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LV.

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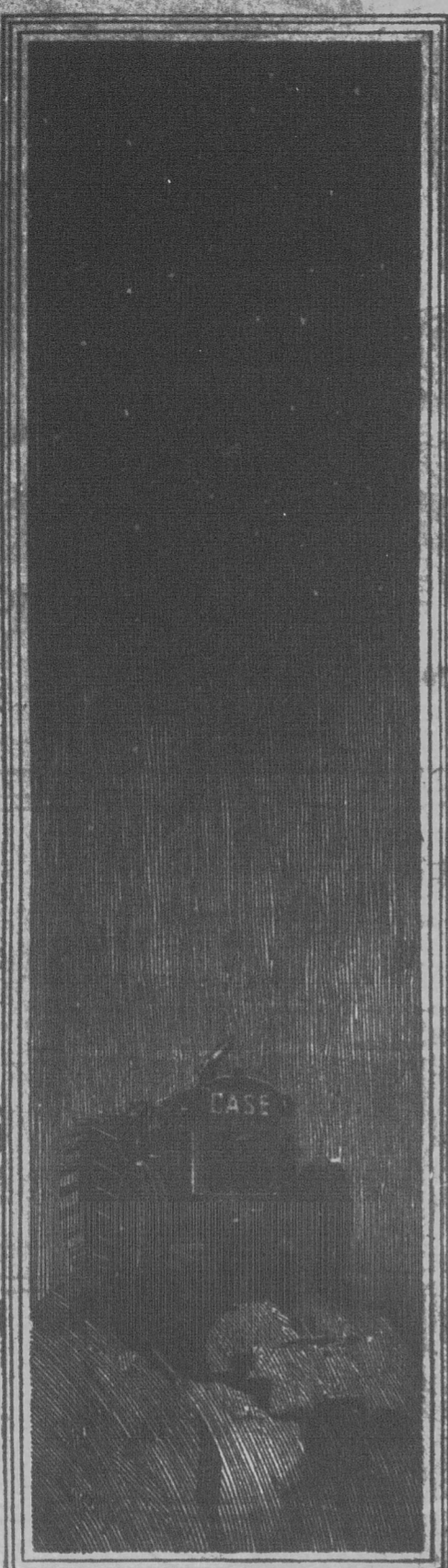

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# The Farmer's Advocate and Home Magazine

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1866

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LV.

LONDON, ONTARIO, DECEMBER 23, 1920.

1474

## EDITORIAL.

A Merry Christmas to all!

Give useful gifts, and see that the needy are first provided for.

Get a live stock club started in your district and interest the boys in the care of animals as well as in the little business transactions and responsibilities involved.

An idle herd is usually an unprofitable one. Keep the cows milking even if it entails the purchase of some concentrates to make the ration a balanced and a palatable one.

It is time clubs had their winter programs mapped out and were under way. Make the clubs interesting and instructive to old and young alike. Much depends on the executive, for a meeting is seldom a success unless the arrangements are complete.

We are loath at this time to say anything that would discourage the spirit of giving, but it does seem, particularly in towns and cities, that organizations are not careful enough in selecting the beneficiaries of Christmas donations. Sometimes those to whom we give require it less than we do ourselves. It really does them harm, but it does us good and perhaps we should overlook it.

The Secretary of the British Board of Agriculture recently announced in the House of Commons that the British Government had not the slightest intention of modifying the embargo on Canadian cattle. The British require a great deal of convincing, but they usually do the right thing in the end. Our Federal Government should not become discouraged in their efforts to secure an open port for Canadian store cattle.

"Keep away from Toronto" is the title of an editorial appearing in one of the leading daily papers of the Queen City. This warning is issued to the unemployed who, it is claimed, are constantly drifting into that city in the hope of getting free board. There are going to be some trying circumstances in the towns and cities of Canada this winter, but urban booms are always followed by a reaction of this kind. An unequal distribution of population is certain to breed trouble, and this country will be fortunate indeed if we can readjust ourselves without serious hardship to a large number of people in the towns and cities who should never have been there.

It is time we began to appreciate the possibilities and potentialities of Canada as a great live stock producing country. We have the foundation for a wonderful live stock industry; the next step is to agree on live stock policies and perfect marketing systems so our product will be remuneratively and expeditiously disposed of. The future of the live stock industry at the present time depends upon our skill in breeding, feeding and marketing, and the order of importance in which these may be numbered would probably demand that their order, as here set down, should be reversed. There has been a good deal said about breeding, but not very much about feeding, and as far as marketing is concerned, that has been left pretty largely to the governments. Some associations have interested themselves in it, but they have had no support or urgings from producers. The growers of live stock and the producers of live stock products should make it their business to see that a constructive, well-thought-out policy is agreed upon and that steps be taken to advertise and to market our live stock products to better advantage.

### Get the Good Out of Christmas.

There is only one way to enjoy Christmas and benefit by it; and that is to enter into the real spirit of the Yuletide season. If one stands coldly aloof while others are merry, if one accepts gifts only while others are giving, if one is the proverbial Scrooge while others are happy, Christmas for that one will be the most unpleasant season of the year. It is better to give than to receive, but we should consider the manner of our giving. It does not warm the heart so much when we give to those who already have plenty or more than we possess ourselves. People are inclined to move along in grooves, and Christmas is sometimes a stereotyped affair. We give to the same friends because last year they gave to us; they do not require gifts, neither do we, but it has become a custom which grips one and holds one to the same groove which annually gets deeper and harder to get out of. There are plenty of needy in the world. They may not be our neighbors or relatives, but the poor are always with us, and if they can be found and gladdened the pleasure of giving will be increased a hundred fold, and we shall feel like Dickens when he wrote: "I have always thought of Christmas as a good time; a kind, forgiving, generous, pleasant time; a time when men and women seem by one consent to open their hearts freely, and so I say—God Bless Christmas."

### More Production and Better Quality.

We are living in unsettled times—a period of readjustment—and such conditions always breed new thoughts and new ideas. There is no progress without thought, but a people need to be careful that their conclusions are correct, lest progress be in the wrong direction. Farmers, particularly, need to be acquainted with economic conditions, markets, finances and world trade. Farmers are big buyers and they are the biggest sellers in the world.

