so-called democratic peoples up to a higher standard of morality and a better understanding of the duties and privileges of the world-citizen of to-day.

When man has been taught to take a real and kindly interest in his brother-man, in no matter what part of the world he may be living, and when he knows that it is only when humanity as a whole goes forward that it will reach its destiny, then he will be likely to act in accordance with that belief and create around himself the conditions that his new ideals suggest.

It is all a matter of education. When we are educated up to the point where we need war's discipline no longer then war will come to an end, naturally and as a matter of course. Reformation cannot be forced on either a man or a body of men. He or they have to be educated up to the point where they can see the folly of their present course of action and made to turn from it by force of their own free will and common sense. They will then change for permanent and real progress will have been made. It all boils down to the old saying that "you can't turn a man by Act of Parliament." It would be holding out of man a machine, and we need no more lessons on the foolishness of that course than our supposedly great nation has lately given us.

In all accounts to this, War has its place in a partially developed world and when man creates the conditions that are favorable to it he can't possibly prevent its appearance, any more than he could break another of Nature's laws by drinking some poisonous

things and not be made sick by it. The law of cause and effect is in just as good working order as ever it was. If we've seen the last of war it is because the heart of the world has been changed and not because our law-makers in Europe are drafting a new set of rules to keep out of mischief.

Nature's Diary.

A. B. KLUGH, M.A.

Peat. (Continued).

Primarily the organic materials from which peat originates are two—cellulose, the substance of which the cell-walls of plants are composed, and lignin or woody matter. These are often mixed with lesser quantities of other organic compounds which have been formed in the course of the activities of the plants. Of these compounds the cellulose is the least changed by decomposition.

During the process of decomposition, as it usually goes on in a peat-bog a part of the gaseous elements, oxygen and hydrogen, together with part of the carbon are liberated as methane or marsh-gas and carbon dioxide. These gases contain respectively more hydrogen and more oxygen than carbon, hence the more completely decomposed peats have a higher percentage of carbon than those less decomposed.

The quantity of ash which is left after combustion determines within certain limits the value of peat for commercial purposes, since the fuel value decreases with the increase in the ash content. This is due to the fact that the ash constituents replace a certain amount of combustible matter, that the ash uses up heat to raise and maintain its own temperature, and also uses up heat energy in bringing about chemical changes in the minerals which compose it. The maximum amount of ash considered allowable in fuel peat is 20 per cent. of the total dry weight of the peat. Irish authorities class peat with 5 or less per cent. as good, with from 5 to 10 per cent. as fair, and from 10 to 20 per cent. as bad, while the Swedish standards are as follows: Good 2 to 5 per cent.; fair, 5 to 8 per cent.; poor, 8 to 14 per cent. When peat is to be used for the generation of producer gas, to which we shall refer later on, a higher proportion of ash may be present than in the case of that which is to be used in the ordinary way as fuel.

Now that we have considered the manner of peat formation and its general characteristics, we are in a position to discuss its fuel value and methods of preparation for use as fuel.

The ideal fuel should maintain a steady and efficient fire, and be capable of easy control, with small attention and without developing smoke or offensive or injurious gases. It must not have too much ash, and must not produce clinkers and slag which will clog the fire and fuse to the grate-bars or fire-box, nor give off compounds which will corrode the boiler or other metal work. It must be cheap, efficient and transportable.

The maximum temperature developed by the combustion of perfectly dry peat of good quality is very high, being over 4,000 degrees F.

The lighter, more fibrous kinds of peat ignite when heated in the air at about 400 degrees F., and burn with a red, smoky flame. The burning is accompanied by a characteristic biting or acrid odor and a grayish or whitish smoke. Black and denser kinds of peat do not ignite as readily, and burn less rapidly. These characteristics of the different kinds of peat are so well recognized in Europe that the fibrous kind is cut for use as kindling, and the denser kinds for general use.

In comparing the efficiency of different fuels the figures are given in either calories or British thermal units. A British thermal unit, abbreviated to B. t. u., is the amount of heat required to raise one pound of water one degree F. The values of some common fuels are as follows:

One pound of wood yields 5,760 B. t. u.
One pound of lignite yields 7,069 B. t. u.
One pound of air-dried peat yields 7,615 B. t. u.
One pound of bituminous coal yields 11,000 B. t. u.
One pound of anthracite yields 12,523 B. t. u.

The figures given above are for average samples of these fuels, and there is naturally a wide variation in the calorific value of these fuels depending on their quality. Thus anthracite varies from 10,966 to 14,000 B. t. u. per pound, and bituminous from 10,706 to 13,365 B. t. u. per pound. The variations in peat are as follows:

Peat with 1% ash and free from water, 10,297 B. t. u.
Peat with 4% ash and 11% water, 9,117.
Peat with 1% ash and 15% water, 8,688.
Peat with 10% ash and 15% water, 8,045.
Peat with 1% ash and 25% water, 7,615.
Peat with 10% ash and 20% water, 7,508.
Peat with 20% ash and 20% water, 6,436.

The water content of air-dried peat will, as we have previously pointed out, vary in different parts of Canada and at different seasons, the usual content being from 20 to 25 per cent. The ash content will vary from 3 per cent. to 20 per cent. On the whole, peat as used will stand in calorific value to anthracite as 7.5 to 12.5 or approximately 7 to 12.

Now as to its other characteristics as a fuel in comparison with coal. Peat raises steam in a boiler in about one half the time taken by coal. It is free from cinders, clinkers, sparks, soot and smoke, and evolves no injurious gases in burning. Coal on the other hand yields a large amount of ash and soot which clog the flues, the fusible character of the ash makes slag and clinkers a constant annoyance and causes loss of heat, its gases corrode boilers, and its smoke is a source of annoyance and detrimental to health.

(To be continued.)

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THE HORSE.

Britain's Remount Service During Wartimes.

EDITOR "THE FARMER'S ADVOCATE":

By the courtesy of the Director-General of Remounts for the British army we are able to give some interesting facts and figures showing the growth, expansion and magnitude of the Remount Service during the War.

At the outbreak of War (August, 1914) the British Army possessed 19,000 horses.

The following table shows the totals, year by year, in all theatres of war—horses and mules:

	Aug., 1914	Aug., 1915	Aug., 1916	Aug., 1917	Aug., 1918
United Kingdom	25,000	234,161	146,752	137,595	91,289
France		232,635	409,730	449,880	391,458
Egypt		68,155	53,233	71,788	106,316
Salonika			58,988	81,200	41,618
Mesopotamia				64,657	80,947
East Africa	1,076	4,681	23,731	4,244	1,766
Italy					19,310

*Does not include many thousands of camels and oxen.

Does not include donkeys and oxen.

Total horses purchased in the United Kingdom since mobilization, 468,088.

Total Shipped from North America.

	Horses	Mules	Total
To the United Kingdom	411,473	205,231	616,704
To France and the Mediterranean direct.	7,691	64,224	71,915
	419,164	269,455	688,619

North America shipped a total of 411,473 horses and 205,231 mules to the United Kingdom, and 7,691 horses and 64,224 mules to France and the Mediterranean direct, making a grand total of 419,164 horses and 269,455 mules.

Out of the number shipped 6,962 horses and mules were lost through sickness and 6,667 were lost by enemy action, making a total loss in shipping of 13,629 or 1.97 per cent.

The average wastage per annum of army animals in the United Kingdom during the war has been 12 per cent. This compares extraordinarily well with 8.23 per cent. of sick, dead and casting for disease, and 6.57 casting for other causes, making a total of 14.80 per cent., which was the annual wastage under peace conditions just before the war.

Compare also with horses in civilian use. Three of our biggest railway companies show an average per annum of 10 per cent sick and 10 per cent resting. Three large business firms given an average of 20 per cent. sick and resting. The average wastage of commercial firms may be put at 20 per cent. per annum.

The highest total of animals in France with the British armies was reached in June, 1917—460,000. The loss from all causes that year was also the highest recorded, namely, 28 per cent., which was largely the result of the Somme offensive and a very trying cold spring.

In Eastern theatres losses have been far less than in France, due to less fierce and only intermittent fighting as well as to favorable climatic conditions. Here are some figures:

Italy less than 1 per cent. per month.

Salonika, 8 to 10 per cent. per annum.

Egypt, 10 per cent. to 14 per cent. per annum.

Mesopotamia, 8 to 10 per cent. (since the War Office took over the administration from the Indian Government.)

It is estimated that of our animals now in France, 27 per cent. are sound and under 8 years old, 44 per cent. between 9 and 12 years; and 19 per cent. are either over 12 or unsound.

A considerable number will be wanted for the army of occupation. They will come home eventually. At present plans have been made to repatriate and distribute for sale all over Great Britain a great many more. The Belgian Government is being provided with 50,000 animals to assist in re-construction. The devastated districts of France will, no doubt, take many more.

As regards sales at home in the immediate future: there are 25,000 good surplus horses which are being put on the market between now and the end of January. By that date we shall have others freed and sales all over Great Britain will be kept up as required by the public.

In the last 4 years we have taken from Great Britain 17 per cent. of its working horse population, and we are now to put that number back if required.

Only the best class of horses are to be brought back to the home, i. e., the pick of the horses which are sound and under 12 years of age.

The Horse Controller has given us coupons for issue when a horse is sold, which entitles him to the ration of 7 lbs. of concentrate, and it is understood that 7 lbs. will now be given for pleasure, (riding and carriage) horses. It is hoped, it is hoped, will shortly be increased to 10 lbs.

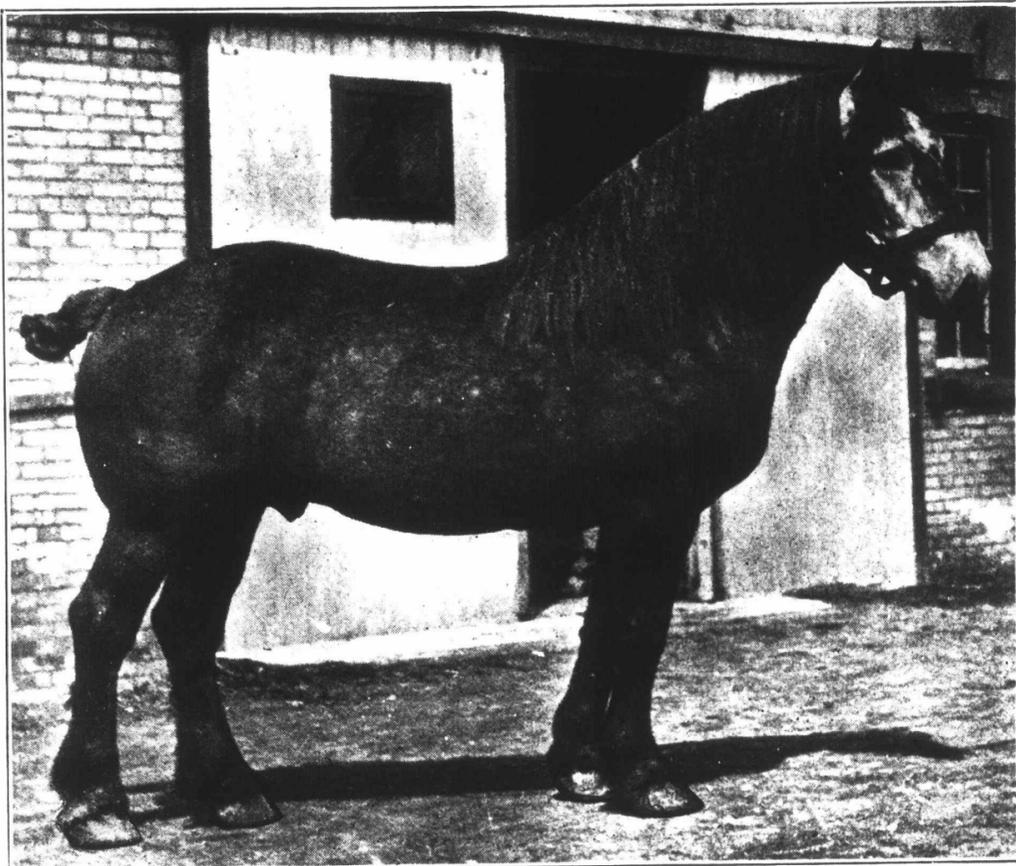
ALBION.

Handle the Colts During Winter

There are many colts that will by spring have reached the age at which they will be expected to work. The practice too often followed, of not taking any trouble to educate them or fit them for work until the season in which work must be done has arrived, and then, without any preparation, expecting them to give reasonable satisfaction, is not less irrational than harmful and expensive. Under such conditions the animal will fret, tire, lose flesh, get sore shoulders, etc., and become practically useless for a greater or less time. This is the normal result, and should be expected; and, while we occasionally notice the contrary result, we, upon consideration, wonder why it is so. The colt frets because he is at once required to go in harness without education. He tires easily because his muscular system is not accustomed to such exertion, hence the muscles are soft, lack tone, and cannot withstand the more or less severe exertion they are called upon to perform. His respiratory organs also are called upon to perform, without preparation, increased functions, and this tends to exhaustion. He loses flesh on account of want of muscular and respiratory tone, and from the fact that the flesh he carries lacks the solidity that would be present had he acquired it while performing light work. His shoulders become sore because they are unaccustomed to friction or pressure, and are at once subjected to both. He will sometimes suffer

in the same way, after which he should be driven on the road or in the fields without being hitched, until he becomes handy, will yield readily to the pressure from the lines on the bit, stand when told to back, go forward, etc., readily at the word of command. Now he should be hitched with a suitable mate, one that is prompt but steady, reliable and not irritable. The future usefulness and value of the animal depends largely upon his manners, and these depend largely upon his early education, notwithstanding the class to which he may belong. After he is safe to drive he should get a little regular exercise or light work daily, and the amount of work or exercise should be gradually increased. The quantity of grain given should be increased in proportion to the amount of work or exercise given. The idea that a horse should be fed a given amount of grain whether working or idle, is altogether wrong. The amount of bulky feed should be about the same in either case, as this is necessary to satisfy his hunger, but the grain ration should be in proportion to the amount and kind of labor performed. If reasonable care were exercised in this respect, there would be fewer troubles and diseases in horses.

By observing rules somewhat after the manner above described, the colt's muscular, respiratory and digestive systems will have gained the necessary tone, and his shoulders will have become so accustomed to the collar that he will be in condition to give good service in the field when the busy time arrives in the spring, and he should be able to do a full day's work with comparatively little danger of being laid off from any cause. The objection that "this all takes too much time" may be raised. We must admit that it "takes time," but it is



The Percheron Stallion, Nard.

First prize winner and champion Percheron stallion at the Western Fair, London, 1918, for T. J. Berry, Hensall, Ont.

from digestive trouble, as he is usually fed more grain than he received during the winter, and the change in quantity, and often in quality of feed is often sudden, hence the digestive organs, being suddenly called upon to perform increased functions, will, in many cases, be over-taxed, and the result is a more or less severe case of indigestion.

In most cases all these probable troubles could be avoided, and much more satisfactory service be had by the exercise of reasonable care on the part of the owner. Colts should be "educated" not "broken" to go in harness, and by gradually increasing the amount of exercise or light work, and also gradually increasing the grain ration during the winter, the animal becomes accustomed to perform labor, hence his muscular and respiratory systems gradually acquire strength and tone; his shoulders gradually become accustomed to friction and pressure, and when the time comes when he is expected to go to the field and perform the functions of a horse, he should be in a condition to do so with at least fair satisfaction.

The colt's education should be gradual. It is not as difficult and tedious to handle one of the heavier classes as one of the lighter and more spirited classes. At the same time, in order that it may be well done, the handler or trainer must not be in a hurry. The first point is to get him accustomed to the bit. This can be done by putting an ordinary bridle with a plain snaffle bit on him and leaving it on for a few hours daily until he ceases to worry and fight the bit. Then he should be made accustomed to wear harness in the

during a slack season, when on most farms, there is little to do but attend to the stock, and when there are boys it is an education to them as well as to the colts. And even when there is not sufficient help, such can usually be procured cheaply during the winter, and we think it would pay the owner to hire some careful man to handle his colts. The cost will be well repaid in the spring when his colts can do the work of a team; while, if put to work without preparation, this cannot be expected, but they will have to receive their preparation gradually when time is much more valuable, when there is much more danger of their becoming incapacitated from work altogether, and, if no extra horses are available, causing a suspension of labor for a variable time. Hence we consider that, even where a man has to be hired to handle the colts during the winter months, it will be money well and wisely spent.

WHTP.

The grade stallion in Ontario is now a thing of the past if the Stallion Enrolment Act is enforced, and we believe it will be. Never in the history of this country was it so necessary to breed good horses and no misfits. There will continue to be a demand for the right type of farm horse, but the market for throwouts and undesirable is going to dry up. Western Canada is disposing of a large number of horses which cannot be used in productive enterprises, and eastern breeders cannot expect to sell anything but a good horse there in the future. Let the good ones breed to a good horse.

LIVE STOCK.

The Live Stock Breeders' Meeting.

John W. Brant, Accountant National Live Stock Records, Ottawa, furnishes the following list of the Breeders' Meetings to be held in Toronto and Montreal during the first week in February, and we are pleased to publish them for the benefit and convenience of those interested.

Toronto Meetings, 1919.

MONDAY.

- Feb. 3, 2.30 p.m.—Canadian Thoroughbred Horse Society, Directors' Meeting.
 " 3, 2.00 " —Canadian Swine Breeders' Association, Directors' Meeting.
 " 3, 3.00 " —Canadian Thoroughbred Horse Society, Annual Meeting.
 " 3, 4.00 " —Canadian Pony Society, Directors' Meeting.
 " 3, 8.00 " —Dominion Shorthorn Breeders' Association, Directors' Meeting, Prince George Hotel.
 " 3, 8.00 " —Canadian Swine Breeders' Association, Annual Meeting.
 " 3, 8.00 " —Canadian Pony Society, Annual Meeting.

TUESDAY.

- Feb. 4, 9.00 a.m. Ontario Swine Breeders' Association, Directors' Meeting.
 " 4, 9.30 " —Canadian Trotting Association, Directors' Meeting.
 " 4, 10.00 " —Ontario Swine Breeders' Association, Annual Meeting.
 " 4, 10.00 " —Dominion Shorthorn Breeders' Association, Annual Meeting, Prince George Hotel.
 " 4, 11.00 " —Canadian Standard-Bred Horse Society, Directors' Meeting.
 " 4, 1.00 p.m. —Ontario Berkshire Club.
 " 4, 2.00 " —Ontario Yorkshire Club.
 " 4, 2.00 " —Canadian Trotting Association, Annual Meeting.
 " 4, 4.00 " —Canadian Sheep Breeders' Association, Directors' Meeting.
 " 4, 4.00 " —Canadian Jersey Cattle Club, Directors' Meeting.
 " 4, 8.00 " —Canadian Sheep Breeders' Association, Annual Meeting.
 " 4, 8.00 " —Canadian Standard-Bred Horse Society, Annual Meeting.

WEDNESDAY.

- Feb. 5, 10.00 a.m. —Ontario Sheep Breeders' Association, Directors' Meeting.
 " 5, 11.00 " —Canadian Jersey Cattle Club, Annual Meeting.
 " 5, 2.00 p.m. —Canadian Kennel Club, Directors' Meeting.
 " 5, 2.00 " —Clydesdale Horse Association of Canada, Directors' Meeting.
 " 5, 2.00 " —Ontario Cattle Breeders, Directors' Meeting.
 " 5, 2.30 " —Ontario Cattle Breeders, Annual Meeting.
 " 5, 4.00 " —Canadian Hackney Horse Society, Directors' Meeting.
 " 5, 8.00 " —Canadian Hackney Horse Society, Annual Meeting.
 " 5, 8.00 " —Canadian Kennel Club, Annual Meeting.
 " 5, 8.00 " —Ontario Sheep Breeders' Association, Annual Meeting.

THURSDAY.

- Feb. 6, 9.00 a.m. —Canadian Shire Horse Association, Directors' Meeting.
 " 6, 10.00 " —Canadian Shire Horse Association, Annual Meeting.
 " 6, 10.30 " —Clydesdale Horse Association of Canada, Annual Meeting.
 " 6, 2.00 p.m. —Canadian Hereford Association, Directors' Meeting.
 " 6, 3.00 " —Canadian Hereford Association, Annual Meeting.
 " 6, 7.30 " —Ontario Horse Breeders, Directors' Meeting.
 " 6, 8.00 " —Ontario Horse Breeders, Annual Meeting.

FRIDAY.

- Feb. 7, 10.00 a.m. —Eastern Canada Live Stock Union, Annual Meeting.

Montreal Meetings, 1919.

TUESDAY.

- Feb. 4, 2.00 p.m. —French Canadian Cattle Breeders' Association, Annual Meeting.
 " 4, 4.00 " —French Canadian Horse Breeders' Association, Annual Meeting.
 " 4, 7.00 " —Quebec Sheep Breeders' Association.
 " 4, 8.30 " —Quebec Swine Breeders' Association.

WEDNESDAY.

- Feb. 5, 10.00 a.m. —General Breeders' Association of the Province of Quebec.

TUESDAY.

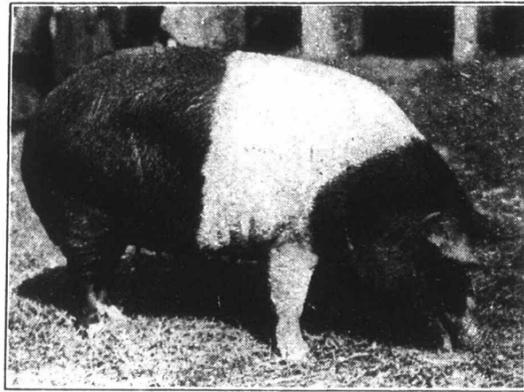
- Feb. 11, 10.00 a.m. —Canadian Ayrshire Breeders' Association, Directors' Meeting.

WEDNESDAY.

- Feb. 12, 10.00 a.m. —Canadian Ayrshire Breeders' Association, Annual Meeting.

Hampshire Swine.

The Hampshire, or Thin Rind breed of hog, has yet to gain universal popularity in Canada. It is a recent importation, however, and after a period of adaptability and selection, according to Canadian ideals, it may become better and more favorably known. Ostensibly the breed takes its name from Hampshire in England, but a different breed of swine has long existed there. About 1820 to 1825 a retired sea captain is said to have brought some of these pigs to Massachusetts, where they took his name for a time and later became known as Thin Rinds. In 1835 legend has it that Major Garnett introduced Thin Rinds to Kentucky, having purchased them from Eastern parties. Definite information regarding the ancestry of the Hampshire is lacking, but it is well known that Kentucky has been the seat of this breed for more than seventy-five years.



A Hampshire Sow.

The head of the Hampshire may be called a straight-faced type, of medium size, with light jowl. The ears incline slightly forward, but not so much as those of the Poland China. From a United States point of view, where the fat hog predominates, the back would be considered of only medium length and not thick. The shoulder would be looked upon as light, but with fair width. The hams would not come up to the United States standard exemplified in their lard hogs. From a Canadian point of view, which recognizes the bacon hog as a national type, the Hampshire would be considered neither one nor the other—too light for the fat hog and not of the proper conformation to produce the Wiltshire side. For the latter purpose it is too short in the side, too thick in the shoulder and back, and too heavy in the neck to meet Wiltshire-side requirements. However, authorities do admit that it is well suited for supplying bacon for home consumption.

One of the former secretaries of the Association fostering this breed, H. F. Work, describes the color as follows: "In color they are either listed or blacks, the most fashionable color consisting of black extremi-



Champion Short-wooled Pen at Guelph.

Winners of the Short-wooled cup for Chamber Bros., Woodstock, Ont.

ties with a white belt from four to twelve inches wide encircling the body and including the fore legs which should also be white." The term "listed" refers to the presence of the white belt, and the same writer states that some breeders try to run their herds all black. However, at fairs and exhibitions, both in Canada and the United States, we have never observed Hampshires on exhibition unless they were marked with the peculiar white band.

In regard to early maturity and as a grazer, the Hampshire gives splendid satisfaction. It is an active, hardy breed and ranks among the highest in point of fecundity. The sows usually farrow litters of ten to twelve pigs, after the first farrowing, and make splendid mothers and nurses. In quality of flesh the Hampshire also has a high reputation. It has made a good record in the dressed carcass competitions at the International Live Stock Exposition, Chicago. The flesh is fine-grained and carries a desirable proportion of lean to fat.

The Hampshire has not yet become widely distributed in Canada, and its success in this regard depends

on just how well it can meet bacon requirements and please the producers with returns for feed consumed.

Return of England's Shows.

EDITOR "THE FARMER'S ADVOCATE":

England's shows are coming back. Societies are fixing dates and we shall soon be "as you were." The Royal Agricultural Society of England has decided to hold its exhibition at Cardiff in South Wales, from June 24 to 28. Peterborough Agricultural Show will be held on July 8, 9 and 10, and the usual fox-hound show will be held in connection with it on the middle day.

The Shire Horse Society will hold its show at Newmarket on February 26 and 27. The National Show of Thoroughbreds (race horses), Hunters, Polo Ponies, etc., will be held at Newmarket on the first Tuesday and Wednesday in March, i. e., March 4 and 5, and the Hackney Show will be held on Friday, March 7.

Birmingham Spring Shorthorn Show will be held on February 18 and 19. Shorthorn shows will be held at Penrith on February 20 and 21 and May 9. At Crewe Shorthorn shows will be held on March 11 and June 6. At York similar shows will be held on February 27 and 28 and on May 1.

The Birmingham Aberdeen-Angus show will be held on January 29. There will be the usual round of shows of Shorthorns and Doddies in February at Perth, Aberdeen and Inverness.

By the way, the Royal Agricultural Society of England now boasts a membership of 10,954, as against 10,861 on the list at the end of 1917.

Dublin and Ulster Agricultural Societies have decided to hold their usual shows of cattle and horses.

ALBION.

Feed Management.

A common and often fatal ailment among calves is due to the curdled milk in the stomach becoming so hard and tough that it cannot pass into the bowels. Such a condition ultimately affects the brain, and the calf dies as if in a fit. A pinch of carbonate of soda stirred into the milk is a sure preventive of this trouble. An expert feeder of calves will never commence feeding until he has satisfied himself as to the state of their bowels, and if there be any tendency to sour he has every chance of checking it in the initial stage.

When cows are dry they should be well fed so as to be in good condition at the time of freshening. Such cows will milk much better than will those that are thin at the beginning of their milking period. It pays to feed quite liberally during the period when a cow is carrying and feeding the calf and preparing for a heavy strain on her system during the coming lactation period.

The highly nervous cow is often among the best producers, and requires a good milker. Such a milker is careful to observe the many little details that appeal to the cow and help to produce a proper nerve stimulation. He will insist on milking his regular number of cows himself instead of changing about with other milkers.

Moreover, they must be milked in the customary order and at the same time each day. He will also see by careful manipulation that the animal has been milked dry. Carelessness in this respect means considerable loss in succeeding milkings. The man who milks the cow has a greater influence on their capacity as money-makers than he is usually credited with.

The products of the cow that freshens in the autumn bring much more money through the winter when the cow is at her maximum production. The cow that freshens in the spring not only brings in the product at a time when it is naturally low in market value (one is speaking of days other than those of fixed prices), but makes the bulk of the labor come just at the

time when a great many other things are also demanding attention.

The bull calf should be separated from the heifers at about four months of age. His treatment and feeding should be identical with that of the heifer, except that to get maximum growth he should receive a little larger quantity of grain. Too much service before he is two years of age will do him permanent injury, which, of course, should be avoided. It is important that he is properly trained to halter, as this will make him much easier to handle when he is old. At six months of age a ring should be put through his nose.

A calf from a reacting cow should not be allowed to suckle from its mother, but should be placed on a healthy cow or reared by hand on pasteurized milk or that from tested cows. Breeders of beef cattle in U. S. A. frequently make a practice of transferring calves from their reacting dams to healthy nurse cows, rearing the calves from nurse cows on the milk of the reactors. These "grade" calves are sold for veal, and in but few cases give evidence of having the disease. Many sires which

have exerted a great influence in the improvement of their respective breeds have been born in quarantine."

Dairy cows require food for two purposes mainly, viz., maintenance and production. The demands of maintenance—which means self-preservation—must be and are met first. When these needs are met the surplus of feed goes to production. Consequently the more food which a cow eats beyond maintenance the greater should be her production until her capacity to make milk is reached. This point is readily arrived at by increasing the amount of feed in the ration every other day until one does not find a corresponding increase in milk yield; by varying the amount of food about this maximum one soon learns just the right amount of food for each cow, and this balance should be maintained. The food which goes for maintenance does not bring in any cash returns, the amount of food above maintenance which each cow consumes goes for production, and the returns therefrom must pay for the entire feed bill. Consequently it is the cow with a large capacity for milk production and a large capacity for feed that can show a profit. Seldom is the dainty, delicate feeder profitable.—Live Stock Journal, England.

Canada's Rank in Live Stock.

Recent figures published by the Canada Food Board and the Live Stock Branch of the Dominion Department of Agriculture throw an interesting light upon Canada's status as a live stock producing country. We give a number of these figures here for careful consideration by our readers, who, we hope will study them carefully with a view to determining how best and most profitably they can assist in building up the live stock in this country, and make our animal products in great demand in European markets. The figures concerning the United States are taken from the United States Census of 1910, and Canadian figures used in comparison of live stock with area and human population are taken from Canadian Census of 1911. Figures for Canadian exports are based on the returns of 1917, while European comparisons in the larger table are for 1916, and 1917, and the live-stock shortages given are the latest official estimates of the British Food Administration.

The Canada Food Board says: "By a careful study of the figures and comparisons the enormous possibility for development of the Canadian live-stock industry on a broader basis is apparent. With the reestablishment of normal commercial communications with Europe on the restoration of peace, a tremendous demand upon the live-stock industry of this country will have to be anticipated and prepared for. Increased production of live stock is of vital importance to Canada and her future, and is the most valuable reconstruction work that can be done." The accompanying tables show Canada's rank as a live-stock producing country, and the surprising extent to which cattle and hogs have decreased in seven of the European countries. Figures from the Department of Agriculture at Ottawa show that, altogether, France is short nearly 8,000,000 head of live stock; that Italy has had to sell her breeding stock; that Germany has suffered a decrease of 22,000,000 head of cattle and hogs, in addition to sweeping Belgium

European Decrease of Cattle and Hogs Since 1914.

Country	Head of cattle	Head of hogs
France	2,366,000	2,815,000
Italy	996,000	354,000
Denmark	345,000	1,837,000
Sweden	599,000	353,000
Germany	2,200,000	19,360,000
Austria-Hungary	Considerable	Considerable
Holland	162,000

Canada's Rank as a Live-Stock Producer.

Country	Rank in Animals per Hundred Acres in Farms.			Number Animals per Hundred Acres in Farms.		
	Cattle	Sheep	Hogs	Cattle	Sheep	Hogs
Holland	1	6	2	29	12	19
Denmark	2	9	1	25	3	22
Germany	3	8	3	16	4	14
Great Britain	4	2	7	16	52	5
France	5	5	6	12	13	6
Italy	6	3	8	10	21	4
Australia	7	1	—	8	58	—
United States	8	7	4	8	6	8
Argentina	—	4	—	—	15	—
Ireland	—	—	5	—	—	7
Canada	9	10	9	6	2	3

bare; that Ireland now supplies about 4,000 hogs a week only, instead of 18,000 as formerly; and that Britain's domestic supply of hogs is only seventy-five per cent. of normal. What the Canada Food Board describes as Canada's live-stock opportunity is shown by British imports of 1,077,154,000 lbs. of beef; 1,261,082,032 lbs. of hog products, as compared with an export from Canada to Britain of 29,580,000 lbs. of beef and 130,304,900 lbs. of hog products. With regard to sheep, "It has been estimated that before the world's supply of wool can become normal it will take six years." The prices of raw fleece wool in Canada are given as follows: 1912, 14 cents per pound; 1913, 17 cents; 1914, 20 cents;

Province	Sq. miles	Population per sq. mile	Cattle		Sheep		Hogs	
			No. head	Per square mile	No. head	Per square mile	No. head	Per square mile
British Columbia	355,855	1.1	139,184	.4	39,272	.1	33,604	.1
Albera	255,285	1.5	739,725	2.9	133,592	.5	237,511	1.0
Saskatchewan	251,700	1.9	633,638	2.5	114,216	.4	286,295	1.1
Manitoba	251,822	1.8	435,568	1.7	37,322	.2	188,416	.7
Ontario	407,262	6.1	2,501,536	6.1	742,188	1.8	1,887,451	4.6
Quebec	706,834	2.8	1,453,269	2.1	637,088	.9	794,351	1.1
New Brunswick	27,985	12.5	222,228	8.0	158,316	5.7	87,393	3.1
Nova Scotia	21,428	22.9	287,492	13.4	221,074	10.3	63,380	3.0
Prince Edward Island	2,184	44.9	113,443	52.	91,232	41.8	56,377	26.
	2,280,365	6,526,113	2.9	2,174,300	.9	3,634,778	1.6
Fifteen most important States in U. S.			39,900,000	33.55	39,200,000	26.02	42,900,000	39.84

1915, 27 cents; 1916, 32 cents; 1917, 60 cents; 1918, 68 cents.

The above information, together with the accompanying tables, is, we think, worth careful study and analysis.

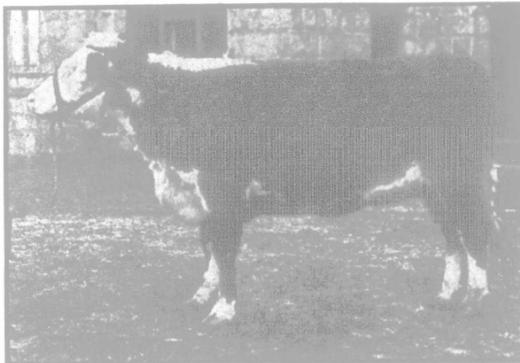
Common Parasites of Swine.

Swine are subject to several parasites external and internal. Of the first class the most troublesome is the ordinary hog-louse. These insects are responsible for much unthriftiness and poor gains; are an advertisement of the unobservant eye or carelessness of the feeder, and are intolerable in that unless the infestation is of long standing, they are fairly easy of eradication.

METHODS OF ERADICATION: 1.—Pigs may be dipped or sprayed with any good creolin or coal-tar disinfectant, made up as per directions accompanying the preparation.

2.—Coal oil or kerosene is used by some. Though effective it has a blistering action and should be avoided.

3.—Fuel oil is highly recommended. Experiments with it at Ottawa proved it efficient, but slightly irritant and leaving the hair of the pigs in a dirty, discolored condition.



Graceful Lady.

First prize yearling Hereford heifer at the Guelph Winter Fair for O'Neil Bros., Denfield.

4. Crude castor oil is non-irritant, soothing, and quite destructive to lice. Where procurable it forms possibly the best application for this purpose. At present, the price of castor oil is too high to permit of its use for such purposes.

5.—Paraffin oil (low grade) as now used in the herd of swine at the Central Experimental Farm, has proven non-irritant to the skin and quite effective as an insecticide. It is cheap, easily procurable and colorless.

6.—Apply disinfectant washes (creolin, etc.) with a brush, broom, spray-pump, or in the case of the large herd, by the dipping method. Apply oils with a cloth or more conveniently still by using a large oil can with a handle and long spout. File a short section from off the end of the spout to increase the amount delivered. Apply a stream of oil over the neck, shoulders and along the back. The heat of the body will cause the

application to spread over the body. A large number of hogs can be treated conveniently and quickly by such means.

7.—Repeat the application after ten days to destroy the lice or nits.

8.—If pigs are seen to be badly infested, a thorough clean-up of the premises would be indicated, using a strong creolin spray over all.

INTESTINAL PARASITES.—Of intestinal parasites the round worm is much the more common. In most cases examination of the smaller intestine of slaughtered pigs will reveal the presence of a few large white worms. In small numbers they appear to cause little inconvenience to the animal; a considerable infestation will cause a marked falling off in general condition. Young pigs so affected, are thin, stunted and lacking in vigor and thrift. Severe infestation will frequently cause intestinal inflammation or stoppage, resulting in death.

Where pigs are kept reasonably clean, and supplied with fresh water, the danger of infestation is small. Filthy surroundings together with stagnant or foul water usually predispose to such parasitic infestation. Prevent by cleanly methods and the use of any good mineral corrective mixture. There are a number of these on the market. A good home-made substitute is a mixture of charcoal, woodashes and salt; or of sulphur, salt and iron sulphate mixed in equal parts,—take one part with 8 parts charcoal and 8 parts ashes, mix well and allow the animals free access to it. Where pigs are infested, turpentine is the best remedy. Give 1 teaspoonful to every 100 pounds weight, after fasting the animal for twelve hours. This may be mixed in the feed and given for three successive days. Follow this with a good purging of Epsom salts.—Experimental Farms Note.

Care of Sows and Pigs.

EDITOR "THE FARMER'S ADVOCATE":

I find it pays to keep pigs clean with plenty of straw for bedding, and to keep them warm in cold weather if I want them to do their best. The pen I use is frame, west side double-boarded with tar paper between, to keep the wind out. It has a pine plank floor. The sow farrows in the basement of barn in a box stall or shed. We do not bother much with her as she is very careful. Between litters she is allowed to run around the straw stack and out on a grass-lot where she gets plenty of exercise. She is fed some oat and barley chop to keep her in fair condition but not too fat. After farrowing for thirty or thirty-six hours she gets no feed, then I feed light for a few days increasing gradually. The feed is oat and barley chop with skim-milk. When the pigs are three weeks old I use a small trough just outside the mother's pen; they soon learn to drink warm separator milk and eat fine-ground oat chop. They are weaned at six or seven weeks of age. At this time they are examined for black teeth and if such be found they are nipped off with a small pair of pinchers, as they cut the tongue and sides of the mouth, then gradually the feed is increased to oat, barley and emmer chop, then at about four months the oats are reduced and more barley added. Sometimes I add corn or oil-cake meal the last month or six weeks.

Wentworth Co., Ont.

E. R. SMITH.

THE FARM.

Fair Play.

EDITOR "THE FARMER'S ADVOCATE":

Fowl-less dinner tables were in evidence in Sarnia on Christmas day, the outcome of strained relations between producer and consumer, following an act of the city council in appointing a price committee, re farm produce.

Farmers, feeling the injustice of it, have practically boycotted the market, turning elsewhere with their Christmas fowl where their trade has not been tampered with. "Why not the various merchants of other lines whose prices are exorbitant?" is one of the pertinent questions asked. Remarks heard on the market or street corners prove all too clearly that the breach—always but lightly bridged—between rural and city dwellers has been woefully widened.

Too often the consumers complaining know little or nothing of the cost of labor attendant upon farm production and view the farmer as a plutocrat. Seeing only the part that goes into the producer's pocket-



A Group of Baby Aberdeen-Angus.

book on the market, they ignore the sums invested and annually expended upon upkeep, in order that his goods may be presented at highwater mark.

Another class—and for these we blush—is comprised of those who have farmed—even as I have—when prices were low and disheartening, but who still succeeded in making good. All honor is due these who laboriously toiled through years of depression in market prices, but is it fair that they now look with envy upon their successors who to-day reap prices for which we longed? Instead of rejoicing that at last the farmer comes into his own and can set his own price, they grouch. Were they to-day in the farmer's shoes, how many of them would reject high prices? Why not "Live and let live," for, though the consumer pays high, are not his pay cheques correspondingly increased? Surely the farmer is not the only one seeking highest prices.

Lambton Co., Ont.

E. W.

The Proposed Provincial Highway.

EDITOR "THE FARMER'S ADVOCATE":

The questions asked by A. E. Aldred in your issue of December 26, concerning the Proposed Provincial Highway, are very timely, and if answered by a number of people who are not directly interested in such a highway they would likely be very acceptable to the different Governments that finally have to assume the responsibility if such a highway is constructed. We in the Western part of the Province of Ontario have heard considerable about this proposed highway, owing to the two factions at London and St. Thomas putting forth their arguments for their choice of routes, etc. Personally, I don't know whether the Government at Toronto has pledged itself to construct such a highway through the province, or whether this agitation is just a feeler, so I take this opportunity to write a few lines, assuming that suggestions or friendly advice is always acceptable to those who are the custodians of the revenues of the province, and responsible for the provincial indebtedness accrued during their term in office. I am an advocate of better roads, but if I was asked to

Let Us Hear From Farmer's Advocate Readers!

EDITOR "THE FARMER'S ADVOCATE":

In looking through a recent number of "The Farmer's Advocate" I was struck with the comparatively small number of letters from subscribers and readers of the paper. There are just as many things of interest happening now as ever there was at any time in our lives and as a rule what interests one man interests another, so why not give the rest of the family circle the benefit of our experiences? We like to hear of what happened to the other fellow so that we may compare his experience with our own. Preaching and theory don't count for much with the most of us, because it's so often impractical and don't get down to the details of our every-day lives. What we want to hear about are the things that don't have to be imagined. We can get that from the war-correspondents and college professors. Why don't some of the farmer subscribers of "The Farmer's Advocate" get busy now and tell us something to cheer us up these long winter evenings. If it's some bad scrape they got into at some time in their lives or a foolish deal they made, so much the better. We all like to hear anything that puts someone else in a worse light than ourselves. I know it's not kind but it's human nature. It makes us, personally, appear to better advantage.

So let's hear from the farmer readers. Particularly those who have never given us the benefit of their knowledge before. What difference if you're not "handy with the pen." The worse the better, so long as it comes from the heart.

And it will be like "Mercy," which Shakespeare says, "blesses him that gives and him that takes;" because no one gets more benefit from the telling of an experience than the person that does the telling. The teacher and the preacher generally get more out of the lesson or sermon than do those for whom it is intended. But, of course, they benefit as well and for this reason also every man should be willing to pass along a little of the life-experience that must have come his way.

Come on now, get out that pen there and tell us what you've been doing since we saw you last. You

bottom of the pile and it affords less high pitching of the cow manure as the barrow can be wheeled up on the stable manure according as the pile gets higher. I use cut straw such as buckwheat and fall wheat in bedding cows, horses and hogs, and I don't think I lose much through leaching. I find that if the pile ever does start to heat it also starts to leach. So I keep the horse manure for the base of the pile the whole winter through, then if the cow manure does leach any the horse manure is underneath to absorb all that does leach out. Since I have started on this plan I can grow corn from 9 to 12 feet tall and every thing else in proportion. This last summer and spring I drew out about 200 spreader loads and none of it was spoiled through excessive heating or leaching. It was just as good I believe as the day it was wheeled out on to the pile. I know that there is no way better than having the cattle run in large open sheds and left to tramp down the straw and dung all winter. In this way there is neither heating nor leaching, but this cannot always be done.

Manure will heat and spoil if too much straw is used for bedding so care should be taken to use enough and not too much. A few pails of water poured on a heating pile usually stops it much to the benefit of the manure. Manure is badly neglected by many farmers, but why should this be when it costs so little? It is the best fertilizer obtainable, and if looked after properly it will produce more of all kinds of crops and when the ground is seeded to hay its good effect is even more evident.

Lanark County, Ont.

J. E. M.

From the Farmer's Viewpoint.

EDITOR "THE FARMER'S ADVOCATE":

It was my good fortune to attend the meetings of the Maritime Conference of the Canadian Manufacturers' Association, held in Amherst on December 11; and I think it is a pity there were not more farmers in the audience, because the more these two great classes can be brought together in their big conventions the better they will understand one another, and the better the feeling there will be between them. The addresses delivered at these meetings were calculated to inspire faith in our country and optimism in the future; and I am writing this article in the hope of showing how some of these things appear from the farmers' standpoint, and perhaps helping to a better understanding of our position.

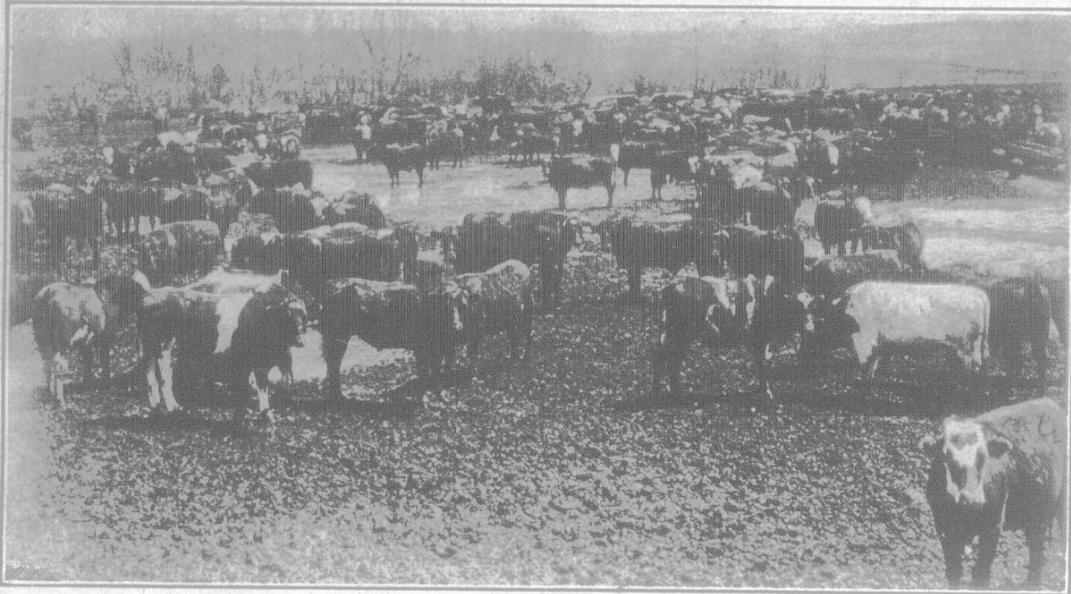
First, as to the farm labor question; there appears to be an impression that farmers want to see wages low. The workers in our factories and mines generally spend what they get, and the higher the wages the more money there is in circulation and the better the "times" for everybody, including the farmer. It must be remembered, however, that the prices of farm products is governed much less by the amount of money in circulation than by the law of supply and demand. The phase of the labor problem that troubles the farmer is to get enough of the right kind of labor. If a farmer can be assured of sufficient help to keep his farm up to the limit of profitable production he can pay wages that will enable the farm hand to have more money at the end of the year than the average workman in our factories; but he wants men of full average intelligence and enough experience to be able to adapt himself to the ever varying farm work without having to be told every move to make, and men who will take interest enough in the work of the farm to make it go. Of course, we must admit that the highly protected manufacturer can pay higher wages than the unprotected farmer, still the necessary and unnecessary expenses of living in town are so much more that the farm hand may easily have more money at the end of the year.

There is a good deal of adverse criticism in the daily papers these days of the farmer's attitude on the tariff question, and his request that the duty be taken off of farm machinery and some other articles. Let us just show how this question really affects the farmer. A man in ordinary business figures out the cost of an article, including freight, duty, etc., and then adds a necessary percentage and sells the article at that increased price. The manufacturer of farm machinery does not have to do that, he finds out what the American machine will cost in the United States or rather what it sells for, wholesale, then he knows that the American machine will have to pay a duty of 20 to 30 per cent. to get into Canada, and he adds that to the selling price in the United States, and sets his own price just enough below that to be sure of selling. This means that the farmer pays about 25 per cent. more for his machine than the actual cost of production. If this extra price went into the Dominion Treasury to help pay the interest on the war debt or the pensions to our returned soldiers, farmers would not object so much, though the papers do seem to delight in throwing slurs as to his loyalty. But the fact is, and the farmer knows it, that this extra price goes into the pocket of the manufacturers and helps to make multi-millionaires in their line of business. All this adds to the cost of production of farm products, and the farmer cannot fix his prices to suit because his prices are largely fixed by the demand, and when there is a bumper crop of any kind prices go down without regard to the cost of production.

Now, I am quite aware that I am not presenting any new phase of this subject and am not even claiming that there should be no Customs duties on these things, but I am merely trying to show how it affects the farming class, which, in Canada, is rather more than half of the population.

Perhaps in a week or so I may have something to say regarding the reasons for the present high prices of farm products and the profits in farming under present conditions.

C. H. BLACK.



Making Beef on a Large Scale.

record my vote for or against a Provincial Highway, I would have to vote against it at the present time, for the reason that I cannot see how it is going to benefit, to any material extent, the productiveness of this province and it seems that we must look to our soils' production to meet the war and other indebtedness. To bring the matter nearer home, or making a more local application of it, I would rather have the chief roads leading to our village, town or city markets macadamized, even if it cost several thousand per mile, than to build a concrete highway from one city to another at a cost of \$25,000 to \$35,000 per mile. While my system of roads would cover more miles perhaps than the (direct route) concrete road, I would feel that my system of roads was being used for both business and pleasure, while the Provincial Highway would be used largely for pleasure. It may be argued that automobile licenses will largely cover the cost of this highway, but the automobile licenses are needed to-day to pay for damage the automobiles are doing upon the side lines and concessions everywhere. If the proposed highway is built in competition with the railways, the railway companies will again demand another increase in freight, express and passenger rates, and they cannot be compelled to operate at a loss. In conclusion let me say that I think the Government will serve the country's interests best if they postpone the building of a concrete highway until more of our local highways are put into condition fit for general traffic, (which can be paid for largely by auto licenses) and until after the war reconstruction has been got off to a good start and business becomes normal. By that time the country may be prospering to such an extent that it wouldn't feel a few-million-dollar highway. We have four good railway lines from East to West—what we need are highways connecting the farms with these railways.

Middlesex Co., Ont.

R. H. HARDING.

say you can make more money with less work than you used to. Let the rest of us into the secret. Some of us have found war-times as hard to make a living in as the old "peace on earth" brand. Anyway and however, let's hear from you so that we'll know that you're not dead—or asleep. Might as well be the last as the first, you know, if you never wake up.

TOM WYLIE.

Caring for Farm Manure.

EDITOR "THE FARMER'S ADVOCATE":

There is still a great deal said about production and if we are going to produce more we will have to attend to our farms, and perhaps a few words regarding the storing and care of the stable manure would not be inopportune at the present time. I have been a great advocator of looking after that part of the winter's work and I notice there is hardly two men in the vicinity who handle their stable manure the same way. In this part of Ontario there are a great many broken farms with rocks projecting but in most cases covered with a thin layer of soil which cannot be plowed. This makes it bad for drawing and spreading manure in the winter when the snow falls, as there is no use of manuring rocks, so we have to take the next plan, that is piling the manure as it is made. I have about 60 head of cattle, 20 hogs, two teams of horses and 20 ewes. They are all on the job manufacturing fertilizer and I want to tell the way I have had the best success in storing. I have a covered shed with a concrete floor in which I store all the winter's manure, we clean out about every second day. The cow manure is piled up against the side of the wall first and as the pile gets higher the horse manure is piled against the cow manure, but not on top of it. The horse manure would cause the whole pile to heat if mixed, so I keep it in the

CANADA'S YOUNG FARMERS AND FUTURE LEADERS.

Back on the Job.

For some months previous to the close of 1918 the "Young Farmers" Department did not appear in the columns of "The Farmer's Advocate." This has occurred from no desire to minimize the importance of this department, but because reports had been reaching us for some months that organization work among young farmers was suffering severely from causes due to the war, particularly the Junior Farmers' Improvement Associations. Young men were leaving in large numbers for overseas and pre-war activities had generally given way to the stern necessity for production, so that little or no time was left for the work of these organizations.

Now, however, fighting has ceased and the war is virtually ended. The farm boys will be coming back and re-establishing themselves in civil life. They will, we expect, again want to take up former occupations and to partake in organization and improvement work as before. "The Farmer's Advocate," as always, is ready to assist and believes the time is ripe for another appearance of the Young Farmers' Department.

This will be a department especially for the young farmer; and much of its success will depend upon his interest in it. We will welcome, especially, articles relating experiences in connection with practical farm work and organization, as well as comments by other young farmers on those articles that appear. Publication will be given to all contributions that have such general interest as to warrant the necessary space. Your experiences in caring for and feeding crops and animals will be particularly appreciated, as well as your thoughts about organization work, and your ideas on farming in general. We hope you will make yourselves at home in this department and consider it as your own.

Beginning with this issue, we are running a series of six or seven short articles on "Public Speaking and Debating." This is an avenue of education admitting of great improvement in most rural districts. There is plenty of good talent, but it is undeveloped, and in getting G. H. Urwin to present the result of his experience and to advise with you as to how you can best become able to clearly and convincingly express your ideas on the platform, we feel that we have added a valuable element to the material of this department. The hints on the organization of debating societies should also prove helpful, as will, likewise, the list of subjects suggested for debate.

Public Speaking and Debating.

BY G. H. UNWIN, O.A.C., GUELPH.
Part I. How to Organize.

This series of articles is written for young farmers who wish, through the medium of private societies and debating clubs, to train themselves in public speaking. There are several reasons why such education is particularly desirable at the present time:

1. Farmers, as a class, are coming to the front and are playing a more conspicuous part in national life than they have done hitherto.
2. With the increasing scarcity of labor, farmers' children have few opportunities of going to school; therefore, any channels of self-culture, such as debating clubs, should be made use of.
3. These are stirring times. A knowledge of public affairs is not only desirable but absolutely necessary.
4. Public opinion is the strongest political force in the civilized world to-day. For this reason it is imperative that every class should contribute to public opinion, and should have capable representatives, taken from its own ranks.

The suggestions given in these pages are based on several years' experience in teaching public speaking at the Ontario Agricultural College. The students taking these classes are themselves farmers, so the difficulties which they have encountered are probably much the same as those which confront the members of rural societies. These observations are primarily for the use of inexperienced speakers, and consequently they must include much that is elementary.

It has been thought advisable to include some hints on organization and procedure. Full information on these subjects can be obtained from Bourinot's Procedure of Public Meetings, and also from the Extension Departments of some of the universities, for example, Wisconsin. However, these sources are not within the reach of all, so it may be well to give the most important points in the organization of a literary society.

Suppose a meeting has been called for this purpose. First of all one of the promoters should be moved into the chair and should at once take charge. His first duty will be to appoint a secretary for this particular meeting. Then he should outline the proposal and call upon anyone interested to address the meeting on the subject. On this point Bourinot says:

"It is essential that no discussion shall commence and be allowed to proceed until a member has proposed and another has seconded a motion as a basis of consideration and debate."

MOTION.—"That in the opinion of this meeting it is desirable to form a society in this town (or other place) to encourage public speaking and to promote an interest in current events."

After a free discussion this motion should be put by the chair. Let us suppose it carried. The next step should be to secure the names of all those who wish to

be members of such a society. Since the first meeting is always informal, the secretary might pass around a small writing pad or notebook on which those interested might sign their names, while the business of the meeting proceeds.

The next step, as outlined by Bourinot, is to form a select committee to draft a constitution and regulations. This committee reports at the next meeting and its suggestions are taken up one by one and adopted or amended as the members see fit. In rural sections, however, where people cannot assemble at short notice, it might be well to put through as much of the preliminary business as possible at the first meeting. For this reason I append the draft of a simple constitution, which may be read before the meeting and altered as circumstances require. In this case some member rises and puts the following motion:

"Mr. Chairman, I move that we constitute ourselves a committee of the whole to frame a constitution for this society."

Having been seconded, the motion is put to the meeting. Then the chairman might read through the following constitution, afterwards putting each clause separately to the vote.

Article I. Name.

SECTION 1. This association shall be called "The _____ Society of _____."

Article II. Officers.

- SECTION 2. The officers of this society shall be a President, Vice-President and Sec.-Treas.
- SECTION 3. The officers of this society shall be elected every three months. No person shall be eligible for the same office two successive terms.
- SECTION 4. If a vacancy occurs in any office the society shall immediately hold an election to fill such office.

Article III. Duties of Officers.

- SECTION 5. The duty of the President shall be to preside at all meetings of the society, and to see that the rules of the society are carried out.
- SECTION 6. The duty of the Vice-President shall be to perform all the duties of the President in the absence of that officer.
- SECTION 7. The duties of the Secretary-Treasurer shall be: To take minutes of all meetings of the society; to do all correspondence of the society not otherwise provided for; to take charge of all money belonging to his society, and to keep accurate account of all receipts and expenditures in a book kept for that purpose.

Article IV. Membership.

- SECTION 8. Any person resident in the township of _____ may become a member of this society on being proposed, seconded and duly elected by a majority of the votes cast.
- SECTION 9. Any person may become an honorary member of this society by election at any regular meeting, provided three votes do not appear against him. He shall be entitled to all the privileges of an active member, except voting and holding office.

Article V. Executive Committee.

- SECTION 10. At the first meeting of his term the President shall appoint two persons, who together with himself shall act as an Executive Committee. Their duty shall be to arrange programmes, select questions for debate, and report the same to the society at least two weeks before the date appointed. The committee shall have full power to place active members on the programme as it may see fit.

Article VI. Meetings.

- SECTION 11. The regular meetings shall be held at _____, on _____ of each week at _____ o'clock.

The draft given above can be altered or supplemented as the members of any society may find necessary. Such in brief is the constitution of a society or, in other words, a formal record of its guiding principles.

The regulations, or as they are sometimes called, the by-laws, take up questions of procedure at meetings, time allowed speakers, membership fees, etc. These, as well as the election of regular officers, might be left to the second meeting.

After the society has been organized, the question of programmes becomes the vital one. I should suggest that the society have three regular meetings in the month and one open meeting. The following procedure might be adopted:

REGULAR MEETINGS.—Reading of minutes—Transaction of business such as applications for membership, correspondence, reports of committees, etc. Impromptu debate, criticism, adjournment.

The impromptu debate might be opened by two members previously appointed to take up opposite sides of the question. After their speeches the meeting might be thrown open for general discussion. Any member wishing to speak rises in his place, and the Chairman pronouncing his name acknowledges his privilege. When two rise together the Chairman decides which has the prior claim to the floor. When the question has been discussed thoroughly the Chairman takes the sense of the meeting by show of hands and then calls upon the critic, whose function in a case like this would be first, to sum up the arguments on both sides and then to offer suggestions to the individual speakers.

These miniature parliaments have been tried with great success in our classes at Guelph. Beginners are

less troubled with nervousness when speaking from the benches to the chair than when they are on the platform. I have known men who through timidity could not bring themselves to speak from the platform, but who, being interested in some passing question, have arisen from their seat and spoken with ease and power. In this way confidence is built up by degrees. Also, if the subject is a familiar one these debates are generally interesting, sometimes indeed very lively. There is the stimulating clash of personalities in a free discussion, which is often smothered in the formality of a prepared debate.

These impromptu discussions might be varied with programmes composed of short addresses by members previously warned by the Executive Committee. The regular meetings, in short, would serve the purpose of preparing the speakers for more ambitious performances.

The Open Meeting.

Once a month a more elaborate programme might be given, including music, readings, and a prepared debate. To this guests might be invited and, if possible, judges and critics might be obtained from outside the society. In the Union Literary Society of this College the practice now in vogue is to appoint three judges, one of whom announces the decision and also gives the criticism. The rules for debate are approximately as follows:

Rules for Debate.

1. Each speaker is allowed twelve (12) minutes in which to present his arguments. The Chairman shall warn each speaker at the end of eleven minutes and again at the end of the time specified.
2. The leader of the affirmative is allowed three minutes for rebuttal, during which he shall introduce no new material.

AUTOMOBILES, FARM MOTORS AND FARM MACHINERY.

The Useful Pipe Wrench.

One of the handiest all-round wrenches for a farmer is the pipe wrench. He can repair pumps and do a great deal of repair work on the farm plumbing with it. It is particularly convenient in removing taps that have rusted tight on bolt threads. If the square shoulder of a wood bolt turns in the wood so that the whole bolt turns when the top is caught with a monkey wrench, the head of the bolt can be held securely with a pipe wrench and the reluctant tap removed. Or if the threads extend half an inch beyond the tap a good purchase can be made on these with a pipe wrench until the tap is loosened.

If the corners of a nut are worn so that a monkey wrench will not grip the nut, the pipe wrench will grip it securely. In automobile and tractor repair work a pipe wrench is practically indispensable. Its uses are many, and once a man owns one he will count it a fixture in his shop. Pipe wrenches are made as light as monkey wrenches and those having jaws that extend two inches will easily hold a rod as small as a quarter of an inch. It is not advisable to get one with too wide an extension or one too large unless there is special plumbing to be done. We find one with a jaw extension of about one and a half inches satisfactory about the farm.

Gasoline Engines.

EDITOR "THE FARMER'S ADVOCATE":

Kindly answer the following questions on gasoline engines:

1. Which would be the better to buy for farm work, a throttling governor or a hit-and-miss type of engine.
2. How much fuel should a six-horse-power engine use in ten hours at nearly full load, and which type would use the most?
3. Explain the Diesel type of oil engines. Are they made for farm work?
4. What would be the right width of belt for a six-horse-power engine? E. R.

Ans.—1. Either will give first-class results.
2. The general consumption of fuel is about a gallon a day per horse-power actually developed. If the engine were delivering say 5 h.-p. for 10 hours it would use approximately five gallons.

The hit-and-miss has a slightly purer mixture than the throttling type, because when it misses that power stroke is devoted to scavenging the cylinder. Consequently the hit-and-miss uses slightly less fuel than the throttle type—all other things being equal. This last condition is difficult to obtain. Any difference there may be is not great enough to be material. There is another phase of the question that should not be lost sight of at this time, viz., that the throttle type is the best for burning coal-oil.

3. The Diesel engine. When air is compressed it causes heat as everyone knows who has felt the pump barrel after pumping up a bicycle or automobile tire, consequently if the compression were made great enough it should heat the air hot enough to fire a charge of gasoline if mixed with the air. In the ordinary engine the compression runs from 65 to 85 lbs. per square inch, according to design, but Diesel designed his engine to have from 400 to 500 pounds per square inch. If the fuel were mixed with the air while this pressure is being developed it would ignite spontaneously long before these pressures were reached. Consequently the pure air is admitted to the cylinder and then at the proper

point of the stroke the fuel is forced in through a jet by a pump giving higher pressure than the compression of the cylinder. And the very instant it enters the cylinder it burns spontaneously. Thus it will be seen the engine has neither carbureter, batteries, spark-plug nor magneto. The drawback to the engine is that it is very difficult to start by hand anything over about 6 h.p., the reason for which is the high compression. In starting, the valve is held open by a finger and the engine spun faster and faster by hand until it has sufficient speed to throw it past the first compression stroke after the finger is removed. They will run on any kind of oil, e. g., lubricating oil, or even the crude oil as pumped from the ground. Some engines are being built now for farm work which have only about half as high a compression as the Diesel and yet fire spontaneously. They are called semi-Diesel.

4. Four-inch belt would be wide enough if extra heavy belting were used. W. H. D.

THE DAIRY.

Determining Cost of Milk Production.

Dairymen have yet to arrive at a satisfactory basis for determining the cost of milk production. As pointed out in these columns recently the problems of adjusting prices for farm produce is particularly complicated, especially if it be animal products that are under consideration. In addition to the multiple factors that arise to complicate cost accounting on the individual farm and make more difficult any standard calculations, there is the well-known fact that on no two farms are the same figures entirely applicable.

Milk production costs have been increasingly important during the past two years and, as a result, many methods have been proposed for arriving at fair prices to the producer. An additional quota of figures have also been presented to show how much feed and labor are required for the dairy herd during the year, and data has been gathered to show how much feed a single cow requires. All these figures, while valuable in a general way and well worth widespread publicity, are, nevertheless, only general and must not be taken as applying exactly to any other set of conditions than those from whence they were derived. At the same time such figures are of the greatest value in the abstract, as setting forth in actual figures, facts which were realized previously only in a general way.

It was, for instance, interesting to study the mass of informative data presented to visitors at the National Dairy Show this year by the various State Departments of Agriculture and Agricultural Colleges with reference to the cost of milk production. The United States Department of Agriculture, for example, exhibited a dairy cow and the actual quantities of different feeds she would consume in one year. The following table shows these quantities reduced to the basis of a thousand-pound cow in the State of Indiana:

Item	Summer	Winter	Total
Grain, (lbs.).....	660	1,337	1,997
Dry Roughage (lbs.).....	897	2,411	3,318
Silage (lbs.).....	2,060	5,188	7,248
Salt (lbs.).....	18	18	36
Bedding (lbs.).....	—	720	720
Pasture (\$)	10.36	—	10.36
Labor (hrs.).....	75.8	89.8	165.6
Overhead (\$)	13.78	13.20	26.98
Milk Produced (lbs.).....	3,390	3,525	6,915
Manure and Bedding Saved (tons).....	—	—	6.3
One calf.	—	—	—

It will be noticed that this Indiana cow ate practically 5 pounds of grain, 10 pounds of hay, 20 pounds of silage and 2 ounces of salt for every day in the year, besides requiring 4 pounds of bedding every day during the winter, eating 6 cents worth of pasture each day during summer, and costing her owner about 7 cents per day the year round for overhead expenses, and taking half an hour per day of someone's time. In return she gave 6,915 pounds of milk, 6.3 tons of manure and added a calf to the herd. Now, these figures are all very well for Indiana, but there are many farmers in Eastern Canada who would not feed 3,060 pounds of silage per cow during the summer, nor would they feed 660 pounds of grain. Nevertheless, they do show about how much feed a 7,000-pound cow requires in a year and of what it consists, so that they are valuable for that alone if for nothing else, since many men do not seem to realize the actual quantities of feed consumed by single animals, especially the inferior kind.