The opinion gains ground at times that farmers reduce their own revenue by producing too much. During certain seasons of crop failures prices are relatively high, and when a bumper year comes round prices fall. This has given rise to the belief that farmers would be better off if they curtailed production, spent less on fertilizers and labor, and had just as large a revenue from a smaller crop. Experiences seem to substantiate this argument, and even such a shrewd economist as J. J. Morrison, Secretary of the United Farmers of Ontario, is reported to have given expression to some such sentiment as this when speaking recently at Guelph. If we analyze the situation a little more carefully and go deeply into the matter, it would appear like heresy to advocate such a doctrine. The strongest argument advanced by free trade exponents is that we buy on a protected market, while the value of farm commodities is set on the markets of the world. We have a large home market, that is true, but the export call, if it be only for a million bushels of wheat or a few carloads of cattle, just about sets the price for the commodities sold at home. Carrying this argument still further, it is easy to see what would happen should we curtail production at home. Competing agricultural nations would at once step in to fill the gap created, and the temporary advance in price, if such occurred, would simply act as a stimulus to other nations to increase production. Just at this time competition is very keen. Denmark is exporting butter to America; New Zealand and Australia are bidding low for British trade; the farmers of France are reclaiming at an amazing rate the fertile acres so badly mutilated by the war. Two years ago France was one of the heaviest importers of American grains; to-day she is producing almost enough grain to feed her population. A disrupted Russia and the small nations of Central

Europe will again come to the front, and these with large agricultural commonwealths of the Southern Hemisphere will provide competition of an agricultural nature such as we have never known before. Should we cease to produce heavily the result would only be noticed by ourselves in smaller incomes and decreased prosperity.

We shall have to farm more carefully in the next few years. The margin of profit will likely be narrower, and to overcome this it will be necessary to pay more attention to cultural methods and to the management of our live stock. Competition will be keener, and we shall have to improve the quality of our product and produce it in greater volume so the consuming markets will be able to depend upon Canada for supply. The right sermon now to preach is greater volume of production, improved quality, better farming methods and increased marketing facilities.

### Quebec and the Royal Show.

One of the functions which the new Royal Show should perform for the benefit of the live stock industry in Canada is to develop a unity of purpose and a common ideal among the stockmen of the various provinces. The show itself, when under way will stand as a meeting place for the best each province can produce, and it should be regarded as having been established in the interests of the Maritime and Quebec live stock industry as well as the live stock industry of the Province of Ontario. It is true that the Royal will be held in Toronto, but then Toronto wanted it worse than any other city wanted it. No one province owns the Royal; it belongs to Canadian agriculture as a whole, but particularly to Eastern Canada, because of the natural barriers separating, in large measure, the East from the West.

As an evidence of this inter-provincial ownership, other provinces than Ontario are being asked to assist in financing the Royal Winter Fair. Only recently a delegation of Quebec live stock breeders met the Hon. Mr. Caron, Minister of Agriculture for Quebec, to ask for a grant of \$10,000 per annum towards the new show. It will be remembered that the Ontario and Federal Departments of Agriculture are each granting \$25,000 per year toward the prize-list, and it seemed eminently fitting that Quebec should be invited to co-operate in forwarding a national movement of this kind. It is a difficult project to carry through to a successful conclusion, and those who have put their shoulders to the wheel to provide for Canada a central rallying point for live stock improvement similar to the great exhibition held annually in Chicago, will need every assistance. Quebec and Ontario must bear the brunt of the burden, because the live stock industry of the Maritime Provinces is sadly handicapped by lack of good markets and cannot, therefore, be expected to contribute to the success of the show to the same extent as the other Eastern Provinces which are more fortunately situated.

The delegation asking for the grant from Quebec, was, as might have been expected, given a very courteous hearing by the Hon. Mr. Caron. Mr. Caron knows his Province and his people, and we believe that his Department is always willing to further any plans or projects that promise improvement in agriculture. The Royal Show should be a stimulus to further improvement over all of Eastern Canada, and we have every reason to believe that Quebec will join in, with her undoubted interest in agriculture, to make it all that it should be, both as a purely Canadian event and a stimulus to live stock improvement.

Take time to feed cautiously and wisely. Good feeding is never done in a hurry.

## The Farmer's Advocate AND HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

Published weekly by  
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### First Aid to Old Bachelors.

By ALLAN McDIARMID.

I was asked lately if I wouldn't put in a good word for the Bachelors, sometime when I was trying to give expression to my ideas on paper. He's the under dog that everybody kicks or throws a stone at, so I suppose that it's no more than fair that I should say a word in his behalf; that is, if I can think of anything to say. A task like this compels us to sort of reverse our mental machinery and begin thinking in a direction opposite to what has always been our habit and contrary to public opinion in general. For who ever wasted sympathy on the man that hasn't had "git up and git" enough to shoulder his share of life's responsibilities? Who ever saw anybody shed tears at his funeral? He's a sort of outcast from society and if it wasn't for the fact that his numbers are becoming greater, year by year, we might safely consign him to oblivion, "unwept, unhonored and unsung."

But he is a problem that, under the circumstances, we must take into consideration, like war, famine or pestilence, whose existence we deplore but which must, nevertheless, be fairly met and dealt with.

For thousands of years, whenever mankind got into a tight corner, it would always take refuge in the passing of a statute, or law, that it was hoped would help to get everyone safely over the difficulty.

For war we have prescribed a League of Nations. For famine we try the cure of jailing the profiteers. For pestilence we quarantine and vaccinate, and all these things are backed up by law. And we even took to passing rules and regulations as to the manner in which the inhabitants of our country should quench their thirst.

It is little wonder then that that defenceless, and often

homeless, being, the bachelor, should be made the subject of this legislating habit of ours. A brilliant idea occurred to some one. They would impose a tax on all unmarried men who had come to the years of understanding, and back it up by the law of the land; tax him off the face of the earth and out of existence, as it were. "Desperate diseases require desperate remedies," and that sort of thing. Force him into matrimony or give him an alternative almost as bad. Make him take up the duties and responsibilities of the average citizen or pay the expenses of those that do. No allowance made for circumstances—a regular holdup—your money, or your life, as you wished to live it.

Going back to the dawn of history, can we find another instance where a person has been subjected to a tax on what they didn't have? Tax a man for his farm or his dog, or his wife, if you like, but don't tax him because of his lack of these things. It's against reason and common-sense, and the matter ought to be taken to the Supreme Court, that is if it too is not swayed by the general prejudice against the Ishmael who has every man's hand against him.

But as to whether the bachelor, be he young or old, shall be taxed or put on the "free list," is not the most important question we have before us. The real point is, what is his place in the community? Is he a member of society in good standing? Is there room for a difference of opinion as to his moral right to take the attitude he does towards his fellow-men in general and his fellow-women in particular? We claim there is. And the best way to prove it is to quote the words of men of wisdom and experience who have left themselves on record as to this matter.

Bacon says that "a wife and children are a hindrance to great enterprises."

An old Scotch proverb says: "If marriages were made in Heaven we had but few friends there."

Another proverb, not taken from the Bible either, says: "When going to sea say a prayer; when going to war say two prayers; but before marrying, say three prayers."

A French writer gives his experience and opinion in this way: "When a man says he has a wife it means that a wife has him."

Voltaire, another French author, makes this confession: "Woman was created to tame man." We can call to mind many sad examples of men who have been thus tamed.

A Welsh proverb thinks that "the man who has taken one wife deserves a crown of patience," but that "the man who has taken two wives deserves two crowns of pity."

Another from the same country says: "In buying horses and in taking a wife, shut your eyes tight and commend yourself to God."

And again: "It is easier to take care of a peck of fleas than of one woman."

A man who, for some reason, didn't sign his name to his statement, says: "How many men would laugh at the funerals of their wives if it were not the custom to weep?"

These are only a few of the examples we could give of the sentiments expressed by some of the world's great men. It all goes to prove that the bachelor of today is not without the backing of the men of past generations in regard to the matter of playing a lone hand in life's game. A lot of them did it and, apparently, a lot more wished they had. Of course, whether you do or don't, it's human nature to regret, but there's no doubt of the fact that "he travels fastest who travels alone," even if he does end in a smash-up, sometimes.

Bachelors have their place in the scheme of things, as well as that part of humanity that is given over, almost entirely, to personal and family cares and worries. They've done just as much for the world, recently, as the married men. They whipped the Germans and for that, if for nothing else, they should have our admiration and respect. They should be bonused, not taxed.

But it's the old story. He who has, gets; but he who has not, gets it in the neck.

In conclusion we can't do better than quote the words of one more great French writer. "Bachelors," he says, "are providential beings; they were created for the consolation of widows and the hope of maids."

This practically puts them in the same class as philanthropists and home missionaries.

The married man has, of course, certain advantages, but, as we heard it expressed by an old gentleman lately: "whether one is willing to go through so much to learn so little is entirely a matter of taste."

### Nature's Diary.

BY A. BROOKER KLUGH, M. A.

ADMINISTERING MEDICINE TO TREES.

For many years past there have been occasional references in the press to the results which have been attained by injecting various substances into trees. Sometimes the operation has been undertaken to rid the tree of injurious insects, sometimes to kill fungi, and again with the idea of imparting some quality to the fruit or foliage. It has been asserted that if a solid piece of some chemical substance is placed in a hole bored in a tree-trunk that this chemical will be carried in the sap to all parts of the tree. Such assertions can only be made by, or believed by, those who know nothing of plant anatomy, and who think that the circulation in a tree is similar to that of the blood in the human body. As a matter of fact the living wood of a tree is made up of long tube-like cells, and it is through these cells that the current of sap ascends. There is little lateral spreading of this ascending current, so that any chemical would be transmitted only to those cells lying fairly directly above the spot at which the chemical was introduced, and none of it would reach the other side of the trunk. The elaborated sap, that is the sap which has received the food-products made by the leaves, descends through the inner layers of the bark and here also the descent is in a fairly straight line. Furthermore the effect of a strong chemical is to kill the cells about the point of its introduction and thus to stop any absorption of any kind.

In recent years the method of giving injections of medicine to trees has been tried in an effort to combat the terribly destructive chestnut bark disease which has spread with great rapidity and has wiped out nearly all the chestnut trees over large areas. Dr. Rumbold of the U. S. Bureau of Plant Industry has described these experiments in a recent number of "American Forestry." The first difficulty encountered was in getting the tree thoroughly injected with any kind of solution. It was found to be essential to make the holes through the bark for injection purposes under cover of a liquid, as if air entered before injection, or with the solution, air-bubbles clogged the vessels of the tree and prevented the absorption of the solution. The following method was, however, worked out to eliminate this difficulty. A glass container holding the solution was hung from a branch. The solution was led to the point of injection by a rubber tube in the end of which was a small glass tube in the form of a T was inserted into the injection hole. The free end of the horizontal arm of the T tube was tipped by a piece of rubber tubing. After the solution had filled the tube, a steel cutter was inserted through the horizontal arm of the T tube and driven through the bark of the tree. In this manner a small hole was made in such a way that no air could clog the vessels, and the solution began immediately to enter the tree. It was found that all kinds of chemicals in solution could thus be introduced into trees, provided there was sufficient transpiration (evaporation of moisture) from the leaves of the trees to keep the sap moving. The transpiration was greatest when the trees were in full leaf and the day was sunny, dry, and a breeze was blowing. On cold rainy days the trees took up very little of the solution. The season of the year caused a great variation in the amount of solution absorbed by the tree, and also as to the part of the tree to which the injected chemical went. For instance if a lithium solution was injected in the autumn, when the nuts were ripening, a large amount of lithium collected in the nuts and in the ends of the fruiting branches. It was found that June was the best month for injecting, then July, May, August, September, October and April. The average amount of solution absorbed through a single injection hole by a tree fifteen feet in height and with a large rounded top, ranged from one-quarter pint per day in April to three-fifths pint per day in June. In some cases as much as three quarts of solution was absorbed in twenty hours. The rate of ascent of solutions was found to be quite rapid, as lithium injected into the trunk could be detected in the leaves of branches at the top of the tree in ten hours.

In the treatment of the chestnut bark disease fifty-six chemical solutions were tried, and of these lithium carbonate and lithium hydroxide were found to check the growth of the fungus. In many cases the effect of the solution was to cause the tree to form a callus around the diseased portions of the bark, which then dried and could be picked off. So far, then, the experiments were a success, but it seems as if continued treatment is necessary to prevent re-infection, as the lithium is sooner or later eliminated from the tree.

It was found that the holes through which the solution was introduced caused no damage to the tree. These holes were afterwards filled with clean grafting wax, and a callus growth quickly closed the wound, forcing out the wax plug.