In arriving at a fair price for milk, an attempt has been made to establish a ratio between the price per hundred pounds and the cost of feed and labor. Standard calculations in the shape of formulae have, therefore, resulted, by which the cost of producing 100 pounds of milk is represented by quantities of each type of feed required and the number of hours of labor. In addition to these figures it is necessary to know only the market price of feeding stuffs and the amount of variation due to season.

One of the best known of these so-called "formulae" is that designed by Pearson, of the University of Illinois. In the first place, Pearson determined the relative grain costs under differing yields of milk and studied the records from 642 grade Holsteins. He found that where

the yield of milk was from 1,000 to 5,000 pounds yearly, the grain cost decreased with increased production. Where the yearly yield was from 5,000 to 8,500 pounds, grain costs were constant with increased production, while for a milk production over 8,500 pounds annually, any increased production was secured at a relatively higher cost for grain feeds.

From 18 farms also, near the city of Chicago, the individual cow costs were worked out with regard to feed and labor. The following table shows these costs for the year as well as for winter and summer separately, based on 100 pounds of milk:

Pearson Cow Costs.

Item	Summer	Winter	Yearly Average
Labor (hrs.).....	2.15	2.41	2.29
Grain (lbs.).....	17.6	43.9	32.4
Hay (lbs.).....	14.2	53.0	36.4
Dry Forage (lbs.).....	4.3	42.1	25.9
Silage (lbs.).....	11.5	183.2	154.0
Corrective Factor (%).....	61.9	86.3	77.8

The corrective factor mentioned in the above table represents the proportion of the total net cost which must be attributed to feed and labor. Pearson also worked out herd costs from the herds kept on these 18 farms, whereon 407 cows, 19 bulls and 234 young stock were kept and where the total milk production was 2,733,735 pounds of milk containing 94,870 pounds butter-fat. From these herds, therefore, the following herd costs were compiled upon the same basis exactly as for the cow costs:

Pearson Herd Costs.

Item	Summer	Winter	Yearly Average
Labor (hrs.).....	2.38	2.78	2.60
Grain (lbs.).....	32.8	53.9	40.7
Hay (lbs.).....	18.8	67.8	47.0
Dry Forage (lbs.).....	6.1	60.5	37.4
Silage (lbs.).....	148.1	233.1	197.3
Corrective Factor (%).....	81.1	106	97.9

From the figures already given and from data covering, all told, about 1,000 cows near Chicago, Pearson developed a formulae which is included among the four presented herewith. The basis is, of course, the net cost of producing 100 pounds of milk. Only feed and labor are included, but it is calculated that other charges such as horse labor, interest and depreciation on buildings and equipment, and miscellaneous expenses will about equal the returns from the herd rather than milk; these will include calves, manure, increase in stock and miscellaneous returns.

Pearson has since prepared a modified formula in which no count is taken of silage and roughage, the equivalent of these being represented by an additional labor charge. The so-called "Hoover" formula has also been advanced, data for it having been gathered from 490 farms in 6 states and a total of 9,761 cows. The "Warren" formula, too, has been widely acclaimed and as can readily be seen, closely approximates the Hoover formula in most respects. As noted some weeks ago this formula has the approval of the United States Food Administration, and has been adopted by the National Dairy Council. It must be remembered that where any of these formulae are used, some standard percentage of butter-fat must be taken as a basis, an allowance for each tenth of one per cent. variation in either direction being made. Warren's formula has since been reduced by the producers and distributors of New York district to 33.79 lbs. grain, 50.5 lbs. hay, 100.5 lbs. silage and 3.02 hours of labor, equivalent values having been found for dry forage other than hay and succulent feeds other than silage.

A Comparison of Formulae.

Item	Pearson	Modified Pearson	Hoover	Warren
Labor (hrs.).....	2.42	3.	9.88	3.02
Purchased Grains (lbs.).....	24.	24.	33.5	33.8
Home grown grains (lbs.).....	20.	20.	—	—
Hay (lbs.).....	50.	110.	45.3	43.3
Roughage (lbs.).....	39.	—	11.5	10.8
Silage (lbs.).....	188.	—	93.2	92.2
Other succulent feeds (lbs.).....	—	—	9.4	8.3
Per cent. total yearly net cost.	—	—	80.	79.7

But it is argued that it does not cost the same to produce milk in June as in December, and that this is true is shown by the following, which shows the approximate percentage deviation of Chicago milk prices by months, as compared with a yearly average of 100. This also serves to illustrate the difference between a fluctuating and a flat price for milk: January, 119.0; February, 114.3; March, 106.5; April, 94.2; May, 73.2; June, 70.6; July, 83.7; August, 94.2; September, 96.7; October, 109.2; November, 118.3; December, 120.3.

This scale of monthly variations differs slightly from what is known as "Warren's Scale"—the greatest difference being in the month of May.

Such formulae as the above, however, from the very fact that they are general in nature, must be subject to criticism. Perhaps the following, regarding the Pearson formula, is equally applicable to all and contains some degree of truth:

"One weakness of the Pearson formula arises out of the fact that the price of milk is the major factor in determining the prices of many of the articles of cow feed. The price of bran, prepared dairy feeds, or clover hay, are determined largely by the price of milk. For example, a high price of milk stimulates milk production, which stimulates the demand for feed, resulting in an increased feed price, which, according to the formula, provides for a still higher milk price. Thus started on its upward course, nothing would stop the upward trend of prices excepting the lack of buyers for the milk at the ever rising price. On the other hand, suppose the price ratio is narrow, resulting in a milk price too low for profit. How would this affect the producers? The farmers would lose money and would produce less milk. The demand for dairy feed would fall off and the price of feeds would fall. This, according to the Pearson formula, would call for a lowering of the price of milk which would further depress milk production and the price of feeds and, in turn, the price of milk, even though the demand for milk might justify a higher price. Thus it is that the Pearson formula possesses elements of danger and will in all probability fail to serve the purpose intended."

Whatever may be the fate accorded these formulae, the fact that the difficulties encountered have been given publicity, constitutes a step in advance and may lead government authorities and influential dairymen to persist in an effort to determine just methods of arriving at fair market values of dairy products.

Co-operative Dairy Company.

A number of our readers may be aware that a strong resolution was recently passed by the United Farmers of Ontario, favoring the formation of a Co-operative Dairy Company in Ontario, similar to the Saskatchewan Creameries Limited, in Saskatchewan. Representatives of the Dairymen's Associations of Eastern and Western Ontario, and of the United Farmers of Ontario recently waited on the Hon. T. A. Crerar, Minister of Agriculture for Canada, asking that his Department defray the expense of a delegation to Saskatchewan to investigate the organization of the company mentioned above. The idea was that such a delegation of dairymen would be able to determine the kind of company which would best suit the purpose of Ontario conditions. Mr. Crerar's consent to this request was obtained two weeks ago, and on Tuesday, December 31, Messrs. Jas. Donaldson, Atwood, President of the Western Ontario Dairymen's Association and a member of the Dairy Produce Commission; N. M. Empey, of Napanee, a director of the Eastern Ontario Dairymen's Association; and Jas. Anderson, Mountain View, Treasurer of the Eastern Ontario Dairymen's Association, and representing the United Farmers of Ontario, left for Saskatchewan as mentioned above. Quite probably all the members of this Commission will be back in Ontario in time to present a report of their findings at the convention of the Western Ontario Dairymen's Association in London. Those who are interested in the cheese industry in Ontario from Ottawa to Windsor will be interested in the success or failure of the proposed Co-operative Dairy Company.

Brockville Ayrshire Men Meet.

A short report has been received from Walter H. Smith, Secretary-Treasurer of the Brockville District Ayrshire Breeders' Club, of the fifth annual meeting, which was held in Victoria Hall, Brockville, on Thursday, December 19, 1918, at which the breeders of the district were well represented.

A. Henderson, of Athens, was elected President of the Club for 1919, and Walter H. Smith, Agricultural Representative for Leeds County, was elected Secretary-Treasurer. Prof. W. J. Bell, of the Kemptville Agricultural School, gave a most excellent address to the breeders, emphasizing the value of the co-operative spirit in breeding, the necessity of breeding for production as well as for type and individuality, the necessity of testing, and the value of consignment sales as a means of advertising the district. It was decided to endeavor to put on a consignment sale for the district early in 1919, as stock bred in this district has topped other consignment sales and won prizes in competition with the best Ayrshires of the country. It was thought proper to advertise the district by means of a consignment sale.

Menie Ayrshire Club Meets.

The Menie District Ayrshire Breeders' Club, one of the two pioneer breeders' clubs in Canada, and the first Ayrshire breeders' club, held their ninth annual meeting at the Windsor Hotel, Campbellford, on Thursday, December 19. The district covered by the Club, including the Counties of Hastings, Prince Edward, Durham, Northumberland and Peterboro was well represented in the attendance. The President, Alex. Hume, Campbellford, emphasized in his address the advisability of members entering their cows and heifers in the Record of Performance test. More than ever this test is helping to place increased values upon the individuals who qualify. The breeder who enters his females in the test is also benefitted in other ways. He usually feeds better, gives the animals better care

and, as the cow will almost always respond to this treatment by increased production, the breeder himself will become encouraged and enthused, taking greater pains and greater pride with his herd and the care of them. The Secretary-Treasurer's report proved the Club to be in a healthy condition financially. It was decided to hold the annual auction sale in Campbellford on April 1, 1919. The officers elected are as follows: Honorary President, Wm. Stewart, Campbellford; President, Alex. Hume, Campbellford; Vice-President, E. A. McCook, Campbellford; Secretary-Treasurer, W. E. Tummon, Crookston. Directors: Geo. A. Stokes, Tweed; H. K. Denyes, Belleville; W. J. Haggerty, Stirling; Jno. McCubbin, Warkworth; R. H. Little, W. S. Grills; John Locke; Jerry O'Connor; Campbellford, and W. J. Peebles, Havelock.

The first 1,000-pound Jersey has arrived. She is Sophie's Agness, and has just completed a record of 16,212 lbs. milk and 1,000.07 lbs. fat, with an average test of 6.17 per cent. During the year she consumed 1,095 pounds each of wheat bran and cornmeal, 1,825 pounds gluten feed, 1,460 pounds ground oats and 730 pounds of a commercial grain feed, in addition to alfalfa, clover and beets. It cost \$186 for the 6,205 lbs. grain she consumed and, valued at 50 cents per pound, the 1,000 lbs. butter-fat she produced was worth \$500. Her sire has 35 daughters in the Register of Merit, and her dam is a long-distance champion. Does breeding pay?

Canary Bell, a ten-year-old Kansas Ayrshire, recently completed her fifth and best record of 19,863 lbs. milk and 774.51 lbs. fat. This cow holds the highest record of any living cow in the state, and her new record shows the highest milk production recorded in the American Ayrshire Association's mature class in 1918. Her five records average 15,078 lbs. milk and 572.69 lbs. fat. One of her daughters has a record of 505.5 lbs. fat as a two-year-old.

In paying for milk by test, the per cent. fat plus two method is better for the man sending low-testing milk, but the per cent. fat method is more profitable for the man sending high-testing milk. It makes little difference to the man producing medium-testing milk which method is used.

There is no standard temperature for churning as all good butter-makers know. The most desirable temperature is that which will bring butter in nice, firm granules in from 20 to 30 minutes.

When collecting composite milk samples in herd testing it is better to use enamel paint to number the bottles. Paper labels wash off too easily.

Every time fresh cream is added to the cream can, the cream should be stirred thoroughly from the bottom of the can.

Not only should a separator be kept in a clean place, but its surroundings should also be clean.

Look for the leaks in your business.

POULTRY.

Improving Quality Through Co-Operation.

It is probably true that a greater amount of improvement has occurred through co-operation in the collection and sale of eggs than in almost any other branch of agriculture. While good egg circles and associations dealing in poultry products are still too few in number, and perhaps fewer than in some other lines in normal times, the fact that the hen and hen product are generally considered of minor importance on the average farm naturally led to conditions of marketing which admit of very great improvement. This is especially true when we consider that there is an enormous waste in eggs from spoiling, between the time the hen lays the egg and the time it reaches the consumer. A very great deal of this waste is attributable directly to the carelessness of the farmer and any effort on his part to improve quality through co-operative marketing must be productive of very marked and immediate results.

As in some other lines of agricultural co-operation, Denmark is still the classic example of successful co-operation in egg marketing. From 1895 to 1911-15 Danish farmers were able to restore a trade in eggs with Great Britain, previously lost because of poor methods, and, in addition, Denmark was able to increase this trade from 95 tons selling at a price of \$1.58 per great hundred eggs to 4,661 tons selling at an average of \$2.18 per great hundred. In addition, there is the rather singular fact that eggs were the only agricultural export from Denmark which did not fall in price during this period.

The object of a co-operative egg circle has been succinctly stated to be as follows: "to maintain the quality of eggs as they leave the farm and to place them in the hands of the consumer with the least possible delays and in good condition." In Prince Edward Island, Quebec and Ontario, the co-operative marketing of eggs has made most notable progress, the egg circle idea being most commonly employed in Ontario and Prince Edward Island. In the latter province the circles have been federated into an Egg and Poultry Selling Association with the result that a fairly complete

system has been developed which has given the Island Province a good name in the egg markets. In fact, eggs from Prince Edward have, until recently, at least, been regarded as being of more uniform quality than from any other part of Canada.

In Ontario there were 40 egg circles in 1917 as compared with 36 in 1916, shipping 542,853 dozens of eggs worth \$209,837.31 to the circles, as compared with 382,808 dozen worth \$104,227.36 the year before. The second quarter of 1918 showed 2,441 members shipping 377,881 dozens worth \$151,892.98, as compared with 1,140 members shipping 56,121 dozens worth \$29,299.49, in the first quarter.

In the Western Provinces a marked improvement has also taken place through legislation providing for inspection as to quality. Merchants are now compelled to candle and properly grade eggs before shipment



Warehouse and Grading Station of Dundas Co-operative Association.

but because of the comparative newness of the country the co-operative idea in selling has not been found workable to the same extent as in Eastern Canada. Egg Circles were organized in Manitoba in 1914 and 1915, but these have nearly all disbanded owing to a shortage of supply preventing frequent enough collections to guarantee eggs of first-class quality. The Department of Agriculture now endeavors to encourage better care of eggs, and purchase on a quality basis by the country grocer. In Alberta, egg circles have also failed, largely because of an absorbing interest in wheat, so that as an alternative a marketing service has been established at Calgary, with another planned for Edmonton where eggs will be received, candled, and graded as they are received from farmers and farmers' organizations throughout the province. These organizations are

Ontario has a few examples of outstanding success in the way of co-operative egg marketing. One of these, and perhaps the best, is the Dundas Co-operative Association, at Morrisburg, in Dundas County. This association has made very great strides in the handling of eggs on a quality basis, so much so in fact, that their product has established a reputation second to none in the Dominion, surpassing in some respects, the eggs from Prince Edward Island, hitherto an outstanding example of success.

The Dundas Association was first organized in March, 1911, with about 35 members, under the name of The Dundas County Co-operative Poultry Association. In March, 1915, the association was incorporated with an authorized capital of \$10,000, allotted in 500 shares of \$20 each. Over 300 shares are now subscribed and are divided among 235 members. Only five per cent.

of the share value has been paid in, amounting to one dollar per share; and the association is conducted on the principle of one man one vote. The company is a joint stock company where each member receives a dividend on the business he transacts through the association, rather than on the capital invested. Previous to incorporation the organization was on the basis of a co-operative association without share capital. For lack of capital eggs had to be sold as collected and without grading, the full value received by the association being returned to the members. All the eggs were marketed through a single produce company whose representative was stationed locally and this company attended to the grading.

At the present time a plan is followed whereby two wagons and a motor truck gather the eggs weekly from the farms during the producing season, which lasts from April 1, to about the second week in October. In addition to a very large number of individual farmers marketing through the Association collections are made weekly from 3 egg circles and from an occasional storekeeper who uses the case plan system, mentioned later, and is paid according to quality, receiving a commission of from one half cent to one cent per dozen for collecting, as do the egg circle collectors. He stands the loss of all bad eggs. Collections are made from a radius of about 15 miles, egg circle members and many other contributors not necessarily being members of the Association. These non-members, however, share no dividends of the Association, receiving merely the local market price which is paid to farmers when the eggs are collected.

The wagons travel the same route each day of the week and immediately upon delivery at the warehouse, an illustration of which is given herewith, the eggs are candled, as many as five candlers being necessary at times during the rush season. At this time receipts average as high as 60 to 70 cases per day. In order that each member may be credited with the exact number and quality of eggs collected, the "case plan" system is used. The accompanying illustration shows a grading card, one of which is placed on the top of each case as it is filled, the figures and heavy lines showing accurately just where to find each man's eggs in the case. This information is marked on the card by the collector as he fills the case and is for the benefit of the candlers and the office staff who will have to credit Jones or Smith with the right number of eggs and the grade which they belong in. This is necessary since the eggs are sold graded and, dividends being paid according to the business done through the Association, Jones should get more dividends for sending 20 dozen specials than Smith should receive for the same number of Number twos.

Every case of eggs is filled in exactly the same way. A standard egg case holds 30 dozen eggs, 15 dozen on each side of a centre partition, in five layers of 3 dozen each. Each one of the large squares represented in the egg grading chart represents a "filler", put to keep the eggs in each layer from touching each other. The small squares each represent a single egg. The collector begins on one side of the partition and fills it first, beginning with the bottom filler at the left hand corner on the side farthest from the partition. Thus the illustration shows that the first farmer whose eggs were put into this case was numbered "12" and he supplied 14 eggs. The eggs from the next farm (number "15"), filled out this filler and 20 eggs in the next, making 3 dozen in all. When the first half of the case is filled it is turned completely around and the other half is filled in exactly the same way. This is indicated by the fact that the egg grading card must be turned around to read the figures. Thus, number "24" will have some eggs on the top layer of the first half filled and a few (18) in the bottom layer of the second half. When the whole case is filled, the card, properly filled out, is placed on top and serves as a guide to the grader. The eggs from each wagon are deposited in separate places when delivered at the warehouse and are candled all at one time, usually all by the same candler.

On the back of the grading card is a ruled blank similar to the one shown herewith, showing the grading of the eggs in the crate and who they came from. Thus Jno. Smith, whose number is 12, supplied 14 eggs in that week, 6 of which graded as specials and 8 Number ones. Jones, (Number 24,) on the other hand supplied 6 dozen but only 4 dozen graded Number one and there were 5 Number two's, 10 dirties and cracks and 9 bad.

EGG GRADING CARD

BRANCH 1

1st Filler	
12	15
2nd	15
20	15
3rd	20
20	15
4th	20
24	15
5th	24
24	15

provided with a simple plan of organization for egg marketing. In 1917 this service at Calgary, available from June on, was utilized by producers from 23 points and 13,326 dozens were handled. Up to September, 1918, eggs were received at Calgary from 65 points, making a total of 128,580 dozen. In British Columbia no co-operative concerns handle eggs regularly, but farmers' co-operative purchasing societies and creameries occasionally handle eggs for their members and patrons.

This means that Jones has been paid the local market price for 9 bad eggs—but not for long. These cards are then taken to the office and the classification transferred to Smith's and Jones' account on the books of the Association.

After the eggs are graded they are taken immediately to the cold storage—and here is the secret of success, the final kick in progress which has made it possible for this Association to market a product of such high quality. The storage is right at the warehouse, but is owned privately by the manager who is paid regular rates for storing the eggs until ready for export or market. At a temperature of 29 degrees F. they can be stored for as long as 6 or 8 months at a cost of 50 cents per case per season, or 12½ cents per case per month. The eggs do not deteriorate in storage if they are put in fresh; and they are taken to storage immediately after candling. Specials, extras and Number ones only, go into storage. Number twos, dirties and cracks are sold immediately in Montreal, on Commission, at a price of from 2 to 5 cents per dozen less than they cost, that is, 2 to 5 cents less than the advance made to the farmer at the time they were collected.

Who pays for the bad eggs? The man who gave them to the collector. Once each month, say June 1, the collector carries a statement of the eggs graded from his route during the month previous (May). This statement is exactly similar to the classification appearing herewith, as printed on the back of each grading card; with the exception that it includes the classification of all eggs supplied by every farmer on the route covered by this collector. If, for instance, on June 1, Jones has five dozen of eggs, the local market price for which is 30 cents per dozen, he will be entitled to \$1.50; but before paying him the collector will look over his statement as to bad eggs supplied the month previous. He will see that Jones supplied nine eggs which were bad, and if they had been paid for at the rate of 40 cents per dozen, the collector would deduct 30 cents from the \$1.50 due Jones and will pay him only \$1.20. In this way the Association does not have to stand the loss of bad eggs. The grader invariably detects them and the loss is thrown back on the man who, through neglect or other causes, sold them to the Association. Eggs that are short are charged back in exactly the same way.

The Association has a special market for "special" eggs. This year a large number of eggs were stored and these are preferred by the Association, for the simple reason that it is possible to sell in much larger lots. Nine hundred cases were exported this year and were sold to the Dairy Produce Commission at the export price of 51 cents for extras and 50 cents for No 1's. In 1917 the business of the Association amounted to \$95,000, of which \$75,000 was in eggs. This year the total business will amount to \$150,000. Some years ago a substantial business amounting to \$35,000 yearly was conducted in live and dressed poultry, but this has considerably diminished until in 1917, a business of only \$2,000 was done. In 1917 the Association handled 170,000 dozen of eggs, and dividends ranging from 2 to 5 cents per dozen on "specials" were returned to the members. The manager, Mr. R. H. Ashton, receives a commission of 3 cents per dozen for collecting, candling, and selling. In addition to the poultry business, the Association will handle from thirty-five to forty cars of feed this year, as well as flour and other products, and it is possible live stock shipping will also be introduced. For these things, aside from the poultry business, the manager is paid a special rate of commission, depending upon the product he is handling. He is paid, for instance, 3 cents per 100 pounds for unloading feed out of a car, and 8 cents per hundredweight for handling feed out of the warehouse.

Unless the causes of it are removed and steps taken to prevent its spread, it is likely to go through the whole flock and possibly kill quite a number. Trying to cure individual chickens is a slow job, and at best the ordinary farm chicken is not worth the time it takes to do it. Do not spare the axe in disease. It is the best and surest cure in the end. Kill off any birds badly affected and give flock treatment to the rest. This method will

arrangements should be made in the different producing districts and also by the trade to have representatives at one or more of the above sittings. The proposed increase is of general application, but as it is the intention to cancel all commodity tariffs, the fruit industry in both Eastern and Western Canada will be one of the interests most seriously affected, as shown by the following schedule:

To	From Group No. 1		From Group No. 2		From Group No. 3	
	Present	Proposed	Present	Proposed	Present	Proposed
Windsor.....	80	120	40	75	30	60
London.....	50	75	40	75	50	90
Toronto.....	40	75	70	105	80	120
North Bay.....	100	135	120	165	120	180
Peterboro.....	60	90	90	135	90	135
Kingston.....	70	120	90	150	90	165
Ottawa.....	80	135	100	180	100	195
Montreal.....	80	165	100	210	100	210
St. John.....	175	315	185	345	185	360
Halifax.....	175	360	185	390	185	400
Winnipeg.....	265	505	290	540	290	540

be the best. It means the least handling of sick birds and quick treatment for the flock as a whole. The simplest remedies are the best. Clean houses, no over-crowding, and plenty of fresh air without drafts should come first. Feed one pound of Epsom Salts to every hundred hens once a week in a wet, or soft, bran mash and a teaspoonful of coal oil to a pailful of drinking water. The salts will clean up the system, and the coal oil prevents the spreading of the disease through the drinking water.

The best medicine, if it can be called such, that the writer has ever used is air-slaked lime or lime dust. To use it, the doors and windows should be closed and the whole flock crowded into one end or corner of the house. The lime dust is then thrown over them, a handful at a time. Use at least two gallons of the dust to every hundred hens. Throw it so as to hit the birds as much around the head as possible. The more dust getting into the eyes and down the throats of the birds the better. There is no danger of suffocating them. Use it liberally and "stay with it" as long as your own eyes and throat can stand, it. Repeat the dose every two days for two weeks, and likely the "Flu" will have "Flew" away by that time.

Manitoba Agr. College

M. C. HERNER.

"Group No. 1 includes all producing districts in the Niagara Peninsula; Group No. 2, Chatham district; Group No. 3, the district comprising Leamington, Essex, Kingsville, Sarnia, Forest, etc.

"You will note the increase in some instances is over 100 per cent. Just what effect this will have upon the fruit industry cannot at the present time be determined with any degree of exactness."

New York State Horticultural Society.

A letter has been received from the Secretary of the Western New York Horticultural Society which will be of interest to a number of fruit growers in Eastern Canada, quite a few of whom regularly attend the meetings of this Society. The announcement of the next annual meeting is of special interest in that "the fruit growers of New York State, through the Societies in which they hold membership, have wisely decided to become one great strong organization. Final action will be taken at a joint meeting to be held in Convention Hall, Rochester, N. Y., January 15 to 17, 1919, when the old Western New York Horticultural Society and the New York State Fruit Growers' Association will become the New York State Horticultural Society. The joint Executive Committees will report constitution and by-laws for adoption at this meeting." A splendid fruit display has been prepared, and the program promises to be of great excellence.

FARM BULLETIN.

Prof. W. H. Day Resigns.

The Ontario Agricultural College is to lose an able professor in the person of W. H. Day, head of the Department of Physics, who has resigned to enter the industrial field and become associated with the Shinn Manufacturing Company. The resignation is to take effect on March 1, thus affording an opportunity to complete important work outlined by his department. Prof. W. H. Day was graduated from the University of Toronto in 1903 as an honor student and gold medalist in physics. He became associated with the O. A. C. as Demonstrator and Lecturer, and for the last twelve years as Professor of Physics. Farm drainage was made a feature of the department's work under Professor



Prof. W. H. Day.

Day, and his activities lead to an enthusiastic campaign throughout Ontario in behalf of this necessary operation on so many farms. Later he devoted himself to the prevention of losses due to lightning, and in this field accomplished a great saving to the province. In addition to his ability as a lecturer, where Prof. Day stood among the first at the College, he was able to make his technical skill of value to the farmers at large through just such avenues as have been mentioned and the compilation of bulletins. "The Farmer's Advocate," to which Prof. Day has been a frequent contributor, wishes him success in the new line of work which he is now undertaking.

Canada's Rank in Poultry.

Figures furnished by the Canada Food Board show that the number of poultry for one hundred acres of land in farms in Canada, as compared with other countries, is as follows: Argentine, 2; Holland, 100; United States, 32; Germany, 65; Denmark, 166; Canada, 27. The population in fowl per square mile in the fifteen most important fowl States in the United States is as follows: Ohio, 423.2; Iowa, 418.2; Indiana, 381.5; Illinois, 379.3; Missouri, 291; Pennsylvania, 278.6; New York, 209.9; Kentucky, 207.7; Kansas, 189.5; Michigan, 169.6; Wisconsin, 167.4; Minnesota, 129.9; Oklahoma, 122.4; Nebraska, 120.4; Texas, 51.5. The population of fowl per square mile in Canada is as follows: British Columbia, 2.8; Alberta, 9.6; Saskatchewan, 13.5; Manitoba, 10.3; Ontario, 35.5; Quebec, 7.3; New Brunswick, 35.1; Nova Scotia, 44.6; Prince Edward Island, 348.4. The same figures go to show that Britain normally imports 190,850,520 dozens of eggs annually

Classification.

Marks	No. Doz.	Specials	Extras	No. 1	No. 2	Dirties and Cracks	Bad	Short	Remarks
12	1-2	—	—6	—8	—	—	—	—	
15	3-6	—6	2—	1—	—	—	—	—	
20	5-10	—	—	—10	5—	—	—	—	
24	6-0	—	—	4—	—5	—10	—9	—	
25	6-6	4—	2-6	—	—	—	—	—	
30	5-0	—	—	1—	2-6	—6	1—	—	
36	2-0	—	1—	—6	—6	—	—	—	

The "Flu" in Hens.

EDITOR "THE FARMER'S ADVOCATE":

Just now there is much trouble in poultry with this disease. Almost every flock has a touch of it in some form or other. Mild attacks, can, of course, go through a flock without causing any loss, but generally the flock as a whole receives a bad setback even though none die from it. Cold damp weather in the fall always seems to bring along this disease. Over-crowding also helps to develop it. The trouble usually starts about the time the spring chickens are put into the house. Often there is not enough roosting space provided, and many of them have to huddle in the corner for the night. More often, though, they do this because they are in a strange place, and do not know what the perches are for. Here the birds become overheated and later become chilled; colds follow, and roup or "flu" develops. Cold winds blowing over the birds during the night, or even during the day, may also start the disease.

The first signs of it are sneezing or coughing, discharges from the nose, and tiny bubbles in the corners of the eyes. Later swellings appear around the eyes, and the coughing and sneezing become more pronounced. When the disease becomes more acute, a scab forms in the throat, and the chicken has difficulty in breathing. This stage is the worst form of the disease.

and that during the war she suffered a shortage of 124, 786,750 dozens. Sixteen years ago Canada exported 10,860,536 dozens; two years ago she exported 2,128,500 and up to October 31, 1918, she had exported 3,861,389 dozens.

HORTICULTURE.

Fruit Men and Express Rates.

A communication received from G. E. McIntosh, in charge of transportation matters, Fruit Branch, Department of Agriculture, Ottawa, refers to the application of the Express Traffic Association of Canada for increased rates. This is a matter of vital interest to fruit growers, especially in the tender-fruit districts. The communication is as follows:

"The Board of Railway Commissioners for Canada will hold sittings to hear the application of the Express Traffic Association of Canada for increased rates, as follows:

City Hall, Toronto.

Monday, Jan. 13, 1919, at 10 o'clock a.m.

Court House, Montreal.

Thursday, Jan. 16, 1919, at 10 o'clock a.m.

"If there is any objection to the proposed increase,

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Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending January 2

Receipts and Market Tops

Dominion Department of Agriculture Live Stock Branch, Markets Intelligence Division

	Receipts CATTLE						CALVES					
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	
Toronto (Union Stock Yards)	2,593	4,021	1,801	\$14.00	\$12.00	\$13.75	289	350	184	\$17.75	\$16.00	\$17.75
Montreal (Pt. St. Charles)	598	365	717		10.25		168	115	171	14.00	15.00	14.00
Montreal (East End)	950	400	1,368		10.25		135	47	187	14.00	15.00	14.00
Winnipeg	1,184	461	4,760	13.00	11.00	14.00	6	23	97	9.00	9.00	9.00
Calgary	554	871	2,721	13.50	9.75	13.00						
Edmonton	319	141	1,023	12.75	10.00	12.00	11	3	101	9	10.00	9.00

	Receipts HOGS						SHEEP					
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	
Toronto (Union Stock Yards)	3,186	7,229	2,020	\$18.50	\$18.75	\$18.00	2,274	1,253	694	\$16.00	\$19.00	\$14.50
Montreal (Pt. St. Charles)	1,142	441	704	18.60	19.25	18.50	1,051	965	348	14.00	16.00	14.50
Montreal (East End)	659	605	1,943	18.60	19.25	18.50	326	360	1,179	14.00	16.00	14.50
Winnipeg	2,048	2,394	11,277	18.00	18.00	17.75	430	169	287	15.25	15.50	15.00
Calgary	1,279	2,604	6,699	17.40	17.80	17.50	276	213	1,784	15.00	12.50	13.00
Edmonton	379	445	1,044	17.25	17.00	17.00	92		81	13.50	13.00	13.00

Market Comments.

Toronto (Union Stock Yards.)

The market was unusually quiet during Christmas week. Cattle receipts were only a trifle over twenty-five hundred head, and of this offering the majority of the animals were of medium and common quality. Prices, however, continued at the level of those prevailing during the previous two weeks, but as nothing of outstanding quality was offered no exceptionally high sales were realized. Owing to a heavier consumption of fowl, the demand for beef was naturally slow, and more activity may be expected in another week or two when a return is made to a normal diet. A few lots of steers of eleven hundred pounds weight each, sold during the week at prices ranging from \$13.40 to \$13.35 per hundred, while a choice lot of butcher cattle of baby beef quality and averaging slightly under ten hundred pounds, were weighed up at \$14 per hundred; this was the best sale of the week. Other good transactions in the medium weight class were: twenty-three head averaging ten hundred pounds at \$12.75; fourteen head averaging eight hundred and forty pounds at \$12.40; twenty head averaging nine hundred and eighty pounds at \$12.15; seventeen head averaging nine hundred and fifty pounds at an equal figure, and numerous sales from \$11.50 to \$12 per hundred. Cows and bulls sold at values steady with those of the previous week. One choice cow of fourteen hundred pounds was weighed up at \$10.75; two of eleven hundred pounds at \$10; three of twelve hundred pounds at \$10, although but few other sales made above \$9.50. No really choice bulls were on hand and none were recorded above a price of \$9.50 per hundred. Quotations in this class remained unchanged, and higher prices than the one noted would be paid for good stock. There was no movement of stockers and feeders to country points during the week. Calves sold at steady prices, but no choice veal was offered, and \$17.25 per hundred was the top price paid as a consequence.