Politics is an exacting game, and while the great mass cannot all "sit in" they do direct, to a large extent, the conduct of the game. The Drury Government has done well, but they must feel, as a Farmer-Labor coalition, a certain gap between them and the masses for whom they legislate. A government must be representative of the masses, and the Premier of Ontario has led out on the only road that will lead to permanent and stable government.



Bringing Home the Christmas Tree.

# Investigating Farm Problems in the Annapolis Valley.

A TRIP through the Annapolis Valley, Nova Scotia, any time during the period from early June to late October will convince anyone that in the general scheme of creation "The Valley" was penciled off as a great apple-growing district. The soil and climate apparently combine to produce a natural habitat for the apple, and when apple trees once get their roots into the soil of that far-famed Valley they are pretty sure to develop into something that cannot be surpassed for color and stateliness. However, when man has his way he seldom improves on Nature's plans; and in the long run he usually destroys the happy equilibrium, exposes himself to the ills and forfeits the benefits which a kind Providence ordained should exist in the great scheme of which we are all a part. This, perhaps, is one reason for the Experimental Farm at Kentville, Nova Scotia, which began to take on shape in the spring of 1912 under the supervision of W. S. Blair. Orchards were planted in the Annapolis Valley twenty, thirty and forty years ago by pioneer fruit growers whose scientific knowledge could all be written down on the back cover of a public school primer and there would still be room to spare; and strange as it may seem those same early-planted orchards are the ones that are yielding the one million and 1 1/2-million-barrel crops which the Valley now produces. In those early days the soils were not depleted, pests were few and unimportant, Nature smiled on the pioneers who went forth to plant trees. Perhaps it can be truthfully said that the men of twenty, thirty or forty years ago, in spite of their ignorance of nitrates, phosphates, insecticides and fungicides, were quite as well equipped to overcome the obstacles of their day as the modern grower is to battle with the infinitely more complex and stubborn problems of the present. Be that as it may, we desire here to pay a tribute to the early growers of the Annapolis Valley, whose prophetic vision and heroic efforts adorned that comparatively small area with the large producing orchards which earn for the Valley the distinction of being one of the foremost apple-growing districts in the world. They endured many hardships and denied themselves many comforts while the plantations were coming into bearing and to the writer, who has had a close acquaintance with the Valley for more than twenty-five years, it seems that we give too little credit to the stalwarts who laid the foundation for this great apple-growing industry.

If the fruit-growing enterprise has developed in the Annapolis Valley, and there can be no doubt regarding that, the problems and difficulties confronting growers have likewise increased. There are labor problems, marketing problems and, last but not least, cultural problems of no small magnitude. In order to throw some light on the general cultural methods best adapted to Valley farming and help solve the problems which confront the apple-growing specialist, the Experimental Farm, the theme of this article, was established at Kentville. This branch of the Dominion Experimental Farms System was primarily intended as a fruit station ministering to the needs of apple growers. However, during the past eight years, while the trees were still young, a fairly complete investigation of soils, farm crops, the relation of live stock to the fruit and general farm, and other kindred subjects, has been carried on.

### THE DEARTH OF LIME.

The Annapolis Valley soils, and likewise those of the entire Province, of Prince Edward Island and of New Brunswick, are pronouncedly deficient in lime. The reason for this is not clear; some lay it to the character

and composition of the soil, others to the precipitation which is fairly heavy, while practically all those in a position to appreciate the real value and true function of lime agree as to the deficiency of it in Maritime soils. The Departments of Agriculture in the three Provinces are awake to the situation, and all are active in encouraging the application of lime in some form and putting it within reach of the farmers. At Kentville, Mr. Blair is experimenting with lime and endeavoring to reveal the useful part it plays in getting a catch of clover. He is of the opinion that 75 per cent. of the soils in the Annapolis Valley would return a handsome profit from 4 tons of limestone per acre broke up into two-ton applications just before seeding down, where a three-year rotation is followed. The aim at the Kentville farm is to get good catches of clover and build up the soil with humus. Lime is also being investigated in its relation to fertilizers and manure.

Maritime Province farmers would do well to test their soils and determine for themselves the actual needs of their farms. It is broadly proclaimed that lime and clover could be made to revolutionize farming in the Maritime Provinces if both were given proper recognition.



A Crop of Hay on the Dyked Marsh at the Experimental Farm, Kentville, N. S.

### THE STRUGGLE WITH CLUBROOT.

Turnip growers in the East are fairly well acquainted with that enemy of the turnip field known as "clubroot." It has been steadily and persistently spreading until it has become a menace of no mean importance. Long blanks in the rows with no living turnip plants indicate the presence of this disease, and when it does not totally annihilate the crop the roots are dwarfed and contorted. The opinion has been entertained that an abundance of lime will prevent this scourge, and at Kentville a test has been carried on to determine the accuracy or fallacy of this contention. Slaked lime and ground limestone have been used in varying amounts on a number of plots purposely inoculated with clubroot, and when the results are compiled for this season's work the test should be completed. This is a matter of prime importance to farmers in the East where turnips grow to perfection when they do not fall a prey to this scourge.

### CORN THE KING OF FIELD CROPS.

"There is no crop we can put into the ground that equals corn," said Mr. Blair, when asked if he still

championed and was successful with corn as a silage crop. The silos at the farm housed 225 tons of silage last year, and it was entirely satisfactory. They have yet to have a failure with the crop. Sunflower as a silage crop is being tried in an experimental way this year, and the results with it will be forthcoming later. A good many silos have been erected in the East, but for various reasons too many of them are allowed to stand unused, or in the case of the old-fashioned stave silo to collapse into a heap of ruins. Live stock cannot be carried successfully through the long winter period in Eastern Canada without succulent fodder, and the silos should be employed to contain silage made from some crops adapted to the climate.

Clover has a staunch supporter in the Superintendent, who argues that if timothy and clover are sown plentifully sufficient of the natural grasses will find their way in even far pasture land. The regular grass mixture sown consists of timothy, 8 pounds; alsike, 2 pounds, and red clover, 8 pounds.

Growers in the Annapolis Valley, particularly, have swung around to a liberal use of commercial fertilizers, where formerly they used it very sparingly. At the farm in question the matter is under test, and economical results have accompanied its use up to 1,000 pounds per acre. Above that amount the yields do not justify one in going.

### MILK PRODUCTION PROFITABLE.

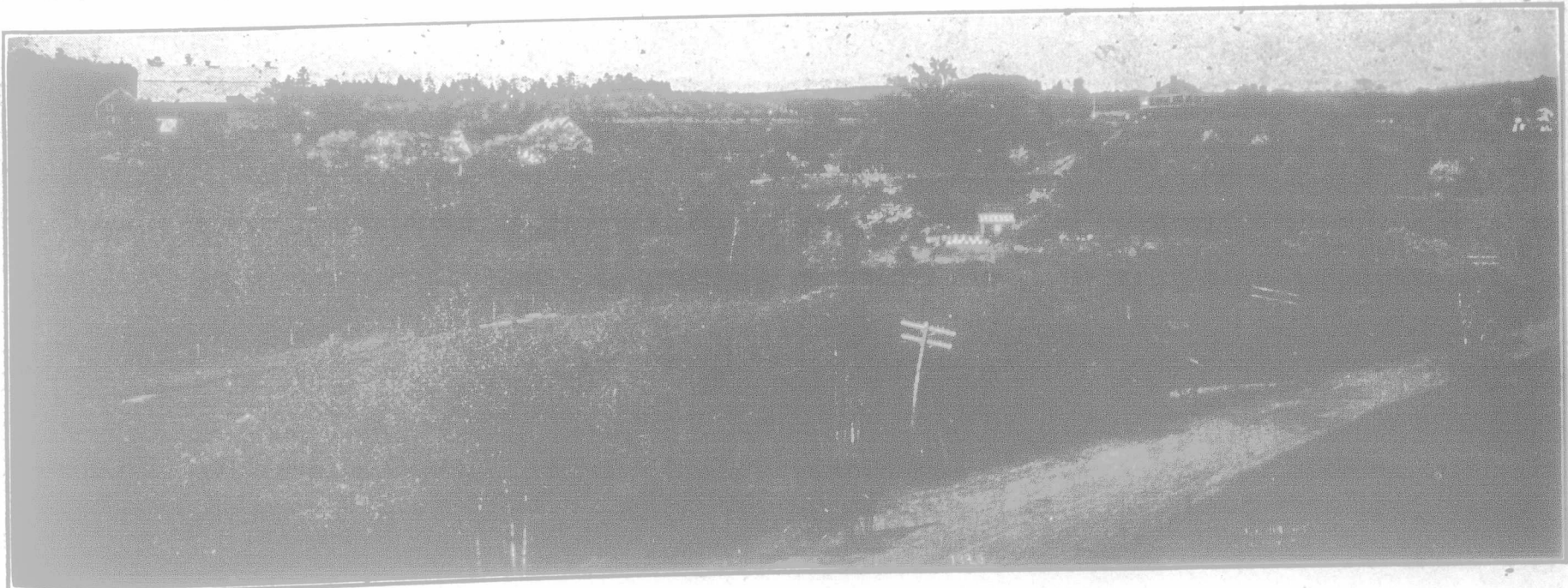
A very creditable herd of dual-purpose Shorthorns are maintained at the Kentville Farm. The foundation for the herd consisted of good milking Shorthorn cows with plenty of type and character, and on them have been used bulls strong in the blood of Butterfly King and St. Claire. When visiting the Farm we observed as nice a bunch of heifers and heifer calves as one would see in a long journey; they were well grown for their ages, thrifty and typey. We were pleased, indeed, to see such splendid stock bred for the purpose of improving the live stock in a district where the need of improvement is so apparent. It has always been a debatable question whether the fruit growers of the Annapolis Valley should stick exclusively to apple production or have two strings to their bow. Without entering into the pros and cons of the argument at this time it is sufficient to say that good live stock never did a country any harm, and where it is handled wisely it invariably does inestimable good.

A better description of the herd is contained in the report for one of the recent years when the complete records show that 10 aged cows and 4 heifers (14 in all) averaged 6,079 pounds of milk each for the year. The daily average was 19.02 pounds. The butter-fat test was 4.14 per cent. The average butter production for each cow in the year was 296.6 pounds, and the profit per cow was \$50.18.

### THE FRUIT FARM PROPER.

The Experimental Farm at Kentville has been transformed from a wilderness to a fruit farm with amazing rapidity. Approximately 50 acres were planted to apples and other fruits during 1912, 1913 and 1914. A part of this is a commercial orchard planted 20 by 20 feet apart, and some 20 by 40 feet. There is also a variety orchard containing in the neighborhood of 450 varieties. In addition to this a farm recently added to the original purchase has 18 acres of trees, making over 60 acres of fruit. One of the tested varieties which is quite promising for the district is the Opalescent, a

Continued on page 2238.



A Panoramic View of the Experimental Farm at Kentville, Nova Scotia.

## THE HORSE.

### Feeding Weanlings.

In answer to an inquiry from a subscriber, re the best kind of feed for a five-months-old colt he hopes to show at the fairs, we thought the subject worthy of a somewhat lengthened discussion.

We presume that the owner wishes to winter the colt in such a manner that he will be in condition for show purposes when the opportunity for competition presents itself. The feeder must remember that at this age it is quite possible to make a mistake in the endeavor to get the animal in high flesh. The ultimate development, usefulness and value of a foal depends largely upon the feed and care he receives during his first winter.

Weanlings should not be pampered, kept housed all the time and fed heavily on grain. They should get plenty of exercise; at the same time the too common idea that a colt should be taught to "rough it" early in life, in order that he may become a "tough, hardy animal," is as false as it is inhumane. In order that he may develop into the best that "is in him," he must always be well looked after, but this especially applies during his first winter.

The foal should be kept in a comfortable box stall when in the stable. The larger the stall the better as there may be occasions when the weather is such for several days at a time, that it would not be wise to turn him outside for exercise, and if in a box stall he will take more or less exercise voluntarily, the amount being largely in proportion to the size of the stall. So long as the weather remains reasonably fine, he should be turned out into a field or paddock for a few hours daily, but when it is wet or very cold he is better in his stall, which, in addition to being large, should be well lighted, excluded from drafts, and well ventilated, and when possible, of moderate temperature. But it is better that the temperature be low than poorly ventilated and warm. His coat will grow sufficiently to protect him from the cold, provided drafts are excluded, but nothing can act as a substitute for fresh air.