The lamb market developed considerable strength on Monday, when advances were made amounting to \$1 per hundred. Most of the sales were made from \$15 to \$15.50 per hundred, while a few choice lambs sold at \$16 per hundred.

There was little change in hog quotations, most of the hog transactions being made at \$18 per hundred, for selects, fed and watered, although a few sales were made at \$18.25 and \$18.50 per hundred.

The total receipts from January 1 to December 26, inclusive, were: 301,545 cattle, 55,576 calves, 360,950 hogs and 166,077 sheep; compared with 301,551 cattle, 46,885 calves, 474,354 hogs and 170,938 sheep, received during the corresponding period of 1917.

Montreal.

As during the previous week practically all the buying was done on the Monday market. Inquiry was keen while supplies were inadequate to meet the needs of the market. Prices on canners and canner bulls were advanced 50 cents per hundred, and on butcher cattle, values were increased from 50 cents to \$1 per hundred. Two three-year-old steers, which together weighed twenty-six hundred pounds, and one of which was well-finished sold at \$13.50 per hundred. A

CLASSIFICATION	No.	TORONTO (Union Stock Yards)				MONTREAL (Pt. St. Charles)			
		Avg. Price	Price Range	Top Price	No.	Avg. Price	Price Range	Top Price	
STEERS									
heavy finished									
STEERS good	83	\$12.95	\$12.00-\$13.75	\$14.00					
1,000-1,200 common	2	11.25							
STEERS good	491	12.40	11.75-13.00	13.00	14	\$10.50	\$10.00-\$11.00	\$11.00	
700-1,000 common	111	9.84	9.00-10.75	11.00	42	8.75	8.00-9.25	9.50	
HEIFERS good	271	12.50	12.00-13.00	13.50	1				
fair	123	10.25	9.75-10.75	10.75	16	9.00	8.00-9.25	9.25	
common	74	8.45	7.75-9.00	9.75	60	6.75	6.00-7.50	8.00	
COWS good	150	9.32	9.00-10.00	10.50	27	9.00	8.50-9.50	10.00	
common	459	7.24	6.75-8.25	8.50	58	7.75	6.50-8.50	8.50	
BULLS good	35	9.25	8.75-10.25	10.50	17	9.50	9.00-10.00	10.00	
common	22	7.40	6.75-8.50	8.75	64	6.75	6.00-8.00	8.50	
CANNERS & CUTTERS	581	6.00	5.75-6.25	6.25	277	5.75	5.25-6.00	6.25	
OXEN					17				
CALVES veal	289	15.16	14.00-17.50	17.75	42	13.00	12.00-14.00	14.00	
grass					126	5.50	5.00-6.00	6.50	
STOCKERS good	22	9.21	8.50-9.50	9.50					
450-800 fair	54	7.97	7.50-8.50	8.75					
FEEDERS good	71	10.50	10.00-10.75	10.75					
800-1,000 fair	44	9.25	9.00-10.00	10.00					
HOGS selects	3,030	18.06	18.00-18.25	18.50	949	18.60	18.60	18.60	
heavy					26				
(fed and lights	18	16.50	16.00-17.00	17.00	120	16.60	16.60	16.60	
watered) sows	137	16.00	15.00-17.00	17.00	44	15.85	15.85	15.85	
stags	1	14.00	14.00	14.00	3				
LAMBS good	1,984	15.21	15.00-15.75	16.00	471	13.60	13.60	14.00	
common	159	12.83	12.00-14.00	14.00	468	13.00	13.00	13.50	
SHEEP heavy	15	9.50	9.00-10.00	10.00					
light	57	10.50	10.00-11.00	11.00	29	8.00	8.00	8.00	
common	59	7.47	6.00-8.00	9.00	83	7.00	6.00-8.00	8.00	

few good quality bulls were weighed up at \$10 per hundred pounds, while most of the sales were made from \$6 to \$6.50. A load of light heifers and steers, averaging seven hundred and forty pounds, sold at \$9.12½ per hundred, and two loads, made up of heifers, steers and good cows, went over the scales at \$9.25. Canners sold at \$5.50 and cutters at \$6.10 per hundred, as compared with prices of \$5 and \$5.75 respectively paid during the previous week's trading. Receipts of cattle were extremely light. Calves sold mostly from \$12 to \$14 per hundred, compared with a general price of \$12 to \$13 during the previous week.

The market for sheep and lambs was chiefly of an export character. Lambs in mixed lots and running from fair to good in grading sold at \$13.50 per hundred and good sheep were weighed up at \$8. The New England Dressed Meat Co. purchased seven hundred and twenty-four lambs on the Pt. St. Charles Yards and five hundred on the East End Yards during the week for shipment to Boston, Mass.

Hogs were in strong demand and all offerings were really taken up at an advance of 10 cents per hundred over the prices paid during the previous week, selects selling at \$18.85 per hundred, off car weights.

PT. ST. CHARLES.—Of the disposition from the yards for the week ending Dec.

26, Canadian packing houses and local butchers purchased 171 calves, 298 canners and cutters, 135 bulls, 270 butcher cattle, 704 hogs and 348 lambs. No shipments were made to country points or United States points during the week.

The total receipts from January 1 to December 26, inclusive, were: 62,164 cattle, 62,959 calves, 76,989 hogs and 66,366 sheep; compared with 56,955 cattle, 53,861 calves, 89,674 hogs and 71,397 sheep, received during the corresponding period of 1917.

EAST END.—Of the disposition from the yards for the week ending December 26, Canadian packing houses and local butchers purchased 187 calves, 993 butcher cattle, 943 hogs and 1,179 sheep; No shipments were made to country or United States points during the week.

The total receipts from January 1 to December 26, inclusive, were: 65,092 cattle, 48,874 calves, 53,047 hogs and 63,034 sheep; compared with 61,638 cattle, 41,540 calves, 52,859 hogs and 48,553 sheep, received during the corresponding period of 1917.

Winnipeg.

Light receipts of cattle and scarcity of good beef in the offerings were factors responsible for slow trading all week in a market barely established. The few good quality butcher steers on sale were weighed up at prices ranging from

\$12 to \$13 per hundred. A number of choice butcher heifers sold at \$11.50; those of good grading from \$10.25 to \$11.25; fair animals from \$9.25 to \$9.75, and common stuff from \$7 to \$7.50. Butcher cows sold up to a top of \$10, most of the best stock being bought at prices ranging from \$9 to \$10 per hundred. Cows of medium grading realized from \$7 to \$8 per hundred. The few bulls that were on hand went over the scales at prices between \$6.40 to \$7.50 per hundred, while a few good oxen sold at \$9.

There were less than five hundred sheep and lambs in the yards and under slow conditions of trading the market was almost impossible to record. One lot of lambs was sold at \$15.25 per hundred.

Hogs were weighed up at prices steady with those of paid during the previous week. Receipts were light and there was practically no market. Most of the select hogs sold from \$17.75 to \$18 per hundred, fed and watered.

Of the disposition from the yards for the week ending December 26, Canadian packing houses purchased 60 calves, 3,692 butcher cattle, 10,211 hogs and 140 sheep. Local butchers purchased 220 butcher cattle, 474 hogs and 129 sheep. Shipments back to country points consisted of 5 to 10 stockers, 91 feeders, 395 hogs and 29 sheep; Shipments to United States points were made up of 74 can-

Incorporated 1865

AT ANY OF THE BRANCHES OF
The Molsons Bank
FARMERS ARE WELCOME

Local Managers are instructed to consult with them, and by every legitimate means assist in securing the utmost developing of our farms.

Savings Department at all Branches.
Interest at Highest Current Rate.

ners and cutters, 25 bulls, 61 heavy steers, 1,353 feeders and 29 oxen.

The total receipts from January 1 to December 28, inclusive, were: 272,475 cattle, 12,163 calves, 311,862 hogs and 35,726 sheep; compared with 255,616 cattle, 12,202 calves, 281,268 hogs, 20,595 sheep, received during the corresponding period of 1917.

Toronto Produce.

Live-stock receipts at the Union Stock Yards, West Toronto, on Monday, January 6, consisted of 198 cars, 3,092 cattle, 242 calves, 2,849 hogs, 223 sheep and lambs. Strong market existed. All classes of cattle, 25 to 50 cents higher. Top for loads, \$14 per hundred. Odd choice steers up to 15.25. Calves, 50 cents higher; top, \$17.50. Sheep, strong; choice, \$10.60 to \$11; lambs, \$16. Hogs, \$18.50 to \$18.75, fed and watered.

Breadstuffs.

Wheat.—Ontario (f.o.b. shipping points, according to freights)—No. 1 winter, per car lot, \$2.14 to \$2.22; No. 2, winter, per car lot, \$2.11 to \$2.19; No. 3 winter, per car lot, \$2.07 to \$2.15; No. 1 spring, per car lot, \$2.09 to \$2.17; No. 2 spring, per car lot, \$2.06 to \$2.14; No. 3 spring per car lot, \$2.02 to \$2.10. Manitoba (in store, Fort William, not including tax)—No. 1 northern, \$2.24½; No. 2 northern, \$2.21½; No. 3 northern, \$2.17½; No. 4 wheat, \$2.11½.

Oats.—Ontario (according to freights outside)—No. 2 white, 70c. to 73c.; No. 3 white, 69c. to 72c. Manitoba (in store, Fort William)—No. 2 C.W., 75½c.; No. 3 C.W., 71½c.; extra No. 1 feed, 72½c.; extra No. 1 feed, 71½c.

Corn.—American, (track, Toronto, Jan. shipment), No. 3 yellow, \$1.70; No. 4 yellow, \$1.65; sample, \$1.45 to \$1.50.

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

Barley (according to freights, outside)—Malting, new, 90c. to 95c.

Buckwheat (according to freights outside)—No. 2, \$1.36.

Rye (according to freights outside)—No. 2, \$1.54, nominal.

Flour.—Manitoba, (Toronto)—War quality, \$11.35. Ontario (prompt shipment)—War quality, \$10.25, in bags, Montreal and Toronto.

Millfeed.—Car lots delivered, Montreal freights, bags included)—Bran, per ton, \$37.25; shorts, per ton, \$42.25.

Hay.—(Track, Toronto)—No. 1, per ton, \$22 to \$23; mixed, per ton, \$20 to \$21.

Straw.—(Track, Toronto)—Car lots, per ton, \$9.50 to \$10.50.

Farm Produce.

Butter.—Prices again kept stationary on the wholesales during the past week, selling as follows: Creamery, fresh-made lb. squares, 56c. to 57c. per lb.; creamery, cut solids, 53c. to 54c. per lb.; dairy, 45c. to 50c. per lb.

Oleomargarine.—32c. to 34c. per lb. Eggs.—While prices remained practically unchanged on the wholesales during the past week, new laid had a slightly easier tendency. Cold storage, 55c. to 56c. per doz.; cold storage, selects, 60c. per doz.; new laid, 80c. per doz.

Cheese.—Cheese sold at unchanged prices, viz., new, 28c. to 29c. per lb.; new twins, 28½c. to 29½c. per lb.

Honey.—Five, 10 and 60-lb. pails, per lb., 27c. to 28c. per lb.; sections, each, 30c. to 40c.

Sending Money to Soldiers

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Those who have friends or relatives at the front, may wish to send money, but possibly do not know the best way to do so.

If time permits, the safest and most convenient method of making remittances abroad is the Bank Money Order or Draft, as issued by The Merchants Bank.

If, however, it is necessary to send money without delay, the Bank will arrange this by Cable Transfer.

THE MERCHANTS BANK

Head Office: Montreal. **OF CANADA** Established 1864.
with its 102 Branches in Ontario, 32 Branches in Quebec, 19 Branches in Manitoba
21 Branches in Saskatchewan, 53 Branches in Alberta, and 8 Branches in British
Columbia serves Rural Canada most effectively.
WRITE OR CALL AT NEAREST BRANCH.

Montreal.

Dressed Hogs.—The tone of the market for dressed hogs was firm, and tendency of prices was upward. Dressed hogs were not coming in in large volume, and prices were steady at about 22c. per lb. Abattoir-dressed fresh-killed stock was quoted at 25c. to 25½c. per lb.

Poultry.—Choice poultry has been pretty well picked up and not a great deal remains in stock. Prices were unchanged, with the choice grades of turkeys at 40c. to 41c.; and the lower grades down to 32c. Milk fed chickens were still 32c. to 33c.; and ordinary grades as low as 24c. Fowl sold at 24c. to 28c.; geese at 25c. to 26c.; and ducks at 32c. to 34c.

Eggs.—Prices go higher and higher in a retail way, though wholesale figures seem to be unchanged, with fancy new laid eggs were quoted at 73c. to 75c. per doz. Strictly new laid were 70c.; select fresh 55c.; cold storage selects, 54c. and No. 1, 50c.

Butter.—The price of butter was unchanged, with finest creamery selling at 52½c. to 53½c.; fine, 51½c. to 52½c.; and dairies 40c. to 45c.

Cheese.—The Commission still quoted 25c. for No. 1 cheese; 24½c. for No. 2; and 24c. for No. 3.

Grain.—No. 3 Canadian Western oats were quoted at 87½c., and extra No. 1 feed at 88c., with No. 2 feed, 81c.; heated No. 1 feed at 78c.; Ontario No. 2 white at 85c.; and No. 3 white 84c.; per bushel, ex-store. Car lots of Ontario extra No. 3 barley were \$1.26; No. 3 being \$1.15; Manitoba sample grades \$1.05. American corn, No. 3 yellow, \$1.62½; No. 4 yellow, \$1.61½; and No. 5 yellow, \$1.60.

Millfeed.—Car lots of bran, ex-track, in bags, were quoted at \$37.25 per ton; shorts being \$42.25 per ton, less 25c. per ton for spot cash. Pure grain mouille, in broken lots, was quoted at \$68 to \$78 pure oats at \$64; corn meal feed at \$60 to \$62; barley feed \$54 to \$60. Mixed mouille \$48 and dairy feed \$42.

Baled Hay.—Sales of car lots of No. 1 baled hay were quoted at \$21 to \$22 per ton; No. 1 light clover mixed \$21 to \$22; No. 2 timothy \$20 to \$21; No. 2 clover mixed, \$19 to \$20; No. 3 timothy \$18 to \$19, ex-track.

Hides.—The market was fairly steady, with cow hides 17c. per lb.; bulls, 15c.; steers, 21c. flat. Veal skins steady at 25c. per lb. for grassers; 20c. for kips and 35c. for veals. Lamb skins were \$2.25 each; horse hides \$5 to \$6.75 each. Rough tallow was 3½c. per lb.; abattoir fat 8c. per lb.; and rendered 16c. to 16½c. per lb.

Chicago.

Hogs.—Butchers', \$17.55 to \$17.65; light, \$16.85 to \$17.75; packing, \$16.80 to \$17.60; throwouts, \$15.65 to \$16.75; pigs, good to choice, \$15.75 to \$16.75. Cattle.—As compared with a week ago beef and butchers' cattle mostly 25c. to 50c. higher. Stockers and feeders strong to 25c. higher. Veal calves, \$1 to \$1.50 higher. Sheep.—As compared with a week ago fat lambs 75c. to \$1 higher. Yearlings 50c. to 75c. higher. Sheep mostly 50c. higher.

Cheese Markets.

New York, specials, 37½c.; average run, 36c. to 37c.; Montreal, finest easterns, 24c. to 25c.

Buffalo.

Cattle.—Light receipts at Buffalo last week brought considerably higher prices on practically all classes of cattle. Supply of Canadians was larger than for some weeks past and included around ten to a dozen loads of medium-weight steers, best of which sold up to \$16 to \$16.10, and were considered a full half dollar above the previous week. Choice butchering cattle were taken readily at the advance. All classes of steers were eagerly sought after. Anything in the female butchering line was ready sale at a full half dollar-advance, canners and cutters entering into the general advance. Only heavy and fat bulls failed to show the general advance, these bringing strong prices, with the light and Bologna grades selling a full half dollar above the previous week. Milk cow and springer trade ruled firm. Receipts are running lighter and sellers generally are predicting very favorable prices for the immediate future, especially on steers. Receipts for the week totaled 3,225 head, as against 3,500 for the previous week, and as compared with 3,825 head for the corresponding week a year ago. Quotations:

Shipping Steers, Natives.—Choice to prime, \$17 to \$17.50; fair to good, \$15.25 to \$16; plain and medium, \$11.25 to \$12; coarse and common, \$10 to \$11.

Shipping Steers, Canadians.—Best heavy, \$15.25 to \$15.75; fair to good, \$13 to \$14.75; medium weight, \$12 to \$12.75; common and plain, \$10.50 to \$10.75.

Butchering Steers.—Choice heavy, \$15.50 to \$16; fair to good, \$13.75 to \$14.50; best handy, \$11.75 to \$12.25; fair to good, \$11 to \$11.50; light and common, \$9 to \$10; yearlings, choice to prime, \$16 to \$18; medium to good, \$12 to \$15.50.

Cows and heifers.—Very fancy fat cows, \$10 to \$11; best heavy heifers, \$11.25 to \$12; fair to good, \$10.50 to \$11; good butchering heifers, \$10 to \$10.50; fair butchering heifers, \$8 to \$9; light common, \$5 to \$7; best heavy fat cows, \$9 to \$10; good butchering cows, \$8.25 to \$8.50; medium to fair, \$7.50 to \$8; cutters, \$6.75 to \$7; canners, \$6.25 to \$6.60.

Bulls.—Best heavy, \$10 to \$11; good butchering, \$10 to \$10.50; sausage, \$7.50 to \$8; light bulls, \$6.50 to \$7.50.

Stockers and Feeders.—Best feeders, \$10.50 to \$11; common to fair, \$8 to \$9.50; best stockers, \$8.75 to \$9.25; fair to good, \$8.25 to \$8.75; common, \$5 to \$7.

Milchers and Springers.—Good to best, small lots, \$100 to \$135; in carloads, \$90 to \$100; medium to fair, small lots, \$80 to \$85; in carloads, \$70 to \$75; common, \$50 to \$55.

Hogs.—On account of the embargo on shipments, receipts last week showed a big falling off, and as a result market was considerably improved. Monday and Tuesday it was a \$17.70 market for all grades; Thursday the bulk sold at \$17.85, few \$17.90, and Friday the majority brought \$18, with a few up to \$18.10. Good throwouts roughs landed around \$15.25 and \$15.50, and stags \$13 down. Receipts for the past week figures 14,600 head, as against 55,825 head for the week before, and as against 25,800 head for the same week a year ago.

Sheep and lambs.—Market occupied a very favorable position last week. Demand was strong and a good clearance was made from day to day. The week started with lambs showing a fifty-cent advance, and sheep were up a dollar.

Money Loose is Money Spent

If you hope to rise above the dependence on daily earnings, you must learn to save money. Saved money means capital, and capital means ability to take advantage of opportunities offering, until some day you become independent.

The Bank of Nova Scotia will welcome your Savings Account and give you every possible service and attention.

Paid-up Capital \$ 6,500,000
Reserve Fund . 12,000,000
Resources . . 130,000,000

THE BANK OF NOVA SCOTIA

We invite your account. Special facilities for banking by mail. One hundred and ninety branches. General Office, Toronto.

12A



Monday the bulk of the choice lambs brought \$17.25, the high days were Tuesday and Friday, when tops reached \$17.50, and the low day of the week was Thursday, when best moved at \$17 and \$17.25. Cull lambs brought up to \$16 and \$16.25, yearlings made \$15, wether sheep were up to \$11, and best ewes ranged from \$9.50 to \$10. Offerings for the past week totaled 13,800 head, as compared with 15,383 head for the week before, and 6,700 head for the same week a year ago.

Coming Events.

Jan. 9-10.—Dairymen's Association of Eastern Ontario, Belleville, Ont.

Jan. 14-15.—Ontario Agricultural and Experimental Union, O. A. C., Guelph.

Jan. 14-17.—Ottawa Winter Fair, Ottawa.

Jan. 14-March 29.—Short Courses at Ontario Agricultural College.

Jan. 15-16.—Dairymen's Association of Western Ontario, London, Ont.

February 3-7.—Live Stock Breeders' Meetings, Toronto.

February 4, 5, 11 and 12.—Live Stock Breeders' Meetings, Montreal.

Sale Dates.

Jan. 15, 1919.—Executors of A. C. Hallman Estate, Dreslau, Ont.—Holsteins.

Jan. 15, 1919.—Geo. J. Barron, R. R. 3, Brantford, Ont.—Holsteins.

Jan. 28, 1919.—Victoria County Pure-Bred Stock Association.—Lindsay, Ont.

Jan. 30, 1919.—Peterboro County Shorthorn Breeders' Association, Peterboro, Ont.

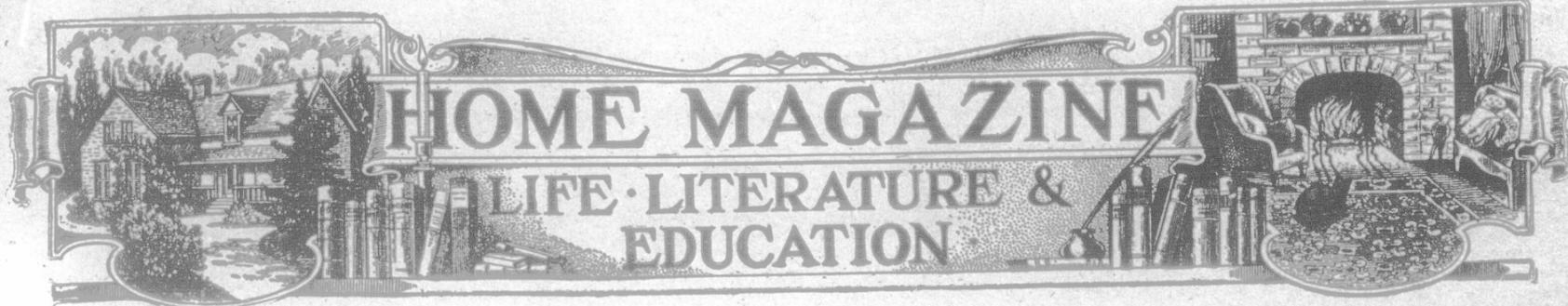
Feb. 5, 1919.—John Miller, Ashburn, Ont.—Shorthorns.

Feb. 6, 1919.—Thos. L. Mercer, Markdale, Ont.—Shorthorns.

Feb. 7, 1919.—J. J. Elliott, R. R. 4, Guelph, Ont.—Shorthorns.

Feb. 7, 1919.—Canadian Hereford Breeders' Association, Toronto, Ont. H. D. Smith, Secretary, R. R. Ancaster, Ont.

March 5, 1919.—Guelph Fat Stock Club, Guelph, Ont.—Pure-bred stock. J. M. Duff, Secretary.



Country Joys.

I am so glad that I can see the woods—
When I look up from tasks to out-of-
doors—
So glad for sunsets and for evening's star,
As I "do up my chores!"

I am so glad for fields of trackless snow,
For grey network of trees against the
sky,
For warm rose-reaches of the arms of
dawn
To gently waken by;

No sounds to mar a wee girl's laughter or
The cherry whistling of a little lad—
For all the simple, home-like country joys
I am devoutly glad!

—Sel.

Mona's Isle.

A German Prison Camp in Great Britain.

BY GEORGE MATHER.
(A Competition Essay.)

SO many contradictory rumors of how the Hun has been treated and the manner of his confinement when he landed on British soil, have inspired me to send you a short account of the land and the people on whose shores there was one of the largest German prison camps, and from which not long before the close of the war a prisoner escaped and swam out to sea. He was picked up by a passing fishing vessel, and after being identified, was promptly dumped back into his appointed place. Very few indeed managed to escape; in fact, they seemed to prefer the hospitality and safe refuge of the British prison, and indeed they were lucky to be sojourners in such a romantic and charming little spot as Manxland,

"Where smiling Spring, its earliest visits
paid,
And parting summers lingering blooms
delayed."

Goldsmith could not have conceived a more beautiful phrase to describe the subject of my little article, had he pictured his ideal of "Sweet Auburn" on the adjacent Isle to the land of his birth.

SET as an emerald in a sea of sparkling diamonds, as the Irish Sea reflects the sun at high noon, stands out a sister isle of the little group which is so proudly distinguished as the "British Isles", commonly known as "Mona's Isle", or "The Isle of Man." The population are chiefly men who occupy their business in great waters, the remainder eke out a living by following a gricultural pursuits. Surely this little self-governing nation has deservedly a rightful place in the records of the world's history, for in bygone days there were Kings of Man, the present Earl of Derby being a descendent of the Royal House. There has been a Bishop of the Church there for many generations. It also has a Parliament, by whom the laws of the land are made, and also a Lieutenant-Governor; at present he is Lord Raglan, appointed by the British Government, and the laws must have his approval and his signature before they become law. These laws are always proclaimed to the people by the Deemster, I believe, from a place called Tynwald Hill, before they are printed for use of the common people.

It is a land of strange customs, and many old families observe the ancient rules to this day. The men mostly earn their livelihood from the harvests of the sea, and, the majority being fishermen, their varied experiences in the performance of the duties by which they earn their daily bread, bring out all the qualities that go to make them strong, husky men, bronzed by exposure to the weather, for sometimes they remain out

at sea for days together waiting for the shoals of fish (mackerel and herring) that are reported by passing vessels. In these days the women have some very anxious times. One is reminded of Tennyson's beautiful lullaby that he must have composed as he walked along the cliffs, as he did every day during the time that he spent at his residence in Freshwater, in the Isle of Wight. "Sweet and Low" is beautiful poetry, and the dear old poet must have had some vivid personal experiences to have written it. May I quote a few lines that will help us to realize the hopes and fears of the fishermen's wives in the hazardous tasks their loved ones are constantly coming in contact with?

"Sweet and low, sweet and low, wind of
the western sea
Low, low, breathe and blow, wind of the
western sea,
Over the rolling waters go—come from the
dying moon and blow,
Blow him again to me, while my little
one, while my pretty one sleeps.

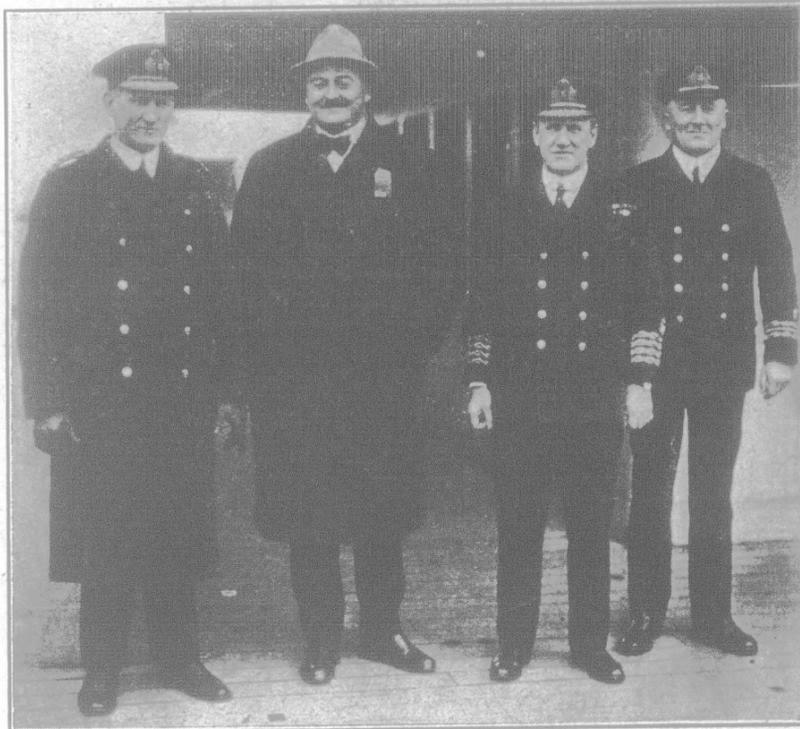
"Sleep and rest, sleep and rest, father will
come to thee soon,
Rest, rest on mother's breast, father will
come to thee soon,
Father will come to his babe in the nest
Silver sails all out of the west,
Under the silver moon—sleep my little
one, sleep my pretty one, sleep."

lap, as the first streak of dawn was breaking over the rough sea, having watched all through the night for a glimpse of a boat that would never return, and this is where the lessons of this poem are so applicable. He says:

"For men must work and women must
weep,
And the sooner its over, the sooner to
sleep,
While the harbor bar is moaning—is
moaning."

But in the long summer days the Manx people have the privilege of passing their time amongst the most sunny brooks and wooded glens, and there is little wonder that these good, honest, industrious Islanders are so bright and happy in their romantic scenery, for they find plenty of amusement even amongst their own folk; like their neighbors, they too have the native wit of the Irishmen, and they speak the Irish brogue themselves. When they go to market with their chickens and eggs, the jokes pass along and they all seem to forget the risks they have dared in the stormy sea. They impress one with the idea that they are always as fresh and bright as the merry, merry month of May.

THERE are several fairly large Towns on the coast, viz.: Douglas, Ramsey, Port Erin, Port St. Mary and



Ship's Officers of the "Olympic."

From left to right: Commander Thomson, R. N. R.; (Mons. E. Gabrury, French Consul); Capt. Hayes, C. M. G., D. S. O., R. D., R. N. R.; Lieut.-Commander Bullman, R.N.R.
British and Colonial Press.

At times there are fearful storms and the waves dash up against the hard brown rocks which, in their turn, hurl the sea back to its appointed bound. Then the signals for the lifeboats are often seen and brave men leave their cozy cots and their loved ones to battle against the mountainous waves, and it is here one recalls Charles Kingsley's beautiful poem where he tells us about "Three Fishers":

"Three fishers went sailing out into the
West,
Out into the West when the sun went
down, etc.

I saw a very striking picture of one of these fishermen's wives watching through the window, with her babe asleep in her

"The Manxman", "The Scapegoat", "The Deemster", and several others.

I prefer to think about the Manx people in their native industries and their self-satisfied style of going through "The daily round and the common task", which I understand never becomes irksome or monotonous. There are little details of their home life which Hall Caine describes in his books which are very interesting and amusing to the student of human nature and of animal life, but there is one little animal of which I make quite a household pet and which I am afraid the great author has omitted to make mention of, and that is the little household pet, the cat. There is a special breed of cats called "Manx cats" and they differ from other breeds, because they are minus that important part of the anatomy of other common cats, the tail. It makes them appear quite unfinished, for one can very often discern from the movements of a cat's tail what kind of a temper it has, and the Manx cat makes one think of a ship without a rudder; someone may call it a "catastrophe."

Space forbids me to describe how the children appreciate the out-door life and the wonderful fascination of the sea, but the yellow sandy beach with its background of great high rocks and rare little flowers growing out of the niches, makes an ideal playground. The children have plenty of chance for sailing in the little harbor in their own little row boats; they are all clever at handling the oars. How can they help shouting and singing about their own little island which they call in the native tongue "Mona".

Many delightful visits to this tight little island fill my thoughts with the uttermost sympathy and yearning for a solution of the problems of the peace that should reign in sister Isle of Ireland, for the Manxman is half Irish and he is naturally gay and witty like Pat, and patriotic too. So full of zealous patriotism was the late lamented John Redmond that we are told that his loyalty and zeal for her welfare and the oft repeated failures and disappointments of his schemes caused him to die a broken-hearted man. Even his strongest opponents have laid at the foot of his bier, brilliant eulogies of his diplomatic abilities and loyalty of spirit. Let us hope that this single sacrifice of a patriotic life to the cause of his heart's desire may in due time bring together the fighting factions in Ireland, so that they may be as happy and contented as the Manxman in his little Island home.

A recent writer says: "Blessed are they whose lives begin with the humblest scenes, and whose bodies feel the pinch of sheer poverty, if thereby the later years are enriched with the enduring wealth of that peace that cometh to the upright in heart and the power to love even the unlovely. Poor indeed is he to whom these things never come, whatever else he may gain of the world's plunder."

The plain working man in the Isle of Man has sometimes had his life moulded into a career of great national worth, stern, uncouth and ragged though he may be.

A correspondent in the London *Evening Standard* that, very oddly, at the Versailles Conference Great Britain is represented by

- 1 Welshman (Premier Lloyd-George).
- 1 Scotch Canadian (Bonar Law).
- 1 Jew (Lord Reading).
- 4 Scots (Hon. A. J. Balfour, Sir Eric Geddes, Marshal Haig, and Admiral Wemyss).
- 1 Englishman (Lord Milner, who, though of English parentage was really born in Germany).

Hope's Quiet Hour.

The Seal of God.

I saw another angel ascending from the east, having the seal of the living God: and he cried with a loud voice to the four angels, to whom it was given to hurt the earth and the sea, saying, Hurt not the earth, neither the sea, nor the trees, till we have sealed the servants of our God in their foreheads.—Rev. VII : 2, 3.

In the ninth chapter we read of the terrible plagues which tortured those men who had not the seal of God in their foreheads. In the last chapter of our Bible—that chapter which shines like a star of hope—we read of the servants of God who still do Him service when the veil is lifted and they see His face. They are sealed with His Name in their foreheads.

They are sealed as His own, in such a conspicuous way that everyone can see the mark. Long ago, when few people could write their signatures, the signet ring had a value which it does not possess now. It was a crime, punishable by

death singing songs of faith and trust, and his face was shining like the face of the martyr, St. Stephen. He went forward hopefully, ready to serve his Master in the new life as he had served Him here, never dreaming for a moment that his term of service had expired, or that he was "cut off in his prime." He was like many other young men, who met death fearlessly in the Great War, and of whom it was written:

"Here—or hereafter, you shall see it ended,—
This mighty work to which your souls are set.
If from beyond—then, with the vision splendid,
You shall smile back and never know regret."

They are safe—those knights of the King—sealed with His seal and guarded always by His angels. The father of one young man wrote: "My dear boy is not dead. He has been called to higher service by the Great Commander in Chief, Whose eye has ever been upon him. We shall know in the days to come what work God has called him to do. His life beyond the grave will be a link

walking beside him. But some faces were very sad. I saw one young widow, walking away with her little girl. Both were evidently fighting hard to keep down their tears. One young woman walked away alone, with tears streaming down her face. It is sometimes very hard to enter into the joy of a soldier who has received "great promotion" and stands in the Presence of the King.

One woman wrote of the banners which decorated the town to welcome home her neighbor's son, and pleaded for strength "to face the glory in her eyes," while her own heart was heavy with grief. She prayed to Him who wept with the sorrowing sisters long ago:

"There beats across my broken heart
The tread of feet that march no more!
Lord, grant me now the conqueror's part
To fitly greet this conqueror!
This glory in the thronging street
Grant that no tears of mine may dim;
Give me swift hands and eager feet,
And valiant heart to welcome him!"

That is a splendid way to take up a heavy burden of sorrow; and one who enlists in the service of the Great King, not as a conscript but as a volunteer,

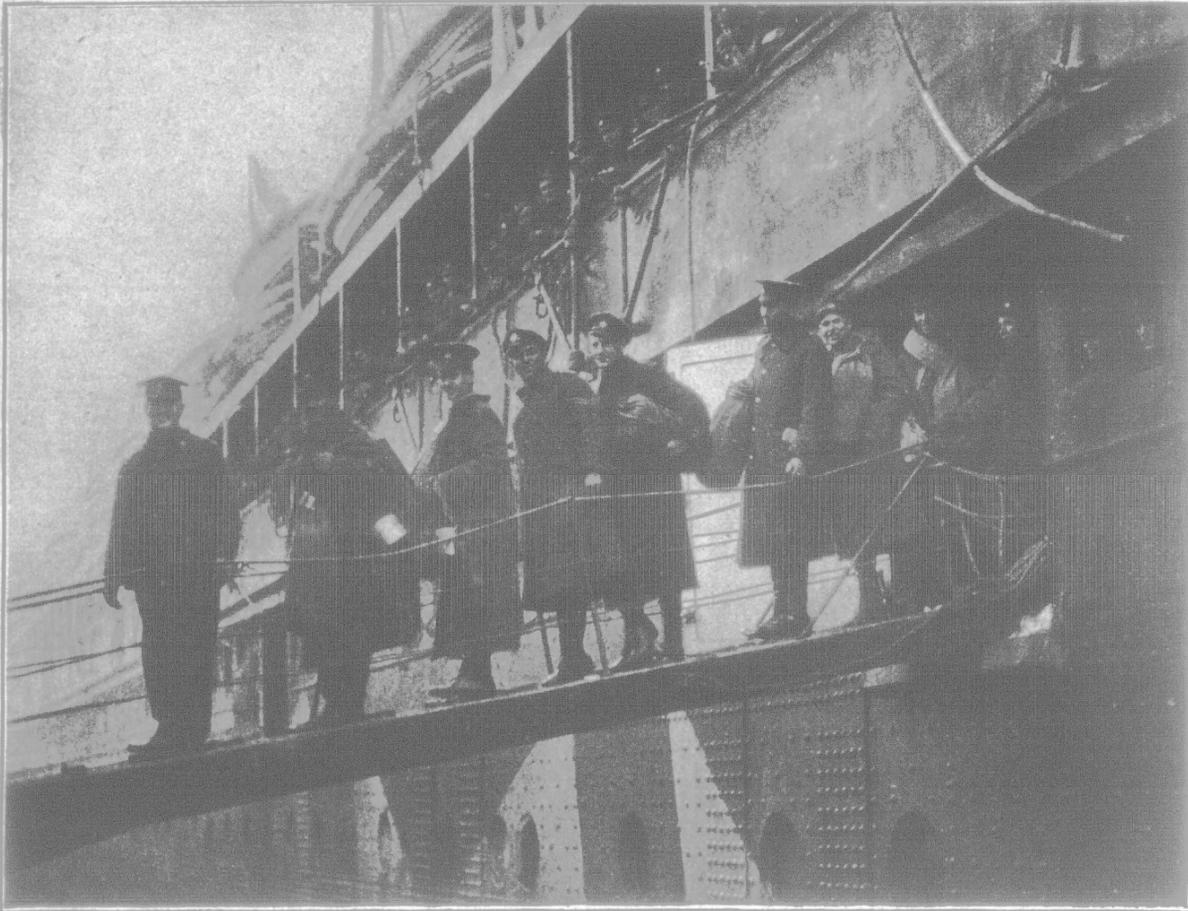
What would we think of a soldier who refused to put on the uniform? Let us glory, as St. Paul did, in our high position as servants of our King.

We sometimes hear it said sneeringly: "Oh, I never trust a man who professes to be a Christian!" But that sneer is a falsehood, for we all know splendid men and women who are not ashamed to confess Christ as their Captain, and who win trust and respect wherever they go. God has written His Name on their foreheads, so that everybody can see they belong to Him. It is just because the real servants of God are so much respected that there are so many imitations—"hypocrites". Unless a thing has value no one takes the trouble to imitate it.

And so people try to write God's Name on themselves, not realizing that He has permitted no counterfeit of His royal signet-ring. The only way to be sealed as God's servant is to be His servant. The Lord knoweth them that are His, and seals them as His own.

Those whom the King has signed and sealed are safe under His shield and banner. Of them it is written: "No weapon that is formed against thee shall prosper; and every tongue that shall rise against thee in judgment thou shalt condemn. This is the heritage of the servants of the Lord."

DORA FARNCOMB.



Returned Soldiers Landing at Halifax.

They are coming off the "Olympic," as she completes her nineteenth voyage from British ports to Halifax.—British and Colonial Press.

death, to imitate the seal of any great personage. Papers stamped with the king's ring had the same authority as if they bore his signature. King Ahasuerus put tremendous power in the hands of Mordecai when he took off his ring and gave it to him, giving him authority to write as he pleased in the king's name, seal it with the king's ring. For "the writing which is written in the king's name, and sealed with the king's ring, may no man reverse."—Est. VIII : 8.

Think what tremendous power, then, must have been in the hands of that messenger of God who ascended from the east carrying the seal of the King of Kings. Surely the stamp of that signet cannot be reversed by any power of evil. Those who are really the servants of God—loyal to Him in their secret thoughts—are safe under His protection. He has sealed them as His own, and they may well walk fearlessly, though a thousand fall beside them and ten thousand at their right hand, for no danger can really injure them. Death may do its worst but it can only open for them the door of a higher life, and usher them into the Presence of the King whose Name shines like a star on their foreheads.

Not long ago I heard of one young man who went right up to the gate of

between us and that other world, and a constant call to keep the communication between that world and ours open. He has left such a splendid memory. Faithful to the last!—we do thank God for his life, and have a full assurance that he will be there to welcome us to that larger life that lies beyond death."

Is not that a splendid way of accepting a great sorrow? The father, who wrote so confidently about his son, ended his letter with:—"Sel. 1 Thess. 4 : 13, 18," that eager appeal to Christians to sorrow not for those who have passed out of sight "even as others which have no hope." St. Paul expected the sorrow of Christians to be different from the sorrow of other people; expected shining threads of hope and faith to brighten mourning garments. Let us see to it that we do not dishonor our Christian profession,—and the memory of those who have bravely fought a good fight and finished their course,—by darkening our homes with sadness and hopeless gloom. Yesterday I watched some returned soldiers who had just got off the train at the North Toronto Station. It was a joy to watch the faces of welcome and welcomed, to see a beaming young father, with his kit bag slung over his shoulder and each hand clasping the hand of a little child, and with his happy wife

has no right to demand an easy post. Like any other soldiers, we are expected to obey orders loyally and cheerily. The sentinel, on duty in rain or blinding snow, does not weaken his nerve by thinking virously of his comrades who are—at the moment—warm and secure. Shall we—who claim to be soldiers of Christ—find fault continually with His orders? Is it really true that we would prefer to have the planning of our own lives, to choose our own crosses? Is our wisdom so great that we can afford to dispense with His?

The mark or sign by which God's servants are distinguished from others is on the "forehead." It is not a secret sign but it can be seen and recognized by everybody. A more conspicuous place than the forehead could hardly be chosen. Now there are plenty of people who pride themselves on not making any profession of religion. In other words, they are trying to serve God but will not openly acknowledge Him as their King. They seem to think that such secret service is all that He demands, forgetting His warning: "whosoever, therefore, shall confess Me before men, him will I confess also before My Father which is in heaven. But whosoever shall deny Me before men, him will I also deny before My Father which is in heaven."

Christmas Gifts for the Needy.

Gifts have been pouring in—as is usual at this kindly season. First came a parcel of clothing from a Sewing Circle, then many gifts of money—\$2 each from "Nellie", Mrs. T. C. M., "Doris", and a reader in Inglewood. Five dollars came from another friend in Inglewood and from Miss E. R. in Pickering. Ten dollars came from C. A. A. (a reader in New Brunswick) a dollar from another N. B. friend (C. McD.) and a dollar from "a sympathizer", Blyth, Ont. There were also five scrap-books from one reader and one from another—which have gone to "shut-in" children.

Gifts of five dollars each came from a "friend" in Drayton; a "reader" in Alliston; J. C.; Mrs. M.; Mrs. Jas. A. M.; Mrs. E. E.; a "friend", Oxford Co.; and "a quiet countrywoman." "Inasmuch" and Mrs. J. S. S. sent a dollar each. Two dollars came from N. M. G. (in memory of a brother who passed away in August) and Mrs. J. W. sent three dollars. Nearly fifty dollars poured into the Q. H. P. in one short week! Do you wonder that I feel rather overwhelmed? I struggled so successfully with the rising tide that the purse (your purse) was practically empty on Christmas Eve. But the emptiness did not last many hours. I do my best to pass on your kindness; but, if I should collapse suddenly under the weight of responsibility, you may be called upon to pay the funeral expenses. If you go on like this there may be funds enough in the Q. H. P.—a plain pine coffin will be good enough for—

"HOPE"—(DORA FARNCOMB),
6 West Ave., Toronto.

The out-flow has gone on steadily, keeping pace with the in-flow,—I am trying hard to cope with the flood of your generosity—and many messages of thanks have been sent to you.

A happy New Year to you all!

DORA FARNCOMB,
6 West Ave., Toronto.

For The Sick and Needy.

Mrs. W. sent two dollars last week for the Quiet Hour Purse and "Another Friend" sent three dollars. Most of this money has already gone out in the shape of nourishing food for sick people.

DORA FARNCOMB,
6 West Ave., Toronto.

The Eternal Battle.

One of the qualities of Liberty is that, as long as it is being striven after, it goes on expanding. Therefore, the man who stands still in the struggle and says, "I have it," merely shows by so doing that he has just lost it.—Henrik Ibsen.

Militarism Discredited.

The outstanding lesson of the war is that militarism stands discredited, and that no great modern nation can conquer or be conquered.—Philip Snowden.

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 stamped envelope ready to be sent on. (4) Allow one month in this Department for answers to questions to appear.]

The "Flu."

Continued.

HOW shall I know if I take the plague?"

I have asked some half dozen or more people who have recovered about their symptoms, and have come to the conclusion that the signs by which the diagnosis may be made vary somewhat. Sometimes the disease strikes suddenly and the victim crumples up under it in a few minutes—as happened in so many cases at the recent big stock show in Chicago. Usually, however, its coming is marked by several days of headache and dullness, with or without a "cold in the head" and sneezing. Always there is rising temperature. Occasionally there is nausea, perhaps loss of appetite; and later come more or less difficulty in breathing, with probably a hard and rasping cough, and a possible development into pneumonia. Sharp aches and pains all over the body, but especially in the chest and back, are a very frequent symptom, and occasionally, in advanced stages, the patient becomes delirious.

As soon as suspicious symptoms appear one should go at once to bed and call a doctor. Don't be "scared." Nine-tenths of the deaths due to the Flu have probably been because of carelessness, especially keeping about too long after one has contracted the disease and getting up too soon after it.

All the time you have the disease, and for some time after it be on the watch to save other people. Cover your face with a handkerchief or rag whenever you cough or sneeze. Of course, this should always be done, at any time, were it only a matter of politeness, but in case of disease neglect to do so is a grave menace.

Never forget for one moment that the Flu is a germ disease. Of course you can't see the germs, but they are just as real and may be just as dangerous, unless you are careful, as real lions and tigers stalking into your house. It is just this lack of care in regard to germs that causes most diseases to keep rampant in our midst, and the carelessness in every case is due to ignorance. Indeed, one of the very hardest things in the world to teach people who have had no training in science is just this—the reality of germs.—Germs—bacteria, micrococci, all the vast cousinship of organisms which cannot be seen with the unassisted eye, but which are just as real as if they could be, and become most horribly so when one looks at them through a strong enough microscope. If they were even as large as fleas, or mice, what an excitement everyone would be in at the advance of an epidemic! And what a fierce and persistent warfare would be waged against them!—See the fuss a woman gets into if "buffalo bugs" get into her home. And yet, the worst the buffalo beetle can do is to riddle some rugs and clothes with holes and eat the hair off some furs.—Those other little realities, germs, may be a menace to life itself.

Remember, then, always, that the Flu is a germ disease.

—Now this is about all that has been given to the public, so far, about the "Flu." If anything more comes up I shall be glad to pass it on to you.

WHILE we are on this subject, perhaps a little talk about common "colds" may be apropos.

"Oh, it's only a cold," folk say, dismissing the matter with a wave of the hand, yet just a common cold is a germ disease also, and dangerous because of what it may lead to; thousands upon thousands of people die every year of pneumonia, tuberculosis and other diseases, which would never have been contracted at all had the soil not first been made ready by "just a common cold." The reason of this is, argues Dr. Irving Voorhees, in *American Medicine*, that the "cold" germ or micrococcus of catarrh, and the germs of pneumonia and tuberculosis, all work in harness together. The cold prepares the way, weakening certain tissues, which are then attacked by the more malignant germs.

Its Unmistakable Economy in Use— is speedily proven in a Tea-Pot Infusion.

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100% Value 100% Pure Sealed Packets Only.

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Peace Work at War Time Pay



Knit Socks, and Dollars with the Auto-Knitter

We guarantee you steady, pleasant work at war time pay rates for 3 years after the war is over. The demand for knitted socks is always heavy. Help us fill it but get away from slow hand knitting. Use the fast, reliable, modern Auto-Knitter in your home. We gladly take all the socks you wish to send us. We send renewal yarn free and pay you highly profitable prices.

The Auto-Knitter is simple and easily learnt—and secures a good, steady income for full or spare time work in your own home and no previous experience is essential.

Write today for full particulars enclosing 8c stamp. See what good money you and your family can earn at home the year round.

AUTO-KNITTER HOSIERY (Canada) CO., LIMITED. Dept. 02B B, 607 College St., Toronto, Ont.

Compare the tone and value

The only way to get a true idea of the exceptional values of our "Phonolas" is to compare them with other cabinets selling at about the same prices.

We venture to state that you cannot get another phonograph at \$25 equal to the

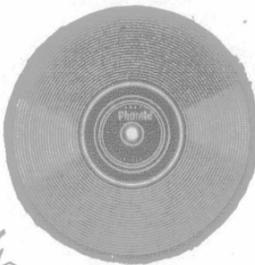


cabinet at that price. Certainly Model B at \$55 is unexcelled value. It is 17 1/4 inches wide, 18 3/4 inches deep, and 12 7/8 inches high—a good-sized instrument, with a double-spring, easy-winding, quiet motor and a surprisingly large volume of tone.

It would be hard to compare our magnificent "Organola" model with any other, because this is the only phonograph in the world with tone control pipes which include every note in the scale and give wonderful clearness and volume to the music.

We are able to give these exceptional values because we make our "Phonolas" complete in our two large plants in Canada at Kitchener and Elmira.

"Phonolas" play all makes of disc records. Ten models, ranging from \$25 to \$310.



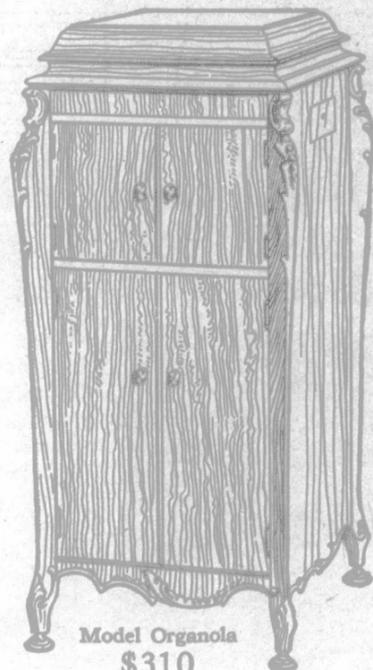
Phonola Double Disc Records 90c

"PHONOLA" RECORDS

They are beautiful, clear, full-toned records — played with a sapphire point. No needles to change. A new list of double disc records every month.



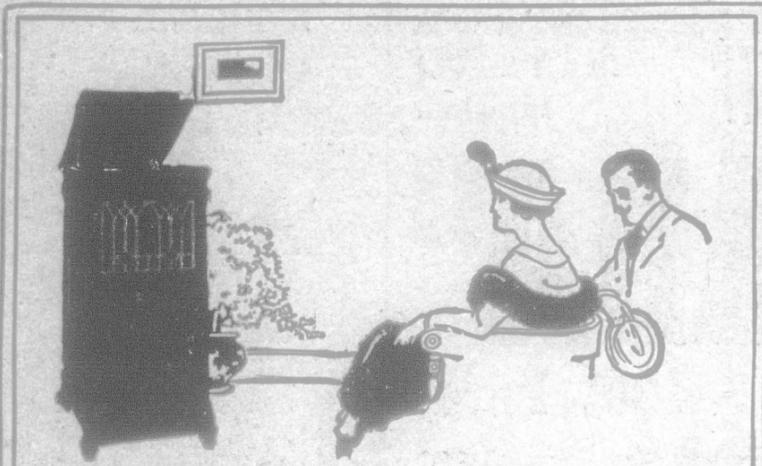
Model "B" \$55



Model Organola \$310

DEALERS: There are some localities in Canada where we require good, live representation. Write for our proposition.

The Phonola Co. of Canada LIMITED Kitchener, Canada



"What Phonograph Shall I Buy?"

How many times, when the subject of purchasing a phonograph or talking machine has come up, have you asked yourself this question?

The Edison tone test answers it for you—completely, convincingly.

Over two million music lovers have been present when this test was being made; and they have realized, as you will realize, that the New Edison alone can actually RE-CREATE the human voice and the music of human-played instruments.

It is all-important that you hear

The NEW EDISON

"The Phonograph with a Soul"

because it is the only instrument that RE-CREATES the singer's voice so faithfully that the human ear cannot distinguish the rendition of the artist from that of the New Edison.

The wise way to choose your phonograph is to have the several makes of phonographs and talking machines sent to your home on trial, where you can make direct comparisons among them, and then decide which one you would like to keep—which one you think you would enjoy hearing as much five years from now as you do to-day.

Read the opinion of the leading newspapers, "What The Critics Say" and our latest booklet, "Mr. Edison's Sublime Gift to Man," both mailed free.

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New Scale PIANOS



THE outward beauty that distinguishes a Williams New Scale Piano is an index of its intrinsic worth. Ideals are built into every one of these famous instruments—ideals of craftsmanship that make for the most enduring quality.

Bungalow Model, \$500.00

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pure air, sufficient exercise, and warm, light clothing will help to ward off colds. Also constipation should be avoided and sitting in close, over-heated rooms. When one is very much fatigued or over-heated, one is much more likely to take cold. If such a condition cannot be avoided one should fortify oneself at once by sipping a glass of hot milk, or even a bowl of hot soup or cup of tea, with a little bread and butter. Men, women and children should observe this rule.

A Clothes Moth.

Dear Junia.—I am mailing you to-day an insect which I found in a good mink marmot fur. On the hair enclosed are specks which I thought were eggs. Also the cocoon is enclosed.

Could you tell me the name? Do they increase very rapidly? and do they attack any other than fur goods? The fur was cut off the skin although the skin was not touched. Also how can they be exterminated?

2. Besides this in the woollens in the attic I found innumerable insects. I destroyed all I found so can mail you only the cocoon. They were the color of the cocoon and about that shape. They varied in length from one-eighth to one-half inch in length and had a tuft of hair on each end. I shall be very glad to know how to eradicate these, and any other information regarding them. Thanking you.

Bruce Co., Ont.

M. M. M.

ANSWERED BY PROF. L. CAESAR, O. A. C., GUELPH.

The insect in question is one of our two species of Clothes Moth. The little dark case is the case in which the larva conceals itself. This case is always made out of the material on which the larva feeds and so will be of the same color as that material. This pest attacks all kinds of woollens, also feathers and furs, but does not injure cottons unless these are directly touching woollens. The eggs are always laid by the little whitish or yellowish moths on or near the material they feed upon, as in the present case on the fur.

It is not difficult to protect furs. In April as soon as the furs are no longer required take them outside, brush and shake them well, place in a pasteboard box,—a tailor's suit case is excellent—wrap the box carefully with good unbroken wrapping paper, then rewrap with another paper, placing this so that the edges will not be at the same places as the previous sheet. Then put on a third paper and tie securely. These three coverings prevent the tiny larvae from finding their way into the box. One ply would not do so.

It is very important to put the furs away early in spring before the moths appear. If desired the box may be taken outside in July and examined to make sure all is well.

Woollens and other goods may be protected by carrying all out into the bright, hot sunshine in spring and leaving them there two or three hours. In the meantime the clothes closets should be washed with scalding water, or better the floor and all cracks sprayed with gasoline (keep all lights away for fear of fire). Shake and brush the clothing before bringing in. About July 1st and again August 1st repeat the process. Examine carefully also any old bundles of woollens or anything in which the insects may be breeding, so that these useless garments or other material may not act as centres of infestation.

Naphthalene either in solid pieces or as flakes will help greatly to keep the pests away if used in strength of a quarter of a pound to five cubic feet of space. Hence about one pound in a closed trunk will protect any material placed therein. Of course the odor is not very agreeable.

The Reply She Sent.

A soldier at the front got short of money, so he sent home the following letter:

"Dear Mary.—We lost a trench this morning, and we must replace it at any cost, so will you please send me five pounds at once."

Sad to say he had a wily wife, who sent the following reply:

"Dear Jim.—Sorry I have not five pounds towards replacing the lost trench but I enclose two candles to help you to look for it."



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Running Sores, Bruises and Sprains

in either man or beast are quickly healed with Egyptian Liniment.

Egyptian Liniment removes all unhealthy matter from scalds, burns and festering wounds, thus enabling Nature to restore healthy flesh. 35c Everywhere

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20	\$5.00	26"	\$7.75
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You can order direct from this list, saving both time and money. Simply mention diameter of blade with size of hole wanted, and remit with your order. I ship promptly.

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Longfellow	70 lbs. \$4.50
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Specially priced for early shipment, carefully selected, strong, vigorous seed. Recent tests show 95 to 98 per cent. germination

Bags Free
Orders of 5 bushels of corn or more, we will pay freight in Ontario and Quebec. Write at once for our ADVANCE PRICE LIST and compare our prices with others. We sell direct to farmers. No Middleman's profits.

BARGAIN IN BAGS
Second hand bags strongly patched by machinery. Cotton first quality, \$6.00 per dozen. Cotton, second quality, \$5.00 per dozen; third quality, \$3.50. Jute sugar bags, \$1.65 per dozen. Jute flour bags, \$2.00 per dozen. Write for our Poultry catalogue.

GEO. KEITH & SONS
124 KING ST. E. TORONTO

The Beaver Circle

Toban's Pup.

[From "On the Fringe of the Great Fight", by Col. George C. Nasmith", McClelland, Goodchild & Stewart, Publishers, Toronto.]

Private Toban, contrary to army orders, owned a dog. It was a nondescript pup, with a cross-eye, and also a kink in its tail. It was colored a sort of battleship gray, with two or three splashes of brown on the flank, and its nearest blood relative was probably a French poodle—though his ancestry was sometimes a subject of prolonged and heated debate between Toban and his mates.

Before the second battle of Ypres, when the division was in training, the Canadians did a good deal of route marching. Toban used to take the pup along with him and the pup used to become tired. Then Toban would pick him up and carry him. Finally the medical officer noticed his fondness for the dog and would, on occasion, take the pup in front of him on the saddle.

Once the battalion was going into action and the M. O. was busy at the regimental aid post, making preparations for a rush, when Toban came in. "Say Doctor", he explained, "I can't take the pup with me and I tied him to a tree down the road."

"I will look after him," promised the M. O., and Toban disappeared.

"Here Corporal, find that dog, and label him with Pte. Toban's number and company," ordered the M. O.

In a couple of minutes the Corporal returned.

"Say Captain," he reported, "I found the pup wrapped up in Toban's blanket and tied to a tree."

The rush began and the doctor forgot all about the dog until an hour later, when Toban, spitting teeth and blood, stumbled into the room with a bullet through his jaw.

"Oh, say Toban", called the M. O., "I found your dog, and he's all right."

When Toban's face was bound up the M. O. asked, "Do you think you can make the field ambulance by the bridge?" Toban nodded and started off.

A minute later he thrust his head into the room—the pup was in his arms, still wrapped in the blanket—and spluttering gratefully through the dressings, "I got 'im, Doc, good-bye," away went Private Toban en route to Blighty.

Senior Beavers' Letter Box.

Dear Puck and Beavers.—This is my first letter to your charming Circle. My grandfather takes the Farmer's Advocate and likes it fine. So he wanted me to write, so I am going to try my luck. I have 2 sisters, Dorothy is 11 years and Margreta is 9 years old. They both go to school. I am 13 years old and was in the Jr. IV at school.

We have about a half a mile to go to school. I have lived on a farm all my lifetime and I like it fine, and we have quite a bit of stock. I raised some chickens last summer, and this fall we are eating them and they are good.

We have two horses, and last summer we rented a farm and hired horses and a hired man, and I had to help in haying. I raked over half of the hay, and I liked it fine. I had to drive the horses on the hay-fork, while Daddy was in the mow leveling the hay, and my uncle on the load to help unload in the harvesting, I had to throw the sheaves back to Daddy.

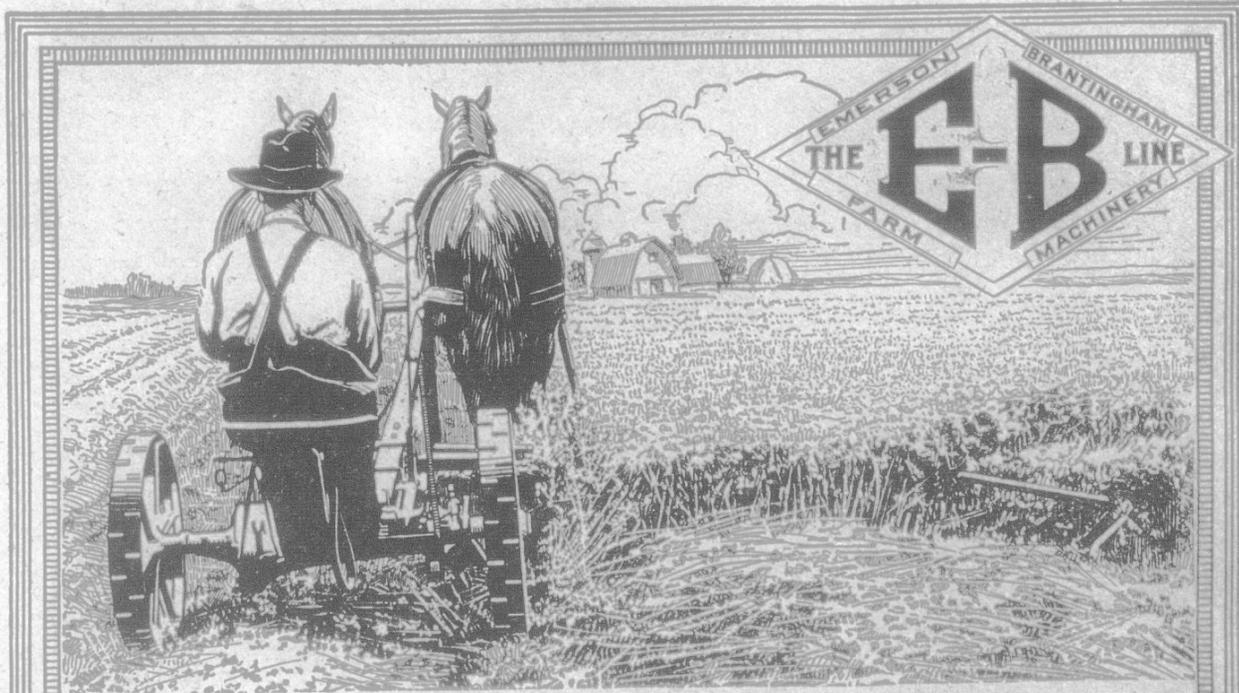
I think I'll start at something else. I had 2 uncles and 1 cousin in the war. I wish one of the Beavers of my own age would write to me and I will answer.

I think I will close now, and wish to see my letter in print pretty soon. I hope the w. p. b. is sick with the whooping cough when this arrives. I will close now.

Bye, bye.

HILDAGARD SCHORMAN, age 13.
Port Carmen, Ontario.

Dear Beavers.—This is my first letter to your charming Circle. I go to school every day possible, but just lately this terrible plague forced us to close the schools. I like reading the letters very much, they are so interesting. My father has taken the Farmer's Advocate for many years and likes it very much. I live on a farm of one hundred and forty acres. Of course there are many things



Saves Crops and Labor By Cutting Twice as Much Grass in Same Time

Labor saving and crop saving are going to be more important than ever before in the history of the world.

The E-B (Standard) Mower is a big aid to conservation of man power and increase of crops.

With its eight foot swath it does more work in less time with no more pull on the horses than many a five foot mower. Also made in 7, 6, 5 and 4 1/2 foot sizes, with correspondingly easy pull.

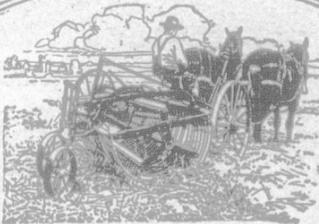
The E-B compensating lever and spring carries the weight of the cutter bar on the drive wheels. No side draft. No weight on the horses' necks. Less wear and tear and longer life to the machine.

Do your mowing with the E-B and you'll have a more successful haying season, less work, a better crop.

See your E-B dealer and have him explain all of the points of E-B Mower construction.

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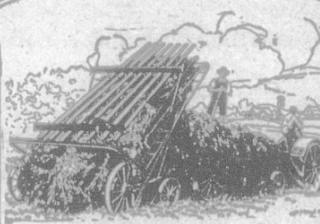
E-B Side Delivery Rake

Rakes Three Acres in the Time of Two
Three swaths instead of two, three acres while others rake two, that is the story of the E-B Side Delivery Rake.