Of course, there are cases in which a box stall cannot be provided, and it is necessary to tie the colt in a single stall, but daily exercise must be given in some way, as it develops muscle, aids digestion and gives tone to the respiratory and nervous systems. When regular exercise is allowed there are few cases in which it is not safe to allow the colt a very liberal supply of grain. There are few weanlings that will eat sufficient to cause digestive trouble, provided, as stated, that daily exercise is allowed. Of course, there are exceptions and these must be treated accordingly. The question then arises, "What and how should they be fed?" As with older animals, hay, oats and bran must be depended upon for the production of bone, muscle and energy, and anything else given is merely for the purpose of satisfying the appetite and aiding digestion. Especially for colts, care must be taken that all feed given be of good quality. Musty or dusty feed of any nature should, on no account, be allowed. Well-cured clover hay gives better results than timothy, but where this cannot be procured good results are obtained from good timothy. The amount of hay should be liberal, but in no case more than will be eaten at one meal. The habit of keeping hay constantly before an animal of any age is wasteful and harmful. If he be fed what he will eat in at most one and a half hours, and then get nothing whatever to eat until the next meal time, he will have an appetite for his meal, will relish it, and receive more benefit from it than if he had been eating more or less between meals. The digestive organs require periodical rests, which they do not get when feed is kept before the animal at all times.

The form in which oats are fed depends, to some extent, upon circumstances and the opinions of the feeders. Some prefer whole oats, some whole oats mixed with bran, some chopped oats, some rolled or crushed oats, and some boiled whole oats. The writer

prefers rolled oats, where this is fed some give it dry, others dampened, others mix it with bran and feed it either dry or dampened. We favor the following plan for weanlings. In the evening mix the ration of rolled oats with a little cut hay or wheat chaff, in a pail, pour some boiling water on it, cover the pail with a lid to prevent escape of steam, and allow it to stand in a moderate temperature until morning, then feed. Then prepare another feed in the same way, to be given in the evening, in the meantime giving a mid-day meal of either rolled or whole oats. This scalded mixture is very palatable and gives good results. It is also well to give a feed of bran, say twice weekly in lieu of oats, but some prefer mixing a little bran with the oats for each meal. Either plan gives good results. In addition, it is well to give a carrot or two with the mid-day meal. This is very palatable and aids digestion. As stated, the amount of grain allowed may be quite liberal, provided regular exercise be allowed. The feeder soon learns about the amount the animal will consume with apparent relish, but if he notices any symptoms of digestive trouble following a meal he should reduce the allowance. Water of good quality should be allowed at least three times daily, and where conditions are such as will allow it, it is well to allow free access to it at all times.

In addition to feeding, housing, watering and exercise, it is necessary to attend to the feet during the winter. The wear of the feet is not equal to the growth, and unless attended to they will grow too large, ill-shaped and out of proportion, hence interfere with the proper relation between the bones of the feet and those of the limbs. This may cause the animal to stand and walk in an unnatural manner and interfere materially with his ultimate value and usefulness. The feet should be carefully examined at least once monthly, and by the use of a shoeing-smith's knife and rasps, trimmed to the desired size and normal shape. The stall should be regularly cleaned out to avoid forcing the colt to stand on heating manure. The attention to the feet teaches the colt to submit to control, and in addition to the handling of the feet and limbs, it is well to teach him to lead, stand tied, etc. Under such care the colt should be in good condition, in fact practically in "show condition" when pasture time arrives, when, if the feeder thinks it necessary, he can supplement the grass with a little grain once or twice daily, as the condition of the pasture warrants. WHIP.

### The Horse Market and Farm Products.

Farmers who do no special breeding of horses and consequently have none to dispose of are not inclined to interest themselves very much in the horse market or in the horse breeding industry. They feel that when the need arises they will be able to obtain a horse or a team, so why should they worry? Whether horses or trucks are used in the manifold activities of trade and industry it matters little so long as plenty of horses are available for work on their farms. This attitude on the part of farmers is altogether too general and many breeders of horses are not sufficiently informed regarding the long-range effect that a decadent horse industry will have on farming as a whole. There is a home market for farm product involved and this phase of the situation is of the most direct significance to farmers everywhere. Wayne Dinsmore, Secretary of the Horse Breeder's Association of America discussed this subject at the last annual convention and showed the breeders where more than a million horses and mules had been displaced in the towns, cities and villages of the United States during the last ten years. Commenting further he said:

"This not only means the closing of a channel to the farmers for sale of his surplus horses, (a by-product of any well managed farm,) but a loss of a home market for staple farm products amounting per year to 113 million bushels of oats, 70 million bushels of corn and 4¼ million tons of hay. The ears of users of horses

both in city and on farms have been so filled with the whirring of engine wheels that the farmer has let this tremendous market for oats, corn and hay, greater than our exports in any one of the last five years, slip unheeded through his fingers, while the city man has paid from two to three times as much for hauling and delivery service without proportionate recompense in efficiency."

The farmers of Canada, where horses have also been displaced in large numbers should consider the problem from this angle for the local market for products of the farm is too big to be ignored.

## LIVE STOCK.

### English Fat Stock Shows.

EDITOR "THE FARMER'S ADVOCATE":

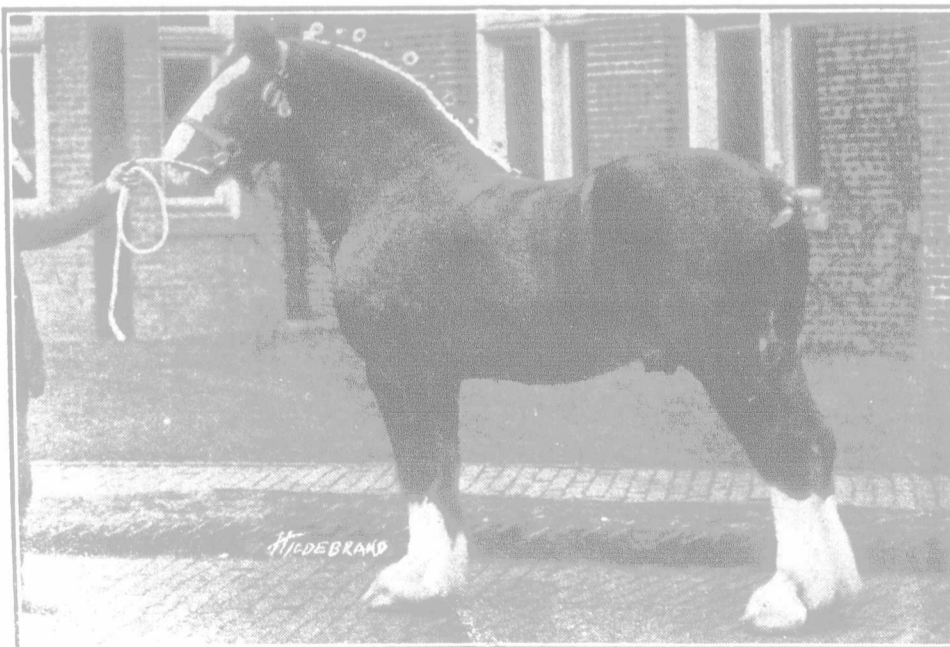
Two of England's leading fat stock shows have just been held. In that held at Birmingham the cattle championship was won by Sir Richard A. Cooper's cross-bred heifer, Blue Bell, by an Aberdeen-Angus bull, out of a dam by a cross-bred Angus-Shorthorn. This exhibit at 2 years 8 months and 5 days weighed 14 cwt. 2 qrs. 11 lbs. Reserve for supreme title was J. J. Cridlan's Eros, an Aberdeen-Angus of Ballinalloch ancestry scaling 13 cwt. 3 qrs. 11 lbs. at 32 months old. Best animal bred and exhibited by the owner was Messrs. H. Weston & Sons' Hereford steer, Bounds Jester, by Conquest and out of Accomplice 4th. At 1 year, 9 months and 6 days he brought down the scale at 13 cwt. 3 qrs. 16 lbs.