Labor saving, time saving, when time means the difference between a good crop and a poor one. Light, fluffy windrows that allow the hay to cure gradually and thoroughly.

Teeth can be changed from seat for wet hay or dry. Lever changes from rake to tedder instantly.

See your E-B dealer for complete facts.



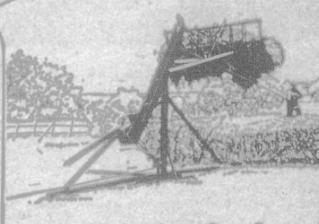
E-B Hay Loader

Gets All the Hay - Without Wadding, Rolling or Twisting

The E-B Hay Loader cleans the windrow as it goes along. It handles the hay gently—does not tear stems and leaves or thresh out seeds. 66-inch sweep of rakes parallel to ground assures clean raking and easy action.

Continuous push upward prevents hay being drawn off rack—hay may be allowed to accumulate at rear of rack without clogging. Put an end to the hardest work of haying by putting an E-B Hay Loader on your farm.

Get complete facts from your dealer.



E-B Swinging Stacker

Lifts the Hay High—Places it Where You Want It

Building a firm, well-shaped stack is easy with the E-B Swinging Stacker.

Simple in construction, with strong wood frame and powerful steel angle plate and cast hinge block.

Load of hay received from rake after being carried upward is easily swung into any desired location by operator and dumped.

The rapidly increasing number of E-B Stackers used by the most progressive farmers in the country is proof of their being practical for your farm.



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Are all bringing good prices. Ship your lot to us and receive highest market figures, returns made same day as shipment is received. Shipping tags furnished free. Write for some and price list.

WM STONE SONS, LIMITED

WOODSTOCK, ONT.

to do now because the war made a scarcity of help. I was at Toronto Fair last year and enjoyed myself very much. I have taken sixteen music lessons and expect to take more when my music teacher comes back. Her name is Avis Johnston; she is fifteen years old. I like her splendidly. We live across from a Holstein dealer. His name is Mr. C. E. Smith. He has all kinds of pets, three ponies and all kinds of chickens. He has a tractor, a truck and a car. Well as my letter is getting long I will close wishing the Beavers every success.

MARY WATSON, age 12.
Hatchley, Ont. The entrance class

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SEND ME YOUR BOOK

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Dear Puck and Beavers.—This is my first letter to your charming Circle.

My father has taken the Farmer's Advocate for as long as I can remember, and I like reading the Beavers letters very much.

I live on a farm of two hundred acres. We have two hundred sheep; I have ten sheep of my own. I go to school every day. My teacher's name is Miss McNeill; I like her fine. I have about half a mile to walk to school. My brother drives me in the winter. We had a school fair this fall, I got five prizes. I am glad the winter is here as I like skating very much, there is a pond nearby and my brother and I go skating after school.

As my letter is getting long I will close hoping the w. p. b. got the "flu", wishing the Beaver Circle every success.

Yours sincerely,
HELEN MCINTYRE, age 12; Sr. 4th class.
Richmond, P. E. I.

Dear Puck and Beavers.—This is my first letter to your charming Circle. I like reading the other Beavers letters, and think they are very interesting. My father just began taking the Advocate last spring. For pets I have a little pup six weeks old; I call him Carlo, and a pet cat called Buff. I also have a pet rabbit called Susan. They are all great pets. I live on a farm two miles from town. I had a garden plot this year; in it I grew potatoes, asters, and parsnips. I had two uncles over in France. I have read, "The Visit to Dobby Hall", "Jeff and Left", "Christie's Old Organ", and some other books. I do a lot of sewing, I like it. I go to school every day. I like going to school. I'm all alone in my class. As my letter is getting long I will close hoping the waste-paper basket is full.

AUDREY ORTWEIN,
Englehart, Ont. age 12, Class, Sr. Third.

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

Dear Puck and Beavers.—This is my first letter to your Circle. We have taken the Advocate for quite a while, and like it fine. I always like to read the letters to the Beaver Circle. I have a pet calf, and when he was small I could carry him in my arms. I also have a pet dog, I call him Watch. He is a good dog; he will go back and take the cows up for me every morning, and he will come with me for them at night. I milk two cows at night, I have not time to milk in the morning as I have two miles to go to school.

I go to school every day. My teacher's name is Miss McArthur and I like her fine. I am in the Senior Third Class.

As my letter is getting long I will close with a riddle:

Four brass eyes, two leather wings, if you can't guess that your no great things.

Ans.—A saddle.
Wishing the Beavers every success.
ANNIE CAMPBELL, age 11.
R. R. No. 1, Lucknow, Ont.

Dear Beavers.—This is my first letter to your charming Circle. As I enjoy reading other letters in the Advocate, I thought I would write. I am going to school every day, but our school was closed on the account of the influenza. I didn't have it, my father and mother and the rest of the family had it. I worked out last summer helping the farmers in with their harvest. My father is a carpenter. When I have holidays I help him with his carpenter work. I have nine chickens. I feed them and see that they are in the pen at nights. I wish the Beaver Circle good luck. As my letter is getting long I will close it with a few riddles.

What tree is of the greatest importance in history? Ans.—The date.

Why is the letter F like a fish-hook?

Ans.—Because it will make eel feel.

CHARLES MOYER, age 14; Jr. 4th Class.
R. R. No. 1, Drumbo, Ontario.

Junior Beavers' Letter Box.

Dear Puck and Beavers.—This is my first letter to your Circle. The Farmer's Advocate has been in our home for a number of years, and I certainly like reading your Circle. I go to school every day I can, and I am in the Senior Second Class. Our teacher's name is Miss Beaman and we like her fine. She has a car and we often get a ride with her. I live four miles west of Stouffville. My brother has a nice flock of sheep, and I have started to raise ducks. Our school was closed on account of the Flu,—and I helped papa pick the apples. I was to the exhibition last year; had a good time. My father was on the Grand Jury for four weeks in September. Now I will close with a riddle.

What does a cat have that no other animal has? Ans.—Kittens.

GRETA RATCLIFF, Sr. II Class, age 10.
R. R. 4, Stouffville, Ont.

Dear Puck and Beavers.—This is my second letter to your charming Circle. The first time I wrote I saw my letter on the Honor Roll. My father has taken the Farmer's Advocate as long as I can remember. I got two prizes at the school fair, one for drawing a map of Perth County, and for running a race. I had a garden of my own; I had six different kind of vegetables, and for flowers I had, Phlox, Gladiolus, Asters, Tame Alice, and Nasturtiums, but the Phlox was the nicest.

ERNA COOK, age 10, Jr. 3rd Class.
R. R. No. 3, New Hamburg.

Dear Puck and Beavers.—This is my first letter to your Circle. I do not go to school on account of the Flu. I went all summer. I have to walk one mile and a half to school. We have a good teacher; her name is Miss Herries. We live on a small farm and I am the only one to help daddy. I help feed and water the chickens. My father keeps Bred-to-lay-Rocks, and they lay too, I tell you. I go for the cow and water her and bed her and husk corn for the pigs. I have a kitten and her name is Sabby.

I will close or you will get tired reading this. Wishing the Beavers every success.
LUNDY BENNETT, age 8.
R. R. No. 2, St. Williams.

Honor Roll.

Senior Beavers.—Dorothy Scharman, Agnes Collison.

This is my e. We have uite a while, like to read rcle. I have small I could also have a ch. He is a and take the ming, and he em at night. ave not time ave two miles

My teacher's d I like her rd Class.

long I will ather wings, ur no great

success. L, age 11. t.

y first letter As I enjoy e Advocate, am going to school was he influenza. d mother and t. I worked e farmers in ther is a car- ys I help him I have nine see that they I wish the as my letter t with a few

t importance a fish-hook? eel feel. 4th Class. ario.

ter Box.

This is my e Farmer's home for a ainly like school every enior Second e is Miss e. She has le with her. ffville. My sheep, and ducks. Our unt of the the apples. year; had a n the Grand ber. Now

at no other ss, age 10.

This is my ing Circle. y my letter father has as long as o prizes at ing a map nning a ny own; I vegetables, Gladiolus, asturtiums,

rd Class.

This is my o not go to u. I went k one mile ave a good s Herries. l I am the p feed and ther keeps ay too, and water rn for the r name is

red reading ry success. age 8.

Scharman,

Junior Beavers.— Verna Parker, Vivienne Jeffs, Laura Locking.

Beaver Circle Notes.

The following wish some of the Beavers to write to them: Dorothy Scharman (age 13), Port Carmen, Ont.; Verna Parker (age 10), R. 1, Formosa, Ont.; Hazel Bellisle (age 12), Craigmont, Ont.; Vivienne Jeffs, Bond Head, Ont.; Agnes Collison (age 13), R. 1, South Mountain, Ont.; Annie Brown (age 13), Musgrave Town, Newfoundland; Laura Locking (age 11), Emo, Ont.

Riddles.

When is a farmer cruel to his corn? Ans.—When he pulls its ears.—Sent by Donald Thompson.

What day in the year is commanded to go ahead? Ans.—March Fourth.

Why is the letter "K" like a pig's tail? Ans.—Because it is the last of "pork".—Sent by Evelyn Bailey.

Our Serial Story

The Forging of the Pikes.

A Romance Based on the Rebellion of 1837.

Serial rights secured by the Farmer's Advocate and Home Magazine.

CHAP. VIII.

The Sore Day.

July 14, 1837.

I HAVE had a sore day. To begin with it was hot enough to make ice sizzle, and I awoke in the morning with the air in my room so close that I could scarcely breathe.

But there was no dawdling, for the hay was to be faced, and that in the worst end of the hay-field, in the part where the stumps are not yet cleared away, behind which we shot at the wolves last winter, so that at last they slunk off without more ado.

Since the hay has been in cocks long enough it was now ready for hauling, so I lost no time in putting the yoke on Buck and Bright and fixing them to the wagon, after which my father and I rode to the field. I do wish we were rich enough to buy a mate for Billy, for this hauling of hay and grain with the oxen is a mighty slow job. In the meantime, Billy, the lad, has altogether too fine a time, and grows sleeker every day, and almost too fat, so that I think I shall have to ride him more for exercise. This day, however, he had run enough!

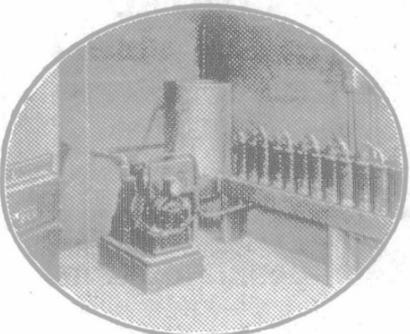
All morning we worked in the boiling sun, and were at it as soon as we could in the afternoon, for such sultry weather as this often brews a storm and the hay must be stacked. But at about three o'clock there came a break, for which that rascal Blucher well deserves a thrashing. And yet perhaps not altogether, for the oxen were in devil's mood all day. The flies were at them, and it may be that that made them more awake than usual and more anxious to lunge off from side to side whenever a clump of green grass was to be seen among the hay stubble.

I was in no best humor, nor was my father, who said little as he was building the loads, but mopped his face and got rid of his discomfort by an occasional growl at the weather—aye! Then, at about three, as I have said, the climax came. There is a wasp's nest in the end of a log where the raspberry bushes grow, which I have been intending to set fire to, but have neglected, and nowhere would do Blucher but nosing about in that part of the field. Twice or thrice I whistled him and he came back, but finally I forgot him and he got into the wasp's nest.

With that he didn't forget me, on my word, for he came to me on the mad run, making such a howling and hullabaloo that the oxen were frightened and tossed up their heads as far as their yokes would allow, and switched their tails. After that the wasps must have got on them as they did on me, and my father too, for the next moment they were off across the field on the gallop, with Blucher at their heels, barking like mad—whether out of a sense of devilment or duty I do not know—and the wagon bumping over the hummocks, and lurching, and knocking into the stumps.

After one glimpse of my father wildly waving the top of a haystack about his

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head to defend himself, I after the oxen; but all my running did not catch me up with them, nor yet did it rid me of the wasps, for they stung me on the neck and on the lip, so that it swelled up in fine style.

At last at the pine stump fence the brutes came to a stop, with the wagon almost on its side over a log so that the tongue was broken and the irons twisted.

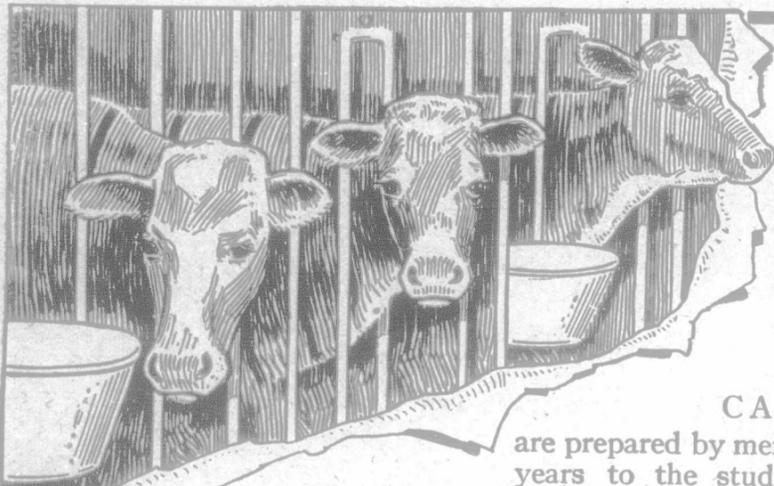
This was a fix, with no time to waste, so I loosed the oxen, and my father came up and together we examined the damage.

"There's no tying it up to do, Alan," he said. "You'll have to take the irons up to the blacksmith shop to have them straightened. I'll get another tongue ready. Where's Billy?"

It took some time to free the irons, but Billy came quickly enough at my whistle, and so I on his back and off down the road on the gallop, hoping that, as I passed the tavern, Barry would not be in sight, because of my lip. Indeed for a minute I hesitated whether I should not go to the shop at the Corners instead, so as to go in the opposite direction, but that seemed too foolish, in the middle of haying-time, since the distance is so much further.

Good luck was with me, for when Billy and I passed at a canter there wasn't the sign of a skirt; but evidently some travellers had arrived, for in the yard a man, strange to me, was rubbing down

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Wish our customers a Happy and Prosperous New Year, 1919.
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LECIESTER SHEEP

Present offering: One good yearling bull and a number of good breeding ewes and lambs.

"Blue Mountain Farms"
Camperdown Ontario

Successful Dairymen
have found that it pays to dehorn their cows. Drovers pay more when they are dehorned, and shippers are insisting on having cattle dehorned.
THE KEYSTONE DEHORNER is the most effective instrument for the purpose. Write for booklet.
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NONE-SUCH SEED CORN

Golden Glow—Wis. No. 7—White Cap. I furnish a good new cotton bag and pay charges to your nearest station, also guarantee that if not satisfied in ten days return corn at my expense and money will be refunded. Write for prices and particulars to R. A. Jackson, R.R. No. 1, Cottam, Ont.

two of the finest riding horses that I have seen in long enough, so that had it not been for my lip I would have stopped to get a better look at them. Black, one of them was, black as midnight, and sorrel the other, very fine and slender, with alert heads, and extra fine trappings, stamping and pawing as though they knew themselves of fine horse clay.

When I got to the blacksmith shop, which I love because it is altogether in the bush though at the side of the high road, Red Jock was standing in the door, with the sweat streaming down his face, and no wonder, for the fire was going full blast in the forge, and that added to the warmth of the day made a fine brew of the air.

"Hello, Alan," he said, as I dismounted and tied Billy to the post, "What's wrang wi' yer lip? Hae ye been in a scrap wi' auld Deveril?"—which from some men might have made me mad, for I might have connected it with Barry, but which I could take from Red Jock with good grace since I knew it was but a bit of pleasantry directed against the tavern-keeper, with whose meekness he has but little patience.

So I answered him civilly enough and soon had him laughing over our adventure with the wasps and the vision of my father performing with the top of the haycock.

"Sit doon i' the door," he said, when I had finished, "an' Ah'll get ye a bit weed, that'll tak' doon the swellin'," and so I sat' down on the step while he went through the back door, returning presently with some leaves.

"Here clap that on't" he said, "while I luik at the airns. Fegs but they got a fine twist! It'll tak' a bit time to get the kinks oot, Ah doot."

With that he took them into the shop and set to work with them, while I sat on the steps between the two doors, holding the leaves to my lip, and glad enough of the draft which made a little comfort, even though, from time to time, a hot blast came from the forge.

"Did ye see anyone ye didna ken when ye gaed by the tavern?" he called, from the depths of the smithy.

"Two strange horses and someone grooming them," I answered. "I didn't stop."

"Ye didna?" with a twinkle in his eye.

"Weel that's odd! What fer no?"
Which I parried by saying, "Because I'm not so thirsty as you and Big Bill and some of 'em, I suppose."

"Nae doot, na doot," he assented cheerfully, "but hae a care Alan! Gin ye couple me mair wi' Big Bill Ah'll—Ah'll tak' the bit leaves awa' frae ye an' ye'll no be able to drap in on the way back."

"Don't!" I begged. "Say, they're the right stuff, Jock; they're taking the pain right out. But what about the strangers at the tavern? Did you see them?"

"Aye, did Ah no!" with evident admiration, "an' fixed a shoe on ane o' the horses, the finest beast Ah've shod sin' the Governor went through three years syne.—But no a horse but for a gentlemen, ye ken,—ower slim i' the legs, an' ower mettly i' the brain, prancin' about so that Ah'd a deil o' a kittle pittin' the shoe."

Red Jock fixes folk first by the horses they ride, and afterwards by themselves, so that one usually has to question him to get any satisfaction further than about the animals.

"Who are they?" I asked.

"Belzebub' wis the black, 'Bub' for short, an' a richt guid handle, thinkin' o' the color an' the fire in his een. Ah'll be blowed, Alan, if the beast didna try to paw me! But Ah'd no grudge fer that."

The ither ane, they ca'd 'Fistiliferus,' or summat, Noo, Ah had, Alan, that the name o' a horse should be short an' shairp, sae the puir beastie'll ken when he's ca'd,—'Pete,' say, or 'Andy.'—But 'Fistiliferus!' in disgust.

"Was it Mephistopheles?" I suggested.

"Noo, Ah doot that wis juist it," he assented.

"But you haven't told me about the men."

"The men? Oh, ane o' them wis a great buck, gin Ah ken the breed, sae I thocht it maun be the Governor himsel', an' saluted.—Kind o' haughty, ye ken, but laffin' an' very gay, he wis. The ither, wha sat the sorrel, Ah doot wis a servin' mon. It wad be him ye saw i' the yaird."

I tried not to be curious, but the arrival of strangers in these parts is an event, and so I asked,

"Where are they going, Jock?"

"Deil if Ah ken. Ah didna speir. But doot Ah it'll be yer nose oot o' joint, Alan—an' nae harm intended—gin they hang about the tavern ower long, for that ane is a gey fine gentleman."

In fun I threw a clod at him for his teasing, but his chaffing did not alarm me, for what could a passing stranger mean to Barry?

"Perhaps it was the Governor," I hazarded.

Jock did not think that. "He's no Sir Francis," he said. "He wadna daur gang about sae lanesome like, wi' the love that's roamin' about fer him. He'd fear he'd suffer a clood on the heid some fine nicht.—But 'twas a gey fine gentleman, some young buck wi' siller tae spare, Ah doot, an' a speerit o' adventure. That Belzebub wad cost mair poun's, I doot, than any ten horses i' these parts—or twenty."

Noo ye'll hae to haud yer gab fer a while, Alan, or Ah'll no hae the airns dune by sundoon."

With that he set to work, heating the irons and hammering, while I sat there, holding the weeds to my lip and changing them, the swelling going down all the while.

When at last he had finished I judged

it quite gone, and began to wonder whether I might look in at Barry.

"How did you know about this weed, Jock?" I asked.

"Frae yon Joe Wabadick, the Indian lad doon ayont the Ford," he replied. "Thae Indians cam', there frae the Reserve a month or mair syne. He's a braw smart laddie! It wud be tellin' mony o' the lads aboot here summat gin they took a leaf oot o' his buik.—Present company excepted, Alan. Ah wis thinkin' o' that rapsallion Dick Jones an' thae fule laddies he gangs aboot wi'."

"Well, poor old Dick isn't so bad," said I, "considering the chance he has."

"Noo ye've said it," he agreed, putting a few final thumps to the iron, "fer of a the clashing female bodies, that mither o' his! . . . Weel, laddie gin ye will tie yersel' tae a kirtle, Ah'm no sorry it's Barry ye've picked on. She's the dangdest fine lassie in these pairts gin she is the dochter o' yon sheep Deveril. Got some of her mither's spunk, Ah doot. . . . Noo, laddie, here's yer bit airns, an' aff wi' ye."

He was slinging them together with a bit of rope and handed them up to me as I sat on the horse. "Billy's luikin' braw," he remarked, patting his neck; then, leaning towards me and dropping his voice to a whisper, although there was no one about, nor a sound except from a katydid scraping in the grass at the side of the road and a chipmunk chattering in the big beech tree, "Hae ye heard aught o' the meetin' at Lloydtoon?"

"Nothing," I replied, "except that Mackenzie left The Schoolmaster's post haste to be there in time for it."

Jock stuck his hands in his pockets and paused to eject a quid of tobacco on the road, looking from right to left as though fearful of someone's sudden appearing.

"The news has come frae ane to anither," he said, "that there wis strong speakin', an' some talk o' resortin' tae arms gin a' thing else fails."

Almost I started, for I had not taken Hank's prophecies seriously.

"My father thinks there will be no need of that," I said.

"Dis he the noo? Weel, ye're faither's aye a canny mon, Alan, an' a richt sensible. But we'll see, we'll see."

He waved his hand and turned back to the shop, while I went on; wondering what ferment is getting into the brain of everyone of late.

I did not intend to turn in at the tavern, but opposite it, my lip being now to itself again, I could not for the life of me pass by, the more so that the strange horses had disappeared, and the yard was quite empty, basking in the sun.

"Just for a minute," thought I. "It'll be neither here nor there with the hay;" and so I got off Billy and tied him to the post near the pump.

There was no one in the hall, but there were voices in the room to the right and so I tapped at the side of the door, and without more ado stepped in, when I swear I was never so abashed in my life;

Soldiers Home Coming Campaign

War Work and After-War Work of the SALVATION ARMY

"FIRST TO SERVE—LAST TO APPEAL"

The Salvation Army has for 53 years been organized on a military basis—inured to hardship, sacrifice and service. It is always in action, day and night.

It has maintained Military Huts, Hostels and Rest Rooms, providing food and rest for tens of thousands of soldiers each day. 1,200 uniformed workers and 45 ambulances have been in service at the front—in addition to taking care of the needs of soldiers' families here at home, assisting the widows and orphans, and relieving distress arising from the absence of the soldier head of the family.

Notwithstanding all the Government is planning to do, notwithstanding the pensions and the relief work of other organizations, hundreds of cases of urgent human need are constantly demanding the practical help the Salvation Army is trained and equipped to render.

The Salvation Army Million Dollar Fund

January 19th to 25th

While it could do so, the Salvation Army has carried on without any general appeal. Now the crisis is arising with the return of the 300,000 soldiers. The budget for essential work during the coming year has been prepared. A million dollars must be raised to continue the after-the-war activities, which include:

Hostels for Soldiers

Salvation Army Hostels are vitally necessary for the protection and comfort of the soldier at the many stopping places between France and his home here in Canada. These Hostels—or military hotels—provide good food, clean beds, wholesome entertainment at a price the soldier can afford to pay. If the boys did not have a Hostel to go to, WHERE would they go?

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Scores and hundreds of cases could be cited where soldiers overseas have been comforted by the assurance that the Salvation Army has stepped in to relieve their families from dire need. As an instance, a mother with six children is located—no fuel, weather freezing, food and funds exhausted by sickness and other troubles. They are taken to Salvation Army Emergency Receiving Home. Winter and 300,000 soldiers returning increase the demands on the Salvation Army, whose

personal help alone is of avail. Consider, too, the vast and complex problems arising out of the care of soldiers' widows and orphans.

Keeping the Family Unit Intact

The women of the Salvation Army on their visiting rounds accomplish the apparently impossible. Is the discharged soldier out of a job? They find him one. Is the wife sick, the home-work piling up, the children neglected? They nurse the wife, mother the children, wash and scrub. Is there urgent need for food, fuel, clothes or medicine? They are supplied. It takes money, of course, but more important is the loving spirit of service in which the work is done.

When the Soldier Needs a Friend

The Salvation Army Lassie provides the boys with hot coffee, the pies, chocolate, magazines, writing materials, and the spiritual comfort which the boys in Khaki need. Until the last homeward-bound soldier is re-established in civilian life, will you not help the Salvation Army to combat the discomforts and evils that beset his path?

The service of the Salvation Army, founded on sacrifice, demonstrates the true spirit of the Master. It is directed to the extension of the Kingdom of Christ. For two generations the Salvation Army has stood out and out for God.

It approaches practical problems in a practical way and achieves RESULTS. It co-operates with all—overlaps none. It recognizes neither color, race nor creed. It is always in action, day and night. No organization does greater work at less cost. To carry on its great work it must have financial help, and on its behalf members of the Dominion Government, business men and returned soldiers endorse this appeal for funds.

"LET YOUR GRATITUDE FIND EXPRESSION IN SERVICE"

THE SALVATION ARMY MILLION DOLLAR FUND COMMITTEE

Headquarters: 20 Albert St., Toronto

12

NEW BARNS, 1919

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During the 6 years in which we have erected hundreds of Perfect Protected Steel Truss Barns all over Canada NOT ONE has been struck—NOT ONE CENT has been lost.



Fresh June Pasture in Winter Time

"Sugar Beet Meal has properties similar to fresh June grass, which, although low in protein, stimulates the milk production of the dairy cow."

So says G. E. Thadd, Vice-President of the Maritime Trading Corporation, Buffalo, N. Y., who has made a special study of Dairy Ration Feed and Food Products, and has had a wide experience with Sugar Beet Meal.

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For many years we have sold our Sugar Beet Meal largely in the United States, where the farmers have learned to highly appreciate this feed. We have received offers as high as \$45 per ton f.o.b. Chatham, for our output, but, at the request of the Canada Food Board, we are this year disposing of our entire output to Canadian farmers. To hasten the introduction of Sugar Beet Meal in this country, we have decided to fix a special price of \$35 per ton—containers to be returned to us. In this way we hope to help out the existing shortage of cattle feed in Canada.

Write for our new booklet describing the value of Sugar Beet Meal, and telling how to obtain it and how to use it.

DOMINION SUGAR COMPANY, Limited
Head Office: CHATHAM, ONTARIO

for there was Barry sitting at one side of the table, leaning her elbow on it and staring across at the "very fine gentleman," evidently, who was talking to her.

Before I had time to collect my wits and betake my way out, she gave me just a nod and turned back to him, her gaze fixed on him, and as unconscious of me as though I had not been there at all, which cut me to the quick.

Just time had I to notice that he was the handsomest man I have ever seen, and perhaps thirty years of age, with a blue coat, all silver-buttoned, and gray riding-breeches, and yellow riding boots as bright as though just out of the shop, when my wits and my manners came to me and I took myself out of the house. But that was not the last, for when I was untying Billy the rope had become tightened so that it took some minutes to loose it, and before the job was ended I heard them coming from the hallway.

For an instant they stood on the step and I heard Barry's laugh, then her voice, to which he laughed, and glancing up I saw the two of them gazing into each other's eyes and smiling.

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That made me bend over the knot again, and by the time I had it out there were footsteps coming over the gravel and the "fine gentleman" was beside me, with Barry still standing at the door.

"My dear fellow!" said he, "Have you seen my man?"

"I have seen no one," I replied, bristling at being called "dear fellow," and preparing to mount.

The stranger, however, laid his hand on my shoulder, looking about the while as though searching for his "man."

"Heaven knows where he's gone," he said. "And my horses haven't had half enough water. They were too hot to be given much." Then, turning to me, "will you be good enough to pump me a trough full?"

"When I have become your lackey,

which I am not at present," I said, hot to the crown of my head, and flung myself on Billy with all despatch, and gave him the touch of my heel that he well knows means top speed. Nor did I look back nor slacken until home was reached, and I saw my father standing in the hay-field, with his rake in his hand, looking to the road at me and doubtless pleased with my hurry to be back at the hay.

* * * * *

This evening at dusk Dick Jones dropped in for a chat, but I was not in much mood for talk. However, he told me—and I have no doubt but that the news came straight enough, through Mistress Jones,—that the stranger's name is Howard Selwyn and his man's Matt Downs, and that the "fine gentleman" is about this country amusing himself, as Red Jock surmised.

* * * * *

It is full two weeks since I last wrote in my journal, for it has been early to rise and late to bed because of the hurry of the work, but so upset was I this night that I was possessed to write the restless-ness off.

I know I am one fool to care that Barry's smile and look were all for that other one to-day, and yet I do fervently hope that he and his Beelzebub and Mephisto may be soon enough off to the regions to which they belong.

Au revoir, Journal. May I be in better and more Christian mood when next I come to you.

To be continued.

Current Events

In the recent elections in the British Isles, with 707 seats to be filled, the returns were as follows: Coalition Unionists, 334; Coalition Liberals, 127; Coalition Laborites 10; Unionists, 46; Asquith Liberals, 37; Laborites 65; National Party, 2; Independents, 5; Socialists, 1; Sinn Feiners, 73; Irish Nationalists, 7. The result was, therefore, a sweeping triumph for Lloyd George, a snowunder for the Asquith Liberals, and the coming forward of the Laborites as practically the only opposition. Among those defeated were ex-Premier Asquith, who lost in East Fife for the first time in 32 years; McKenna, former Chancellor of the Exchequer (Lib.); Walter Runciman, former Pres. of the Board of Trade (Lib.); John Dillon (Irish Nationalist); Henderson (Laborite); De Valera (Sinn Feiner); and Philip Snowden and Ramsay MacDonald (Pacifist Socialist). Only one woman was elected, Countess Markiewicz, who ran for a division of Dublin, and she is disqualified because of her marriage with an alien. Lloyd-George himself polled 13,993 votes against 1,095 for Austin Harrison, in Carnarvon, Wales. Among the straight Unionists elected were Bonar Law, Balfour, Curzon and Milner. The Unionist element is now the strongest in the House. . . . Among those returned were 8 Canadians.

The Sinn Feiners, it is reported, may refuse to take their seats in the British Parliament, but, resting on the principle of "self-determination" may establish an Irish National Assembly in Dublin. . . . The Coalition Government, in presenting itself for re-election rested its claims chiefly on promises to collect a large part of the cost of the War from Germany, abolish conscript armies in Europe, and form a workable League of Nations. Premier Lloyd-George also proposes a sweeping program of domestic reforms. The strength of the Unionist following elected seems to indicate that for the present there will be no disestablishment of the Church and no drastic temperance action.

The Dollar Chain

For War Relief Work: Contributions from Dec. 20 to Jan. 3: "Toronto", \$2.; Jas. R. Watson, Hawkesbury, Ont., \$1; Mrs. M. Thompson, Mildmay, Ont., \$5; H. C. P., \$2; "Scotia", London, Ont., \$1; A Friend, Langton, Ont., \$2; W. H. Detenbeck, R. 1, Chippewa, Ont., \$3.50; "Ravenswood", \$20; "Toronto", \$2.

Previously acknowledged \$5,755.50
Total to Jan, 3rd..... \$5,794.00

Kindly address contributions to The Farmer's Advocate and Home Magazine, London, Ont.

Gossip.

A Percheron Stallion Offered.

Regarding the Percheron stallion, Nard, illustrated in the Horse Department of this issue and offered for sale by T. J. Berry, Hensall, Ont., the owner writes: "Nard weighs one ton and 25 lbs.; he stands 17 hands high and is a wide, thick horse with good action. He is guaranteed sound and right every way and a sure foal getter, as I have had him two years at my barn. In color he is a dark, iron-grey, and he was five years old last spring.

The Springbrook Holstein Dispersal.

Holstein breeders throughout the Dominion were all more or less familiar with the name, at least, of the late Mr. A. C. Hallman, whose Holstein herd is now advertised by the executors for dispersal on Jan. 15. East or west there was no breeder of any breed of cattle who was held in higher esteem, and in requesting his services as judge, as they often did, the officers of Canada's larger fair associations were always sure that the exhibitors in the Holstein section at least, would value each decision as they were handed down by Mr. Hallman. He was among the first advocates of the breed, and the first to found a herd in Ontario. He had his own ideals and was careful to include them in developing his own herd; the wisdom of which is best evidenced by the high quality which is to be seen throughout the present-day herd. Through the surplus sale held in the spring of 1917 the majority of the older foundation cows in the herd were dispersed, and in the sale now scheduled for Jan. 15 all entries, with one exception are under seven years of age. A summary of the herd shows 14 cows from three to seven years of age, 5 two-year-old heifers, 3 yearling heifers, the two herd sires and ten 1918 calves. As there has been a great distribution of catalogues it seems almost useless to go into detail here regarding individual animals selling. Breeders should, however, note carefully the splendid breeding represented on practically every page in the catalogue, and also the large number of daughters and granddaughters, there are selling, of the 32.16-lb.-bred son of Pontiac Korndyke, Sir Korndyke Boon. This sire was used in the herd for a number of years exclusively, and following him came Sir Echo Beets Posch, a son of Inka Sylvia Beets Posch, the sire of the great May Echo Sylvia. This bull has been used jointly in the herd during the past year, with Hill-Crest Ormsby De Kol, whose get played such a prominent role in the successful Brethen sale of a year ago, which topped the high average for the breed in Canada. Both bulls are selling and furnish Ontario breeders with an opportunity of getting sires far above the average on Jan. 15, at their own price. As will be noted in the advertising copy appearing elsewhere in this issue, there are 26 head of pure-bred Tamworth swine selling, which include the entire herd. This, too, is one of Canada's oldest herds of Tamworth swine, and from which have come many a prize-winner at the leading exhibitions. For particulars as to terms of sale, train service, etc., see advertising copy in this issue, and write or wire at once for catalogue. Address Irvin C. Hallman, R. R. 3, Waterloo, Ontario.

Vol. 38 U. S. Holstein Record.

Registrations of Holstein-Friesian cattle in the United States have reached over 654,000, as shown by Volume 38 of the U. S. Holstein-Friesian Herd Book. This volume includes registrations of bulls from 216,626 to 230,705, and of cows from 391,506 to 423,670, a total of 14,080 males and 32,165 females between September 1, 1917, and February 26, 1918. A complete record of animals registered is given in addition to their age, sire and dam, breeders and owners. A price of \$2.75, delivered, is charged.

Easy Enough.

"Why did you leave your last place?" asked the boss. "I didn't leave it. It left me." "Rather strange, I should say." "Not at all. I worked in an ammunition factory."



a pair of boots or if he found that sugar was 12 cents a pound instead of "21 pounds for a dollar," he would think the country had fallen into the hands of robbers and thieves. And if he went in to buy a wagon similar to the old one that, like a skeleton whitening in the sun, lies out behind your barn, and was told that the price was \$150, he would have some sharp words to say about "profiteers."

But on the other hand, when he found that a hog is worth as much to-day as a cow was in his day, or that he could get more than \$2.25 a bushel for his wheat, it would make him feel some better. We would simply have to explain to the old gentleman that a dollar is not worth as much as it used to be. That is to say, it will not buy as much of many things as it did in his day. Professors of economics have a phrase they like to use—"the diminishing value of a dollar," they say.

"How much did you get for eggs in your day?" we would ask him.

"Thirteen cents. Two dozen a quarter," he would reply.



"Well, they are worth 60 cents a dozen now. How much for hogs?"

"Well, I remember some forty years ago selling the finest bunch of hogs you ever saw for 2 1/2 cents, per lb. What do they fetch now?"

"Twenty cents, fed and watered."

Yes, we would have lots of surprises for the old gentleman. But there is one commodity that is still the same price as in the old gentleman's day—that's Life Insurance. If Life Insurance premiums had advanced at the same rate as the price of other commodities, they would be twice or even three times what they are. You can maintain Life Insurance to-day with the same yearly deposit as you could fifteen years ago.

There is an Imperial Policy exactly suited to your own particular circumstances. Just fill out the coupon in this advertisement and mail it to us. Then we'll tell you all about it. And you will be placed under no obligation whatever.

THE IMPERIAL LIFE ASSURANCE COMPANY of CANADA HEAD OFFICE - TORONTO, ONTARIO

Branches and Agencies in all important centres

If some old gentleman who died, say fifteen years ago, at the age of seventy, could come back and go shopping with us to-day, what a tremendous shock he would get. If he went into the store where he used to trade and they asked him ten dollars for

The carrying of Life Insurance is a practice that is more and more extending among Canadian farmers. Almost every man and woman wants to save money in order that they may be independent later on in life. Life Insurance is the greatest way to save that has ever been devised. Just think of it!—the moment you sign your application for life insurance for \$1,000 or \$2,000, or \$5,000 you have created "an estate" of that much money. Each year or each six months you deposit the premium with the Company. At the end of fifteen, or twenty, or thirty years, The Imperial Life Assurance Company pays over to you the proceeds of your savings for that period. You don't need to worry about any other kind of saving. You and your family are safe!



If you want to save money to pay off a mortgage, Life Insurance is the way to do it. If you want to build later on, you can easily and quickly raise money against your Life Insurance. If you want to provide for the education of your children, or to buy a farm for your boy later on, or to guarantee your wife and family against trouble and want, if anything should happen to you, the surest and best way to do it is by Life Insurance. In the old days people used to say, "Oh, Life Insurance! No, thanks. You have to die to win!" That is a great mistake. You don't have to die to win, because The Imperial Life Assurance Company has many different plans of Life Insurance to offer that will provide you with money at the time you know you will need it most.

I will read your booklet if you mail it to me. But it must be understood that this does not commit me to any further action.

I am..... years of age and could save and invest \$..... each year

Name.....

Address.....

John Ellman of Glynde

BY MARGARET RAIN.

At the present time and for some years past the periodicals and daily press of Great Britain have fairly shrieked that we should go "back to the land." One literary man actually did go back and demonstrated that on 5 or 7 acres of English soil he could support his wife, himself and several children. We feel inclined to ask whoever said it, would not this man's undoubted abilities as a thinker have been more profitably employed, both for himself and other people, had he gone on with his usual work and bought his bread and butter. Mr. John Galsworthy, who writes good novels, has also given us some hysterical literature on this subject. One thing he says is, if true, important, namely, that the Britons are losing their good looks and becoming an "ugly people." Out of a hundred presumably British persons in London, England, he only considered about 40 per cent. good looking. In his own county of Devon his percentage, he said, was 60, which he found also to be the ratio of good looks in an Australian regiment. He states that he is not hard to please, and the standard he set was low. Another of his statements is that the British are a nation of paupers, because they do not from their own land supply the whole of their daily bread. Are Canadians paupers, because they are obliged to import 460,000 bales of wool from Australia, and yet have not enough woolen clothing to fully supply their soldiers and their civil population? The British are not paupers as long as they can pay for their bread, nor are the Canadians as long as they can pay for the wool they buy and which the Australians are glad to sell. At the same time the Canadians have more reason to be ashamed that they have to import wool than the British that they cannot grow in the United Kingdom enough bread to supply their needs. In Canada there are acres upon acres of land which could pasture enough sheep to clothe all

The Most Successful Men

practically always carry as much Life Insurance as they can afford. They know that a Life Policy gives the only certain provision for an uncertain future.

If wealthy men carry Insurance, how much more is it the duty of those to insure whose families depend entirely upon their weekly or monthly earnings?

The Great-West Life issues Policies on terms most attractive to the wage-earner. Rates are low and profit returns are remarkable. Write for information, stating exact age.

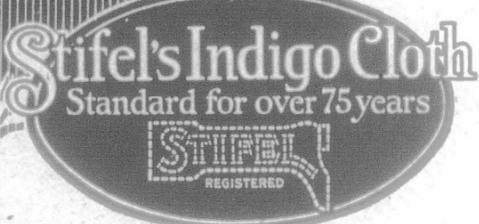
The Great-West Life Assurance Company

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HEAD OFFICE

WINNIPEG

Buy War Savings Stamps





OVERALLS—when you buy them get your money's worth!

Men, ask for Overalls made of Stifel's Indigo Cloth.

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These two sturdy, fast-color fabrics are the most serviceable and economical made. You know, it's the CLOTH in your overalls that gives the wear.

Look for the **BOOT** trademark on the back of the cloth—its your guarantee of the genuine.

Your dealer can supply you. **We are makers of cloth only.**



J. L. STIFEL & SONS
Indigo Dyers and Printers

WHEELING, W. VA. 260 CHURCH ST., NEW YORK

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

Canadians were our population multiplied by twenty. It is the duty of all good Canadians to see that something in the way of producing wool and mutton is done, and done at once, for assuredly the increase of population is coming whether we will or no, and will be rapid. We wish the Australians only good, but we require as much as possible to keep all our money at home.

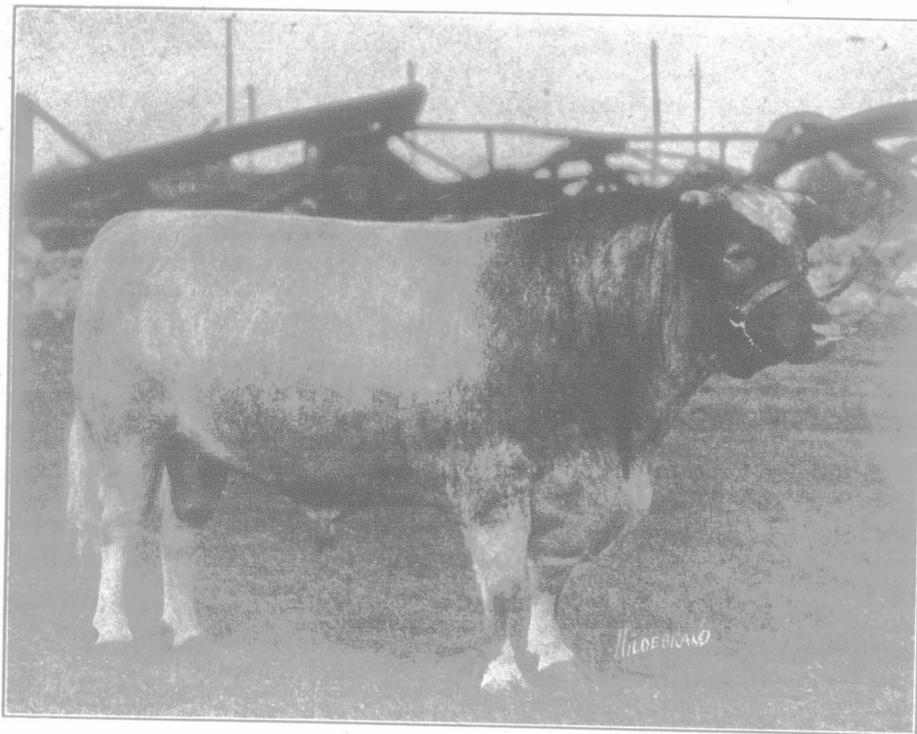
The work of a shepherd is most interesting. In one respect he can, within a few years, see the result of the careful handling of his flock. Of course, like every other kind of work, the improving of stock has only to be begun, one can never see the end of it. One good Scottish breeder lamented that one man's life was too short to raise a flock to the ideal standard. It is well to have a high ideal to begin with, but with the success of each effort be sure your standard of excellence will also rise. Not many records exist of the lives of farmers. Their work is to act and not to talk, and till Arthur Young wrote about this industry, early in the eighteenth and the early part of the nineteenth century, there is little literature available on this subject. He interested himself in the experiments in breeding stock, and leaves some record of the work of the Bakewells, who, according to the Countess of Oxford, "invented sheep." Robert Bakewell, indeed, may be said to have produced one breed of sheep, the Leicester, so the lady was not so far wrong.

We do not, however, want to talk of sheep just now, but of one man who did much for that class of stock, John Ellman. He lived his life in England, never was out of it, except perhaps across the little stretch of sea to Normandy. His father was a farmer in Sussex, and there the boy was brought up, most likely as other farm lads, helping his father, attending markets, doing little bits of supervision in subordinate affairs. He did not go about with his eyes closed. He saw what was going on and formed a very clear idea of what was required for the successful conduct of his business, but it was only after his father retired from the active management of his farm of Glynde that John Ellman could put his observations and indications into practical use. Even

Announcing the Elliott Sale of Shorthorns

WINTER FAIR BUILDINGS,

Guelph, Ont., February 7th, 1919



Newton Loyalist (imp.), Grand Champion.
Winner at Brandon, Regina, Saskatoon, Edmonton, 1918.

WRITE FOR CATALOGUE AND WATCH THESE COLUMNS FOR FURTHER ADVERTISEMENTS

JONES & MILNE
Auctioneers

The Greatest Sale of Show and Breeding Cattle Ever Sold in a Canadian Auction.

Forty-eight Head of Pure Scotch and Scotch-Topped

Shorthorns

Including the Champion Show Herd of the 1918 Circuit.

The Summary:

Fifteen cows with calves at foot.

Eight cows and heifers bred.

Eight young bulls.

Seven cows due in February and March.

Ten open heifers.

The herd sire.

Everything of breeding age guaranteed a breeder.

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A Real Oil Engine Not an Experiment

Uses no Gasoline, not even to start with. Starts easily in the coldest weather on the fuel it runs on. Coal Oil or Fuel Oil, and only uses half the amount required by other so-called Oil Engines. The saving in fuel will pay for this engine in a few months. The

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has no electric devices whatever, the burning of the oil is obtained by mechanical means alone, and the usual time and trouble, forever fixing electrical ignition, is entirely done away with, making this engine the Farmers' Friend. Get circulars and price of size you are interested in.

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STAMMERING
or stuttering overcome positively. Our natural methods permanently restore natural speech. Graduate pupils everywhere. Free advice and literature.

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CENTRAL NURSERIES

TREES, SHRUBS, ROSES IN VARIETY. Reliable Customers Say So. Filling orders over 40 years. Direct to Planters. No Agents. Send for Price List.

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SEED CORN

Grown from Native Seed. DENTS and FLINTS. As good as the best germination. Guaranteed. Prices right.

ED. MATHER, Box 460 (Essex Co.) Leamington, Ontario

Seed Corn - Strong, vigorous seed, carefully selected and tested. Cut and husked by hand. Grown in Essex Co. from native seed. White Cap, Wisconsin No. 7 and Bailey. Send for special prices for immediate delivery.

A. GRANT FOX, Rutledge, Ontario

Seed Corn - A quantity of select early Leaming, Longfellows and White Cap Yellow Dent. \$4.75 per bushel f.o.b. Bags free.

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HAY SHIPPERS! Consign your carloads to The E. L. RICHMOND CO., Detroit. The Old Reliable Firm. In business a quarter of a century. References - Any Bank

ESSEX CO. SEED CORN

White Cap, Wisconsin, Golden Glow and Leaming. Germination guaranteed; \$3.50 for 70 lbs. Special rates for F. Clubs.

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DR. PAGE'S SPAVIN CURE

Cures the lameness from Bone-Spavins, Side-Bones, Ringbones, Curbs, Splints, etc., and absorbs the bunches, does not kill the hair, absorbs Capped Hocks, Bog-Spavin, thick pastern joints; cures lameness in tendons; most powerful absorbent known; guaranteed or money refunded.

Mailed to any address. Price \$1.00. Canadian Agents: J. A. JOHNSTON & CO. Druggists

171 King St. E., Toronto, Ont.

Dr. Bell's Veterinary Medical Wonder, 10,000 \$1,000 bottles FREE to horsemen who give the Wonder a trial. Guaranteed for Colic, Inflammation of Lungs, Bowels, Kidneys, Fevers and distempers, etc. Send 25c. for mailing, packing, etc. Agents wanted. Write address plainly. DR. BELL, V.S. Kingston, Ont.

SUNNY ACRES Aberdeen-Angus

Present offering: 15 young bulls, 5 to 10 months; also 6 breeding females. G. C. CHANNON

P. O. and 'Phone - Oakwood, Ont. Railway connections: Lindsay, C.P.R. and G.T.R.

Alloway Lodge Stock Farm

Angus - Southdowns - Collies SHOW FLOCKS

Rams and ewes. Heifers in calf to Queen's Edward, 1st prize, Indiana State Fair.

Robt. McEwen, R.R. 4, London, Ont.

Sunnyside Herefords

Young cows, heifers to calve in January, heifer calves, first prize senior and junior bull calves, London, 1918, and yearling bulls in field condition. Must have room before winter. Inspection invited.

ARTHUR F. O'NEIL & SONS, Denfield, Ont. Phone connection. Granton, Ont.

this farm did not belong to the Ellmans as the Canadian farmer owns his. They were merely tenants of Glynde, and it was only when he was old and had retired from active farming that he went to live on a small estate of his own, High Cross near Uckfield, in his native county of Sussex. He seems to have loved his native Downs so well that he never wanted to leave them, though with his abilities he could have made his mark anywhere.

These Downs run along the Southern coast of England, great billows of land nowhere of any particular altitude, interspersed by hollows where the farmhouses stand among clumps of trees and surrounded by cultivated fields. Here and there are tiny villages in other valleys, through which streams that have their source up in the Downs flow to the sea, becoming bigger and lazier as they get into the flat, rich lands. The South Downs are on a chalk formation, and the soil is never deep, always the chalky rocks are near the surface. The herbage is of short, fine grass, and on these banks the "wild thyme blows," giving off its exhilarating perfume as you tread it underfoot. Walking over these Downs the air is so fine and bracing, the sea never far away, that one never gets weary, as in many walking excursions. At night we may be glad to rest but the feeling of fatigue after a long day's walk is a pleasant one, quite different from that produced by work in the enervating atmosphere of a city, and the springy turf makes walking a delight when compared to the city's hard pavements. In these surroundings John Ellman spent his life, and there, too, from time immemorial have lived the Southdown sheep he loved so well. Perhaps their ancestors beheld the making of Stonehenge, that mighty monument of which we know so little. If these primeval Southdowns were like their present descendants they would not be greatly interested. Day by day they see carriages and motors arrive at the edge of the Downs and unload their cargoes of tourists who go to look at Stonehenge. The sheep look up casually but appear to be much more interested in cropping up enough of the short grass to keep them in their present comfortable condition. They are a placid race and have learned to mind their own business. Even on summer days when the grass is at its best we should judge that to get a plentiful meal of that and of the wild thyme would guarantee a quite sufficient amount of pedestrian exercise to ensure a proper digestion. Dyspepsia and nervous prostration must be unknown to these happy fellow creatures of ours. The cynical may, perhaps, suggest that if we modern sufferers had more to do and less to eat our circumstances might be similar.

Be that as it may, the short herbage and the amount of activity these sheep take have produced between them one of the hardiest breeds of sheep going, with an old reputation for the flavor of its mutton and the fine quality of its wool. The breed is so old and its good qualities so fixed that even removal to different climates does not seem to cause deterioration. What this breed of sheep was like when John Ellman began to improve it we cannot say. Certainly the Southdown sheep was not the thing of beauty he made of it. He had the sure instinct of a man of genius in selecting the most desirable type, and he kept his ideal ever before him, and within a few years had not only improved the Southdown flocks on their native hills, but had given advice to people who asked it, all over England and Ireland. He made no secret of his methods and was no churl, keeping the knowledge he had gained to himself. As this became known his influence spread gradually to all classes of society. He corresponded with many of the aristocracy and was acquainted with the king himself, "Farmer George," who not only interested himself practically in live stock, but we believe made some contributions to the agricultural literature of his time. "Mark thou the man diligent in his business, he shall stand before kings, he shall not stand before mean men," says a wise man of old, and John Ellman is a proof that the Bible speaks truth. By his association with these influential people, who had what Mr. Ellman only had in a very limited way, a command of money, he was able to bring his business more prominently before the public. So far as the improvement of his flocks and herds went he does not seem to have required much money. His father's flock and those of his neighbors and friends provided sub-

Closest Skimming

is only one of the many merits of the SIMPLEX Cream Separator, but it's one that tells the real value of a cream separator. Cream lost in the skim milk is money thrown away, it's just like losing a few pounds of butter every week. All this loss is eliminated when you use

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Just think what this saving will mean to you over a period of months or a period of years. The SIMPLEX is saving money for you at every operation by close skimming, it's just like added interest to your savings account.

The large capacity, ease of running, ease of cleaning, simplicity, self-balancing, bowl, interchangeable spindle point, low-down supply can and general pleasing appearance of the SIMPLEX makes it a favorite with all dairymen.

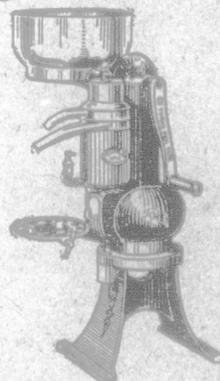
Write us to-day and let us explain how you can get rid of all your separator troubles.

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Use Power in the House as well as in the Barn

Runs by Motor or Engine. YOU know how much farm work is saved by electric motor and gasoline engines. Why not adopt the same idea in the house? Backaches from washing are out-of-date - successful housekeepers everywhere insist on washing machines, and the best idea of all is the power washer, because it does all the work itself and needs no attention whatever.



Maxwell Power Bench Washer. - has proved itself a wonderful friend to others. Let it help you. It will even do the wringing! Handles the biggest or smallest wash. heaviest or daintiest clothes with no tearing or wearing. Pays for itself over and over! Made in three sizes. Write for particulars. MAXWELLS LIMITED, - Dept. W - St. Marys, Ontario 40

60 10th Annual Auction Sale 60 Head Under the auspices of the Victoria County Pure Bred Stock Association. Head

IN BUTLER HOUSE YARDS, LINDSAY, ONT. Tuesday, January 28, 1919, at 1.00 p. m. sharp.

45 Males SHORTHORNS 15 Females

Among the offering are a number of choice young bulls and heifers sired by such splendidly bred bulls as Chief Link (imp)-101803-, Golden Arrow (imp)-101798-, Balaclava -109964-, Bandsman's Chief -91383-, and others.

The entries have all been inspected, and as a result the Association is offering the best lot of stuff in its history.

TERMS: - To residents of Ontario, Cash or ten months credit will be allowed on approved joint notes, all notes to bear interest at the rate of 6 per cent. per annum from date of sale.

To buyers not residing in Ontario; Terms Cash. Sale under cover if stormy. Catalogue mailed on request to the secretary.

President and Auctioneer, JAS. CASEY, VALENTIA, ONT.

Secretary, A. A. KNIGHT, LINDSAY, ONT.

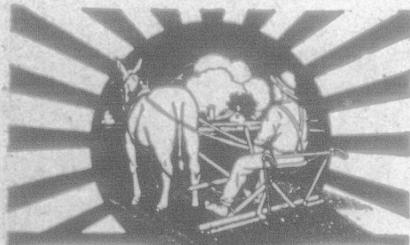
33-lb. Grandsons of Lula Keyes

I have at present ten young bulls all sired by my own herd sire King Korndyke Sadie Keyes a son of Lula Keyes 36.05 lbs. of butter and 785 lbs. of milk in 7 days. These youngsters are all first-class individuals and their dams' records run as high as 33.29 lbs. of butter in 7 days. Several of them must go quick to make room.

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60 Shorthorns 60 - Bulls - During next few weeks we will sell bulls of service-able age at a big sacrifice, to make room. Near a dozen good ones to choose from. Can spare near a carload of fine females, mostly sired by Scotch Grey 72692, a champion and sweepstakes bull.

JOHN ELDER & SON, Hensall, Ont.



Every Truck Farmer

needs a tillage tool that does fast thorough work with one mule or horse. Experienced growers like the "Acme" Pulverizing Harrow because "the coulters do the work." They cut, slice, pulverize, and turn the soil twice in one operation. Leave the soil level as a floor and "mellow as fresh ashes." There's an "Acme" to fit your farm—1 horse to 4 horse. Send today for new free book, *The "Acme" Way to Crops That Pay.*

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Size "H,"
1-horse cultivator.
Cuts 4 ft. 4 in. wide.

Toronto,
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Heaves

AND HOW TO CURE
—A Standard treatment with years of success back of it to guarantee results is

Fleming's Tonic Heave Remedy

Use it on any case—No matter what else has been tried—and if three boxes fail to relieve, we will refund full amount paid. Further details in

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Write us for a Free Copy

BEST EVER USED

Dear Sirs:—Enclosed find \$1.00 for 1 package of Tonic Heave Remedy. I used a package last year and completely cured a case of Heaves of some 3 years' standing.

H. B. BURKHOLDER, Lillooet, B.C.
Per Box, \$1.00; 6 for \$5.00

FLEMING BROS., Chemists
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Flintstone Farm

Breeders of

**Milking Shorthorn Cattle,
Belgian Draft Horses
Berkshire Swine.**

We offer animals that will raise herds to a level of war-time efficiency. Bull calves from \$125 up.

DALTON

Massachusetts

MESSRS. A. J. HICKMAN & CO.

Halse Grange, Brackley, England (late of Egerton, Kent)

Exporters of all breeds of stock, draft horses, beef cattle and show and field sheep are specialties.

You can buy imported stock through us cheaper than in any other way, and we hope to get your enquiry at once, so that we can fit you out before this country is skinned of good stock, as it soon will be now war is over.

SPRUCEDALE

Shorthorns and Berkshires

Herd headed by Sprucedale Butterfly, whose dam, Orma of Northlynd 105359 (owned in herd), has a 4-year-old R. O. P. record of 10463 lbs. milk, 390 lbs. fat. Shorthorns and Berkshires of different ages and sex for sale. Inspection invited.

Frank Teasdale - Concord, Ont

Graham's Dairy Shorthorns

I have a choice offering in cows and heifers in calf. Bulls from the heaviest milking strains. Satisfaction guaranteed.

Charles Graham, Port Perry, Ont.

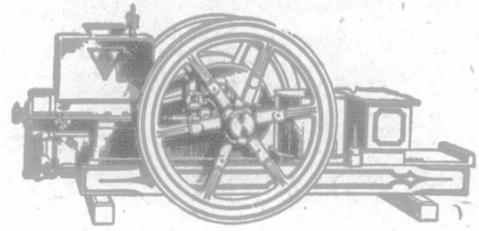
Shorthorns and Shropshires—We still have a few extra well-covered shearing rams. Also a choice lot of ram and ewe lambs. Prices right. We can supply young bulls or heifers both of which are from high-record dams.
P. CHRISTIE & SON, Port Perry, Ont.

jects for his experiments, for he introduced no fresh blood, paid no high prices for long-pedigreed rams. When, as the result of his management, his flock of Southdowns became famous, he lent his rams freely to those of his neighbors who had the sense to borrow, and so by his public-spirited and generous conduct spread his good influence wider and within a shorter time than one could have believed to be possible.

There is, however, something in advertising, though its almost magic power had only begun to be felt in these early days. The Prince Regent, afterwards George IV, the most perfect gentleman in Europe, loved the Sussex coast and erected to himself a palace of pleasure at Brighton. He loved Southdown mutton also, as he gets the credit of having loved many things less innocent, and made it the fashion. Through his and his courtiers' influence the Southdown became famous in one way; but the rise of an interest in agriculture of a less frivolous character caused cattle shows, both at local centres and at large cities, and there the general public got their first sight of Mr. Ellman's stock. He was largely instrumental in founding the greatest Fat Stock Show in England, that of the Smithfield Club—still a flourishing institution. On the death of the first president he was nominated successor, and was "Father," as they called it in those days, of the Smithfield Club for many years. With Lord Sheffield he inaugurated the Sussex Wool Fair, and he was also one of the founders and an important member of the Association for the Improvement of Cattle and Sheep, and the encouragement of industry among the laboring poor. As an exhibitor at these shows his career was short. He was so frequently a prize-winner at these fairs that he latterly refrained from exhibiting. If he took any sheep to the showyards he withdrew them while the judging was in progress that "they might not detract from the appearance of the others."

The wool trade had always been of great importance to England, and at the time John Ellman made his appearance in the Sussex farm house in 1753, England exported quantities of raw material in the shape of fleeces, as well as a considerable amount of manufactured woolen goods. It will hardly be believed that at that time before the Peninsular War altered the face of Europe, Great Britain also exported quite a considerable amount of wheat. This must have been grown in England, for though in the Lothians and a few other favored districts in Scotland wheat of fine quality can be grown, there would be none for export in that quarter. The good Scot, making a virtue of necessity said he preferred oatmeal porridge and barley broth, and it was only very rich and luxurious Scots families that indulged in much wheaten bread. John Ellman would, no doubt, grow enough wheat to provide for his family and servants, but he was among those who first found out that the real value of the English soil and climate is in the fine class of stock the land carried. We grieve to think that the exigencies of circumstances in these times of war and famine must have caused the breaking up of much of our noble pastures, but why grumble when the invader has been kept from our shores. One would say that with all this work on his hands Mr. Ellman would not have much spare time, but we ever find that it is the dilettante and the idler who is pressed for time. There was no work of public utility in his district in which Mr. Ellman did not find time to engage. He was largely instrumental in making the harbor at Newhaven—larger steamers leave it twice a day at least in normal times, carrying freight and passengers to Dieppe in France. He engaged in a difficult engineering undertaking, in deepening the Ouse to make navigation possible, for in those days before railways made a network over the country water carriage was of great importance. He was a commissioner on taxes and belonged to all the organizations connected with the county business of his district.

Free education was not generally thought of in those days, but in this, as in much else, John Ellman was before his time. In his own village of Glynde he maintained a school for his laborers' children at his own expense. He had views of the liquor question and would allow no licensed premises in his village, but he was no prohibitionist, and his views on the question of the brewing and drinking of ale would shock the teetotalers of our days, so we need not mention them.



Alpha Gas Engines
SAVE

Work

No more operating your pump, turning your cream separator, running your churn or washing machine by hand.

Time and Money

No more hauling your feed to the mill to be cut or ground, or hiring someone to come to your place and grind it for you. A small cutter or grinder and your Alpha would always be ready.

Fuel

The Alpha uses gasoline or kerosene, and much less of either than any other make of engine.

An Alpha Gas Engine will soon pay for itself on your farm

Write today for our catalogue which describes in detail all the twelve sizes of Alpha Gas Engines and shows why the farmer who buys the Alpha gets the most for his money.

THE DE LAVAL COMPANY, Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA. Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Silos. Alpha Gas Engines, Alpha Churns and Butterworkers. Catalogues of any of our lines mailed upon request.

MONTREAL PETERBORO WINNIPEG VANCOUVER
50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER

Pure Scotch and Scotch Topped Shorthorns

We have several choice young bulls of the best of breeding and ready for service. Two are by Rapheal (Imp.), one by Right Sort (Imp.), one by Sittyton Selection, and several by our present herd sire, Newton Cedric (Imp.). Prices write. R. M. MITCHELL, Freeman, Ont., R. R. No. 1.

I HAVE FOUR RED BULLS

Two imported, also a few females for sale. Six Lincoln ewe lambs, got by an imported ram, and from heavy Shearling registered ewes. \$25 each.

J. T. GIBSON - DENFIELD, ONT.

Burnfoot Stock Farm--Dual-Purpose SHORTHORNS

Herd headed by Burnfoot Chieftain =97766 = whose dam has an R. O. P. record of 13535 lbs. milk and 540 lbs. fat, offers 6 thick, growthy bulls, with R.O.P. records of 10600 up to 13535 lbs. milk back of them. Come and see the cattle, or if inconvenient, your inquiries are solicited.

S. A. MOORE, Prop., CALEDONIA, ONT.

SPRUCE GLEN FARM

Herd headed by Nonpareil Ramsden =101081 = and Royal Blood =77521 =. At present we have nothing to sell, but we have some very good ones coming on.

JAMES MCPHERSON & SON - DUNDALK, ONTARIO

GLENGOW SHORTHORNS

We have a choice offering in young bulls, fit for service. They are all of pure Scotch breeding and are thick, mellow fellows, bred in the purple.

WM. SMITH, COLUMBUS, ONT. Myrtle, C.P.R.; Brooklin, G.T.R.; Oshawa, C.N.R.

Shorthorns

Herd headed by Pride of Escana, a great son of Right Sort. Several bulls and a few females with calves at foot for sale. Herd of over seventy head.

A. G. FARROW (between Toronto and Hamilton) OAKVILLE, ONT.

SHORTHORNS and CLYDESDALES

Herd still headed by Proud Victor =102587 =. For Sale—One red, 20-months old, and eight 10-months-old choice reds and roans. Also females of all ages.

J. B. CALDER - GLANFORD, STA. R. R. 3

Shorthorns Landed Home—My last importation of 60 head landed at my farm on June the 20th, and includes representatives of the most popular families of the breed. There are 12 yearling bulls, 7 cows with calves at foot, 24 heifers in calf, of such noted strains as Princess Royal, Golden drop, Broadhooks, Augusta, Miss Ramsden, Whimble, etc. Make your selection early.