Championship in sheep (pens of 3) went to the Pendley Stock Farms Co., Tring, for a pen of Hampshire Down lambs which weighed 5 cwts 13 lbs. at 10 months. Reserve was R. S. Hicks Southdown wethers which at 22 months turned the scale at 5 cwts 4 lbs. Championship in pigs (pens of two) fell to Robert Ibbotson's Tamworths, which won several special awards and brought down the scale at 8 cwts. 17 lbs. at 11 months and 3 weeks old.

At Norwich show the cattle championship fell to the Duke of Portland's white Shorthorn heifer, Welbeck Lass which scaled 16 cwt. 1 qr. 6 lbs. at 2 years and 7 months. Reserve was A. W. Bailey Hawkin's Era of Stagenhoe which at 34 months weighed 14 cwt. 1 qr. The Royal herd from Sandingham won the steer prize with a Red Poll scaling 15 cwt. 2 qrs. 12 lbs. at 2 years, 9 months and 3 weeks. Sir Jeremiah Colman's Southdown wethers won the sheep championship. They weighed 4 cwts 1 qr. 10 lbs. at 22 months. ALBION.

### "I Got Him!"

A boy pushed open the door of the Agricultural Representative's office one morning and shouted "I got him!" and was gone. Those in the office were surprised at the action of the lad but they were soon enlightened as to the reason for this outburst of enthusiasm. A pig club had recently been organized and one stipulation was that each member was to give his personal note, backed by the signature of a parent or guardian, in payment for a young sow. The notes would not mature until the member had produce from his sow to sell. This particular lad had been in town the day previous and had picked his sow, but he could not make final settlement as the father was not present. The Representative told him to go home and bring his father in next morning at ten o'clock. "Father is very busy and thinks this club work all nonsense. He won't come, I know he won't!" said the boy and his eyes filled with tears as he saw his chances of owning a pure-bred sow vanish. To be lenient with one lad would possibly weaken the morale of the scheme and, besides, business is business. The lad was told to bring his father in next morning, but if he wouldn't come he was to come anyway. We believe the Agricultural Representative would have found some way of financing that pig deal if the father wouldn't lend his aid. However, the boy had his father with him at the appointed time



**Wee Donald,**  
Grand champion Clydesdale stallion at the International, Chicago,  
for C. A. Weaver, Regina, Sask.



**Donna Woodford 5th.**  
Champion Hereford female at the International, Chicago, for  
N. E. Parrish, Reading, Pa.

the note was signed, and the pig taken home. A more delighted boy would be hard to find in many a day's journey and we have an idea that the father was glad that he had come. We don't know what persuasive powers or arguments the lad used but the fact that the father did come enlisted another recruit for better live stock and the enthusiasm of the boy will altogether likely enlist the father also.

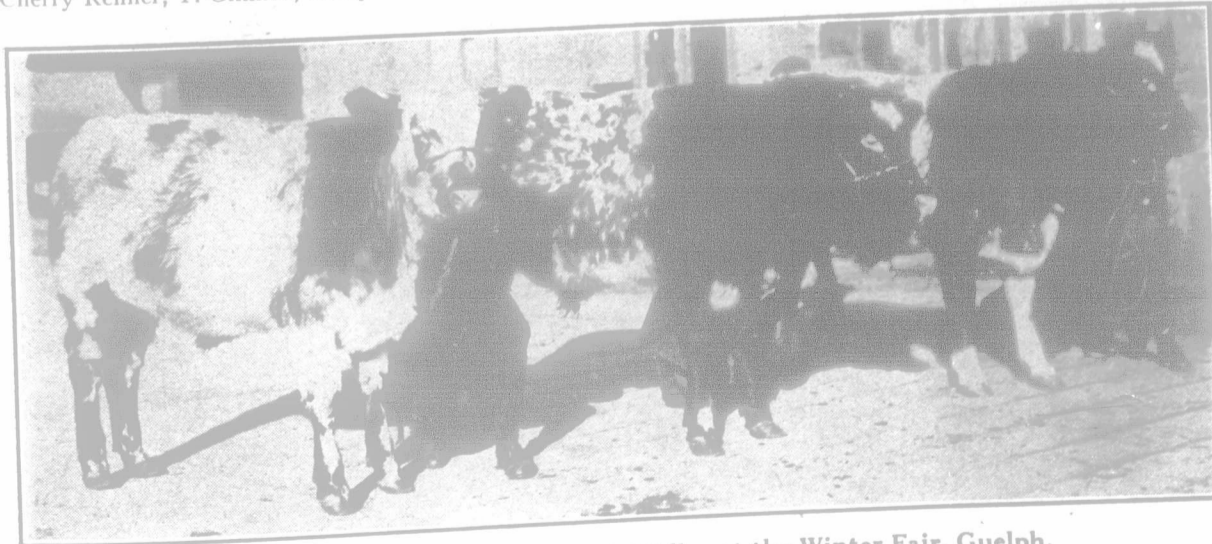
There are many boys who have coaxed father for permission to have a calf, pig or lamb to call their own and to care for, promising to work hard and look after the other stock. Sometimes they get their wish but after months of hard work have had their air castles broken down by the money for the sale of the boy's property going to help reduce the mortgage or to buy new machinery. How can a father hope to retain the respect of his son or to keep him on the farm when he breaks faith with him? The selfishness of the head of the house is responsible for a portion at least of the rural depopulation. When a boy gets his father to quit the field in harvest time to drive seven miles to town to put his name along side of his twelve-year-old son in the purchase of a ten-weeks-old registered pig, we venture to say that that father will take a keen interest in what the boy does with that pig and the boy will take a keener interest in the other stock on the farm than if he had been forced to get the Agricultural Representative or other person to back his note. When the boys "get the fathers" the fathers usually have the boys remain with them on the farm.