GEO. ISAAC. (All railroads, Bell 'Phone.) Cobourg, Ont

SPRING VALLEY SHORTHORNS

We sell or exchange for females. Nonpareil Ramsden =83422 =, we have used him five years. He is an extra good sire. We also have for sale Village Ramsden =122762 =, winner of 2nd at London and 3rd at Winter Fair. Will price a few females.

KYLE BROS., DRUMBO. (Phone and Telegraph via Ayr.)

Walnut Grove Shorthorns—Trout Creek Wonder 56167, Gainford Eclipse 103055. We are offering an exceptionally choice lot of bulls and heifers from the best Scotch families, and our herd sires, Trout Creek Wonder and Gainford Eclipse. If interested, write.
Twelve miles west of St. Thomas. DUNCAN BROWN & SONS
Bell Phone. M.C.R. and P.M. Ry. Sheddin, Ontario

ESCANA FARM SHORTHORNS

Five Bulls for Sale. One roan senior yearling; one choice twelve-months white calf, by Right Sort (Imp.); one select, dark roan, ten months calf; one roan yearling, by Raphael (Imp.); one roan red yearling, for grade bull. Farm ¼ mile from Burlington Jct., G. T. R.

BURLINGTON, ONT.

Creekside Scotch Shorthorns—Herd headed by Gay Monarch 79611; dam Sally 8th Imp., and sire, the great Gold Sultan 75411. My present offering of young bulls includes several 7 to 14 months' youngsters, all thick, mellow, well-grown fellows—reds and roans—and priced right. Can also supply females in most any numbers.
GEO. FERGUSON, Elora Station, C.P.R., G.T.R., Salem, Ont.

Another of his opinions which would be anathema to the modern reformer was his entire disapproval of allotments on any large scale. All his unmarried employees were lodged and fed under his own roof. On their marriage he was accustomed to provide them with a "plot of grass land for a cow and pig."

That a man of such wide and varied interests should have views worth recording is to be expected, but how could he, among all his other avocations and his wide correspondence, have time to write papers for the agricultural papers of his day we cannot imagine. He was much interested in the production of wool and his contributions to farming magazines are always sensible and interesting. He also corresponded with the French Societe d'Amelioration des Laives, and was a member of the Agricultural Society of Rouen.

It must have been a sad day for him when he had to part, on account of his age and increasing infirmities, with all his sheep and cattle, for he bred pigs and cattle too, and all the dear objects animate and inanimate which must have filled his life at Glynde with happiness. It would be hard to leave those sights and sounds which had filled his life of nearly seventy years with interest and pleasure. In 1829 his stock was sold by auction, and no doubt to the benefit of the live stock of the country was dispersed far and wide among various owners.

He himself retired to his own small estate, and besides set up a small establishment in his market town of Lewes. There he died on the 22 November, 1832, having attained the good old age of 79. He had done much for the world during the years of his active life. Let us hope his three years of retirement were peaceful and happy, and that he had good friends and loving hearts around him at the last. The meagre materials available for this history does not tell us much, but we have cause to believe that as his life was beneficent his latter end would be peace.

Eastern Dairymen's Convention.

A copy of the program of the forty-second annual convention of the Dairymen's Association of Eastern Ontario has been received at this office. The convention is being held in Belleville, January 9 and 10, beginning at 2 p.m. on Thursday, January 9. The first day is Farmers' Day, and the convention will be addressed by A. Leitch, O.A.C., Guelph, and Dr. J. H. Grisdale, Deputy Minister of Agriculture, Ottawa. The Hon. Dr. Cody, Minister of Education for Ontario, and Hon. T. A. Crerar will address the evening session on Thursday, while the Friday evening session is to be addressed by Hon. G. S. Henry, Minister of Agriculture for Ontario; Dr. G. C. Creelman, Commissioner of Agriculture for Ontario, and J. A. Ruddick, Dairy Commissioner, Ottawa. There will be in addition a good program of practical subjects for the day sessions.

Western Dairymen's Convention.

The fifty-second annual convention of the Dairymen's Association of Western Ontario will be held in London, on Wednesday and Thursday, January 15 and 16. A very complete and comprehensive printed program has been compiled by the secretary, including also a prize-list for the Winter Dairy Exhibition, to be held in conjunction with the convention. The program of subjects includes many addresses on matters of very great practical importance, and these will be discussed by men thoroughly conversant with them. The Ministers of Agriculture for Ontario and the Dominion will address the evening session on Wednesday, Thursday sessions being devoted to cheese and butter-making.

He Had the Same Right.

Pat was on a sinking ship and was watching with interest the frantic passengers grabbing life preservers, putting them on and jumping overboard. "Shure," said he, "if everybody is stealing, I can too." Immediately picked up a heavy piece of iron and jumped overboard with it.

LLENROC STOCK FARM.

Come to "LLENROC"

IF—you want an animal with type.
 IF—you want real production with it.
 IF—you, also, desire proven breeding.
 IF—you want your money to go farthest.

Try us on some fine young bulls.

W. C. HOUCK, Chippawa, Ont., R.R. No. 1

ON THE BOULEVARD OF THE BEAUTIFUL NIAGARA RIVER.

Harnelbel Shorthorns

Herd headed by Gainford Supreme, No. 115283, one of the best sons of the undefeated Gainford Marquis (imp.).

We are offering some specially good young bulls, all nearing serviceable age, and priced right. Two of these are by Mortimer, a son of the great imported dairy-bred bull, Director. Others are by Dentford Sultan, No. 116021; Meadow Lawn Prince, No. 110354, and Lord Gloucester, No. 109652. Write for particulars, or see these before buying elsewhere.

HARRY McGEE, Owner, SAMUEL TRUESDALE, Farm Mgr.
 61 Forest Hill Road, Toronto Islington, Ont.

Come to Headquarters for COTTON SEED MEAL and CAKE

Our Brands:
 Jay Dove Owl Lone Star
 38% Protein 38 1/2% Protein 41% Protein 43% Protein
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Imported Shorthorns

SIRES IN SERVICE:

Imp. Collynie Ringleader (Bred by Wm. Duthie) Imp. Clipper Prince (Bred by Geo. Campbell) Imp. Orange Lord (Bred by Geo. Anderson)

We are offering a large selection in imported females with calves at foot or in calf. A few home-bred females, 19 imported bulls and 8 home-bred bulls, all of serviceable age. If interested, write us, or come and see the herd.

J. A. & H. M. PETTIT - Freeman, Ontario
 Burlington Jct., G.T.R., half mile from farm. Phone Burlington.

SHORTHORNS For Profits
 Shorthorn steers dressed the highest percentage at the Chicago International in 1917. Shorthorn steers are preferred by the largest buyers of feeders on the Chicago market. Shorthorn steers show greatest weight for age.
 Write the Secretary for free Publications.
 THE BREED FOR FARM ORRANCH DOMINION SHORTHORN BREEDERS' ASSOCIATION
 W. A. DRYDEN, Pres., Brooklin, Ont. G. E. DAY, Sec., Guelph, Ont. 10

LARKIN FARMS Queenston, Ontario

ABERDEEN ANGUS and JERSEY CATTLE, SHROPSHIRE and SOUTHDOWN SHEEP

Correspondence and Inspection Invited (Please mention "Farmer's Advocate")

Robert Miller, Stouffville, Ont. still has a few Shorthorn bulls, fit for service, and some females that are as good as can be found for the man that wants to start right in Scotch Shorthorns. They will be sold for a low price, considering the quality, and the freight will be paid. Write for anything in Shorthorns. One hour from Toronto.

1861 IRVINEDALE SHORTHORNS 1919
 Herd headed by Marquis Supreme =116022 =; have on hand, a number of good young cows and heifers, bred to Marquis Supreme. Also a right good lot of bulls, all by Gainford Select =90772 =. Anyone in need of a good young bull or a nice, well-bred heifer will do well to write to. JOHN WATT & SON (G. T. R. & C. P. R.) R.R. 3, Elora, Ont.

MILKING SHORTHORNS

Herd headed by Dominator 106224, whose two nearest dams average over 12,000 pounds of milk in a lactation; cows with records up to 11,000 pounds of milk in a year. Bulls ready for service for sale. Heifers and cows for inspection. Weldwood Farm, Farmer's Advocate, London, Ontario

Cream Wanted

Ship yours to us, as we must have it to supply our well-established trade with good quality butter. Therefore, we are prepared to pay you a higher price than any other creamery. We furnish cans and pay express charges. References, any bank.

MUTUAL DAIRY & CREAMERY
 743 King St., W., Toronto, Ont.

English Dual-Purpose Shorthorns

Young bulls fit for service and bull calves. A choice and highly bred collection from imported stock on both sides. The right kind to increase the flow of milk, in any herd.

English Large Black Pigs. A great breed. Approved where tried. Come or write.

LYNNORE STOCK FARM
 F. Wallace Cockshutt, Brantford, Ont.

Mardella Shorthorns

Herd headed by The Duke, the great, massive, 4-year-old sire, whose dam has 13,599 lbs. of milk and 474 lbs. of butter-fat in the R. O. P. test. I have at present two exceptionally good young bulls ready for service, and others younger as well as females all ages. Some are full of Scotch breeding, and all are priced to sell. Write or call. Thos. Graham, R.R. No. 3, Port Perry, Ont.

Spruce Lodge Shorthorns & Leicesters Herd headed by the Butterfly-bred bull, Roan Chief Imp. =60865 = young stock of both sex, together with a choice offering of Shearlings and Ram, and ewe lambs, all from Imp. stock. W. A. DOUGLAS, Caledonia, Ont.

Springbank Pure Scotch Shorthorns and O. I. Chester White Swine, young stock, both sexes at all times. In Chesters we have a number sired by Sunny Mike 15917, first at Toronto in 1917. Satisfaction guaranteed. Inspection invited. Wm. Stevenson & Son, Science Hill, Ont.



FOOD PRODUCTION MUST BE INCREASED

The horse is a vital factor in such accomplishment. His efficiency is measured by the degree of fitness for constant use.

Stuffed Collar Pads

Are the only guarantee against bruised, galled and chafed shoulders. They are better than other kinds, being soft, springy and absorbent. They make possible the continued use of a horse collar long after its worn condition would otherwise compel its discontinuance.

New Patented Hook Attachment

(Found only on pads made by us)

Consists of wire staple with felt washer. It gives hook a firmer hold and prevents pulling off, even though fabric is weakened by long usage. This is the greatest improvement since we invented the hook.

Thirty-Seven Years Making Pads
Look For the Felt Washer

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Keep Cows Well

Perfect health, more milk and bigger profits
GUARANTEED with

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Write for FREE Book.

PRATT FOOD CO.
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WE PAY HIGHEST PRICES
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RAW FURS

Send us your next shipment.
Price List and catalogue of trappers' supplies now ready.
We pay express and postage.

E. T. CARTER & CO.

82 Front St., E. Toronto, Ont.

Holstein Bulls

Ready for service and younger. Cows and heifers bred to ORMSBY JANE BURKE, whose two nearest dams average 38.82 lbs. of butter in 7 days. The three nearest sires' dams and his dam's records average 35.69 lbs. for 7 days, and 112 lbs. milk for one day.

R.M. Holtby, R. R. 4, Port Perry, Ont.

Ridgedale Farm offers for sale 5 Young Bulls ready for service, grandsons of "King Segis Pontiac Duplicate," brother to the \$50,000 bull; also 6 or 8 choice young cows due to freshen in next 2 months all bred to our young sire, "Sylvius Walker Raymondale," one of the highest bred young bulls in Canada. We have several of his young sons a few weeks old; they are wonderfully developed and typey. Speak for one of them early. It will pay you. R. W. Walker & Sons, R. R. 4, Port Perry, Ont., Manchester Station, G.T.R. Myrtle Station, C.P.R., Bell Phone.

Farmers in Parliament

The important and even fundamental issues that will come before the people of Canada at the close of hostilities demand that the farmers, representing so large a proportion of the population, make their weight and influence felt. They cannot, however, exert their influence apart from the regularly constituted parliamentary institutions which have largely, in the past, been left in the hands of the business interests, with results that every one knows. Some farmers, perhaps naturally enough, have turned away in disgust from politics, believing that in this sphere, they have not, and cannot gain, control. We are convinced that this is a fatal mistake. For, whether they will it or not, the agricultural community must come into close and vital contact with the political affairs of the country.

Neither do we believe in the current fashion which derides partyism and parliamentary institutions. The main indictment, and about the only one that can be honestly made against partyism and politics, is that these have been directed almost solely, in the past, by the business interests; and that the common people have not asserted their rights. It is futile and foolish, nevertheless, to assail parliamentary government on the score that it does not really represent the people. It can be made truly democratic and efficient only when pressure shall have been brought to bear upon it by those whose economic and social existence so largely depends upon it. We are well aware, however, that those who have directed the political life of Canada in the past would be glad indeed if they were left alone to work out unhindered their programme and policies. It is incumbent upon the farmers to come into their own and take their proper place in the political life of the nation.

Those who most bitterly assail party politics are the last to bring forth any adequate democratic measure to take its place. We are engaged, if we correctly estimate the present situation, in a war of entire peoples against vested interests of all kinds—castes, military oligarchies, selfish bureaucracies and absolute rulers. Emperor Wilhelm, Czar Ferdinand, King Constantine, Emperor Charles, and the Turkish Sultan, have been fighting not only for the hegemony of the East, but for the supremacy of militarism and personal, autocratic rule. We are persuaded that if they fail—and they must fail, because the free democracies will it—the barriers against democracy will be broken down, and subject peoples will learn to rule themselves. We know of no other method than that of parliamentary government, as practiced in the British Commonwealth and the United States, whereby the people can exert political power. Those who hold party government in contempt are forced, in all fairness, to outline clearly what democratic expedient can displace it. A study of history, a survey of the practices of mankind, discloses the truth that parliamentary government and party politics have been the only alternative to autocracy and personal rule. That party government has so lamentably failed in meeting democratic ends, in the past, is not due so much to inherent defects within the system itself as to lack of interest and lukewarmness on the part of the people. And yet those who see a profit in manipulating the political life of the nation have never ceased for a moment, with lynx-like sharpness, to play the party game.

Canada has enrolled 500,000 men and has spent not less than one thousand million dollars to dethrone tyranny and autocracy in Europe. The Allies will triumph because the power of the common people is at their back. Instinctively we realize that Canada could not support the war for a single day longer were it not for the fact that the people feel that the French Republic, the British Parliament and the American Congress express the will of democracy. And it is through parliamentary institutions, and party government, that these free nations make their way to victory felt. It is idle to stand by and abuse parties and parliament when these potent democratic instruments can be used with such impelling force to work our will, and to shape our national life. Instinctively we realize that if the war had accomplished nothing more than to liberate the Russian nation and to smash once and for ever tyranny and oppression among that stricken

Complete Clearing Sale

Thirty High-Class Holsteins

The Entire Herd of G. J. BARRON, Selling at the farm on the
Cockshutt Road, four miles south of the City of

BRANTFORD, ONTARIO, WEDNESDAY, JAN. 15, 1919

This is just to remind you of this great small sale of untested Holsteins. They will be sold in good condition and are just the kind to make good buying. Many of the mature cows have records of upwards of 15,000 and 16,000 lbs. of milk in 10 months, under private test and all are still young.

Catalogues on Request.

G. J. BARRON, Owner, Brantford, R. R. No. 2

W. Almas, Auctioneer

N. P. Sager, Clerk

Conveyances will leave Belmont Hotel,
Brantford at 11.30 a. m.

SUNNYBROOK FARM HOLSTEINS

Offers—One 30-lb. bull, and several grandsons of the great King Segis. Two of these are ready for heavy service. We also have a number of heifers of same breeding—all from approved dams.

JOSEPH KILGOUR,

Eglinton P.O., Ont., North Toronto.
Phone Adol. 3900

Manor Farm Holstein-Friesians

If it's a herd sire you want, write me. I have sons of both my senior and junior sires, King Segis Pontiac Posch and King Korndyke Sadie Keyes. All from good record dams.

Choice bull calves at present to offer—average for two nearest dams, up to 34.71 lbs. butter to seven days. Correspondence solicited, visitors welcome.

Gordon S. Gooderham, Stations: Clarkson and Oakville
Farm on Toronto and Hamilton Highway Clarkson, Ont.

HOSPITAL FOR INSANE

HAMILTON - ONTARIO

Present herd sire is one of the best sons of King Segis Alcartra Spofford; we have three of his sons born during May and June last, and also a grandson of Lakeview Lestrage. Apply to Superintendent.

Raymondale Holstein Friesians

A herd sire of our breeding will improve your herd. We have sons of our present sire, Pontiac Korndyke of Het Loo (sire of \$12,760 Het Loo Pietertje) and also sons of our former sire, Avondale Pontiac Echo. Several of these are of serviceable age, and all are from good record dams. Quality considered, our prices are lower than anywhere else on the continent. These youngsters should not remain long. Write to-day.

Raymondale Farm, Vaudreuil, Que.

D. RAYMOND, Owner
Queen's Hotel, Montreal

Dumfries Farm Holsteins

S. G. & ERLE KITCHEN, St. George, Ontario

YOUNG BULLS FOR SALE

from R.O.P. champions and dams and sisters of R.O.P. champions, sired by Canary Hartog and some by a son of Queen Butter Baroness, the dam of two champions in 7-and-30-day tests. We invite inspection and will meet prospective buyers at G.T.R. or C.P.R. stations—Woodstock or Ingersoll. Walburn Rivers & Sons, (Phone 343 L Ingersoll, Independent Line) R.R. 5, Ingersoll, Ont.

SUNNYSIDE STOCK FARM HOLSTEIN

Echo Segis Fayne, our herd sire, is by a brother of the world's 50-lb. cow, Segis Fayne Johanna. He is a grand bull in every way, and is not yet 4 years old. To avoid in-breeding would sell him at a price. Also have bulls from 1 month to 17 months old for sale, sired by Echo Segis Fayne and out of grand producing cows.

JOHN M. MONTLE, Prop., STANSTEAD, QUE.

SILVER STREAM HOLSTEINS

Special offering—four well-bred young bulls fit for service, sired by King Lyons Colantha, whose 6 nearest dams average 30.10 lbs. butter in 7 days, and from daughters of King Lyons Hengerveld, whose five nearest dams average 31.31 lbs. butter in 7 days. For fuller particulars and prices write at once. Priced to sell.

J. MOGK & SON, R. R. 1, TAVISTOCK, ONT.

14 REG. HOLSTEIN HEIFERS FOR SALE

I have sold part of my rough pasture so am offering 14 heifer calves from 8 to 11 months of age, calved by a 31.28 lb. bull, also could spare 4 2-year-olds due to freshen in January.

B. R. BARR, MOSSLEY R. 1

Harrietsville Station, C. P. R.

Walnut Grove Holsteins

I am offering a choice lot of bull calves, all sired by May Echo Champion, who is a full brother to the world's champion, May Echo Sylvia. All are from R. O. M. dams and good individuals. Also having usual offering in Tamworth Swine.

C. R. JAMES

(Take Radial Cars from North Toronto)

RICHMOND HILL, ONT

BEAVER Creek Stock Farm Offers HOLSTEIN Cows and Heifers of good milking strain. Apply to Albert Mittlefehldt, WELLANDPORT P. O., ONT., Port Dewison Station, L.H.&B.

ELDERSLIE FARM HOLSTEIN-FRIESIANS

I am offering for immediate sale several young sons of my senior herd sire Judge Hengerveld De Ko. 8th, who is a 32.92-lb. grandson of De Kol's 2nd Butter Boy. The dams of these bulls all have R.O.P. records running up as high as 195.26 lbs. of milk for the year. Write for pedigrees.

A. MUIR (Take Kingston Road Radial cars from Toronto, Stop 37) Scarborough P. O., Ont.

Choice Grandson of Queen Butter Baroness

I am offering a choice 14-months bulls from a 21-lb. junior 2-year-old daughter of Louis Prilly Rouble Hartog, and sired by Baron Colantha Fayne, a son of Queen Butter Baroness, the former 33-lb. Canadian champion cow. Also have others younger. T. W. McQUEEN (Oxford Co.), Tillsonburg, Ont.

CLOVERLEA FARM HOLSTEIN-FRIESIANS

Offers for sale some choice young bulls ready for service from tested dams. Priced right for immediate sale. Phone or write

GRIESBACH BROS.

COLLINGWOOD, ONT.



Summer Hill Oxfords



The Sheep for the Producer, Butcher and Consumer.

Our Oxfords Hold an Unbeaten Record for America.

We have at present a choice offering of yearling ewes and rams, as well as a lot of good ram and ewe lambs—the choicest selection of flock-heads and breeding stock we have ever offered.

PETER ARKELL, & SONS

R. R. No. 1, Teeswater, Ontario
H. C. Arkell, W. J. Arkell, F. S. Arkell

SHROPSHIRE and COTSWOLDS

I am offering for sale 30 imported Shropshire rams, also home-bred rams and ewes, all at reasonable prices.

JOHN MILLER, CLAREMONT, ONT.

Kent or Romney Marsh Sheep

The hardest and best grazing mutton and wool sheep of Great Britain. Successfully acclimated wherever grazing sheep are required. Descriptive pamphlet, list of breeders, and all information from A. J. Burrows, 41 Bank St., Ashford, Kent, and at 16 Bedford Square, London, England.

Shropshires

Yearling rams and ewes. A few nice ram lambs by imported ram.
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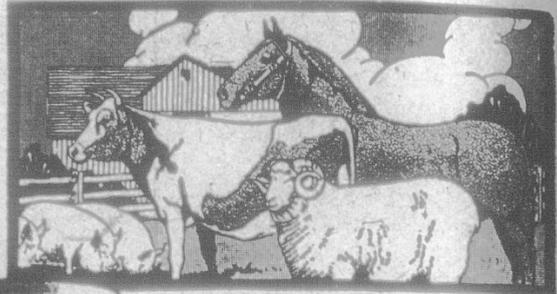
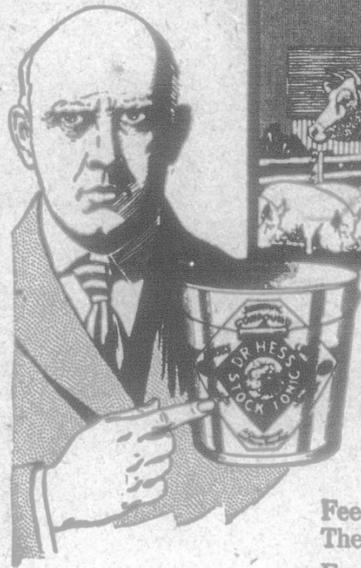
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There is altogether too much emphasis laid upon the efficiency of the business men in politics, and of the virtues of a "business administration." Again and again, and particularly at election time in Canada, demands are made on the platform and in the press for this paragon of political virtues—a "business administration." What is meant, precisely, except in a general way, by that term is hard to decide. Since the outbreak of hostilities, however, it has been made clear enough what is meant by a business administration. The Northcliffe group of journals hail with delight the establishment of committees composed of big business men; and these newspapers are not without their followers in Canada. To our mind, government by committee smells over much of tyranny. There is undoubtedly room for better business methods and for a greater display of business efficiency in Parliament—and particularly by those who have most loudly denounced the political inefficiency and lack of business training of farmers. It is sound policy to insist that, for the future,—whether in the United Kingdom, the United States or Canada—money, social rank, fashion and so forth shall weigh less in choosing representatives of the people. At the same time it is well to point out that the business men whom Premier Lloyd George called into the councils of the nation were the first to admit that they would have accomplished something less than nothing had it not been for the judgment, experience, and detailed knowledge of affairs possessed by the trained officers in the permanent civil service. It is just here that Canada can learn something worth while from the Mother Country. Up to the time that Dr. Adam Shortt took charge of the Canadian Civil Service it had been given over as the last refuge of moribund and defunct politicians. There is no reason why the farmers of this country should not take a prominent part in shaping the political life and economic future of the nation, having at their command, in an efficient civil service, the data and detailed information required.

It is a fallacy to suppose that the business instinct is a sine que non of political success. One hardly needs to point out that the most brilliant trio of British statesmen ever known—Chatham, Burke, Disraeli—were poor business men. That fact is notorious. And yet to the political life of England no greater contribution has ever been made than by these three great leaders of men. On the other hand, Gladstone and Peel were conspicuously successful as business administrators although neither one had ever had factory, office or mercantile experience. In truth, business capacity and the business instinct depend less upon experience than upon aptitude, common sense and a vigorous mentality. In these particulars the farmers of the West have produced leaders second to none. It is a sheer absurdity to imagine that only business men, big or little, have the capacity to carry forward an adequate programme bearing upon the social and economic life of the nation. For one hardly needs to point out, lawyers, and not business men, have furnished the most brilliant and capable parliamentarians in the past.

We do not agree with those who assert, and indeed insist, that matters of public policy and fiscal readjustments should be postponed to that golden era known as "after the war." We are persuaded that now is the accepted time to plan a programme that will not only maintain, but raise, the standard of the people. It is little less than folly, it is little less than criminal, to postpone the consideration of social, economic and constitutional questions. The Hon. Walter Scott was doubly right when he insisted, a short time since, that the most intensive study and preparation should be devoted here and now to the preparation of plans for economic and industrial, and above all, agricultural reconstruction. This whole question centres about the providing of work for the whole people; and not merely the providing of work, but of profitable work. We are only too well aware of the fact that the work of the average man, and woman upon the farm is never done. It is high time that the farmers of the country should concern themselves with these vital problems; and that they secure adequate representation—proportional representation—in Parliament to make their desires and policies an actuality.—W. W. Swanson, Prof. of Economics, University of Saskatchewan.



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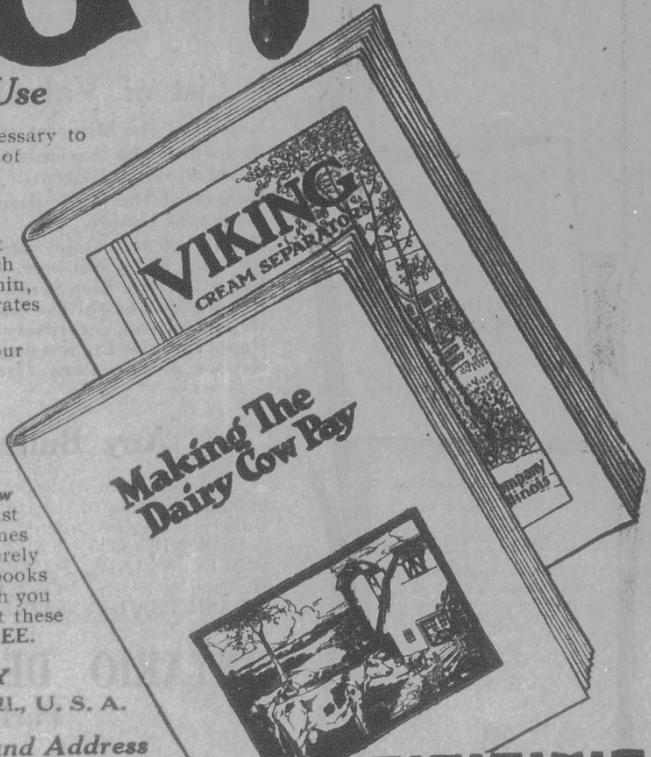
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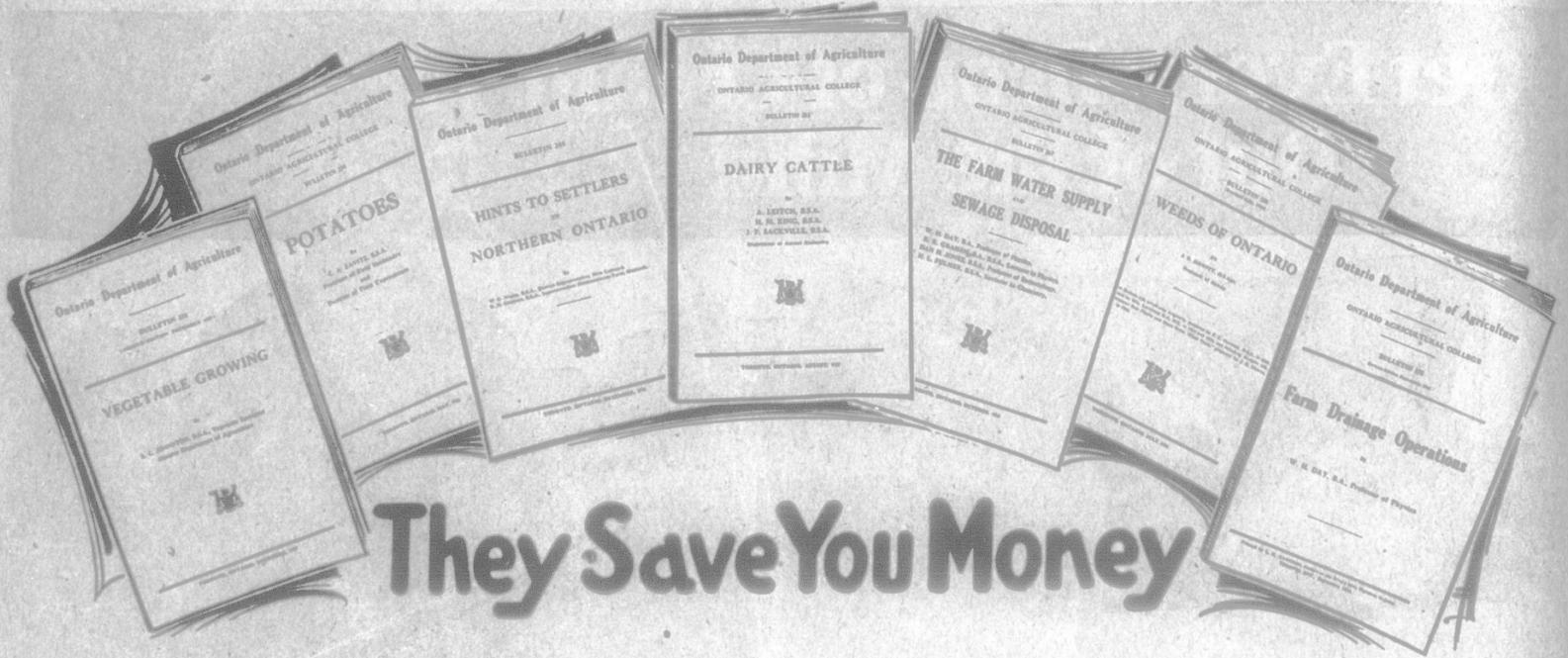
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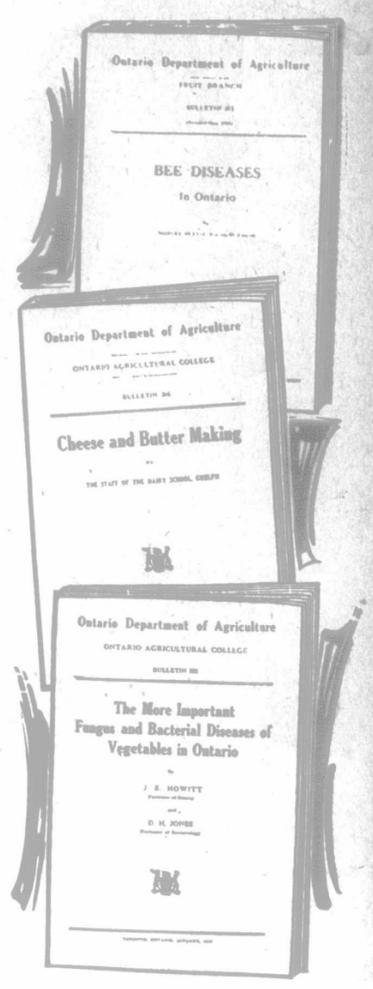
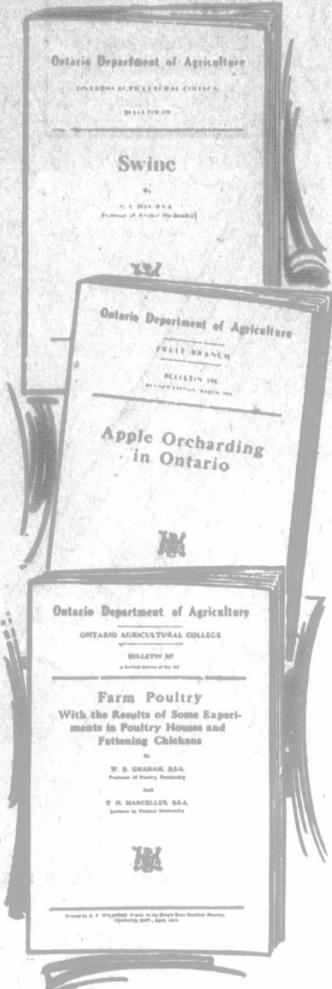
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