If there is a pig, calf or lamb club in the community the boys and girls should be encouraged to become a member and assisted to do the best possible with their animals. It is but human nature for a person to want to own something to have something that will give returns that they can call their very own and use as they think best. Too many country boys and girls have had to depend on the parents for every cent they had to spend and as a result when the time came for them to sever connections with the old home and start for themselves they were like a ship stranded on a stormy sea. They knew nothing of values, of banking or the way of the financial world, consequently at twenty-five years of age they had to learn by hard experience what should have been taught by practice in their teens. A livestock club in every community and every boy and girl a member of it would soon arouse a new interest in agriculture in general and would hold the cream of the country to the farms to be producers of wealth. Are you a club booster or knocker?

### Third Annual Hereford Sale at Guelph.

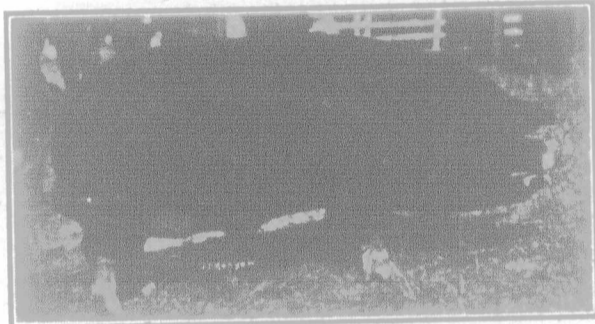
On December 10, the Ontario Hereford Breeders' Association held their third annual auction sale at the Royal City, when they disposed of five males and forty-eight females. The attendance was not large and bidding was slow. Quite a few of the entries were well bred; some, however, were plain and were brought into the ring in field condition, which did not impress the purchasers as favorably as if they had been in higher fit. However, some very good prices were received. For instance, Bernice, consigned by J. E. Harris, of Kingsville, went to A. L. Webster & Son, of Croton, at \$525. She had a heifer calf at foot, and is a good cow for her age. Bonnie Lass, consigned by D. Grainger, went to the bid of W. Mitchell, of Norham, at \$400. She had a bull calf at foot. Anna Donald, consigned by W. H. Hunter, was purchased by L. O. Clifford, at \$400. On the whole, the sale was a satisfactory one, and led to the distribution of good cattle. The total receipts were \$9,700. The following is a list of the animals selling for \$100 and over, together with the names and addresses of the purchasers:

Donald Lad 6th, W. Readhead, Milton.....	\$210
Canadian Fairfax, Geo. Kennedy, Lucknow.....	185
Columbus Donald, W. Mitchell, Norham.....	205
Roy Fairfax, A. S. Hunter, Durham.....	100
Don's Jessie, W. Mitchell.....	130
Bernice and H. C., A. L. Webster & Son, Croton.....	525
Miss Donald 3rd, L. O. Clifford, Oshawa.....	230
Miss Albany, J. G. Boyes, Creemore.....	335
Jessie 25th and calf, A. Gammie, Ariss.....	350
Rosie and H. C., W. Mitchell.....	300
Cherry Refiner, T. Gilfillen, Guelph.....	160



First Prize Steers in Group Under 1,000 lbs. at the Winter Fair, Guelph. Exhibited by J. Lerch and Sons, Preston.

Cherry 3rd, W. Mitchell.....	160
Rosetta, A. M. Harrison, Mount Albert.....	140
Victoria of Brookdale 2nd and H. C., G. E. Reynolds, Elora.....	280
Bonnie Lass and B. C., W. Mitchell.....	400
Princess Fairfax, W. Mitchell.....	275
Della May, W. Mitchell.....	210
Lily Fairfax, O'Neil Bros., Denfield.....	210
Silver Rose, R. McGregor, Tiverton.....	150
Ina of Oakland, W. Mitchell.....	200
Duchess 9th, A. A. McDonald, Victoria Rd.....	230
Clearview Maid 2nd, W. Mitchell.....	105
Princess 6th, W. J. Giles, Clifford.....	195
Clara 2nd, M. K. Deans, Blair.....	125
Rubella 3rd, Geo. Reid, Goring.....	110
Mable Fairfax, R. McGugan, Tiverton.....	235
Miss Brae Dale, W. H. Hunter, Orangeville.....	210
Oakland Jean, Geo. Kennedy, Lucknow.....	165
Oakland Rose, W. Mitchell.....	200
Lady Maud, Clarence O'Neil, Denfield.....	205
Florence, F. Langdon, Guelph.....	200
Sunflower and H. C., H. D. Perdue, Wingham.....	205
Berna Donald, A. A. McDonald.....	250
Carnation Donald, M. K. Deans.....	130
Mable Drew, M. K. Deans.....	105
Fairy Queen, Wm. Mitchell.....	210
Nancy Canol, J. G. Boyes.....	180
Jennie 2nd, R. J. Hillock, Orangeville.....	150
Anne Donald, L. O. Clifford.....	400
Belle and B. C., J. E. Harris, Kingsville.....	175
Gladys 2nd, J. E. Jamieson, Singhampton.....	340
Lizzie Brae, D. Heskett, Guelph.....	165
Sunrise Lass and H. C., T. G. McCrae, Guelph.....	175
Miss Brae Real 26th, D. Heskett.....	110
Refiner Brae 3rd and H. C., D. Heskett.....	180
Prime Real, A. Gammie.....	190



A Champion Berkshire. First and Champion boar at Toronto for Adam Thompson, Stratford.

### Sugar Beets as Hog Feed.

EDITOR "THE FARMER'S ADVOCATE":

Some people say that there is no money in raising hogs for market. Actual experience has taught the writer of this article that there is money in raising hogs, even if the present prices were to drop. But there is a way to raise the hogs and get a profit as well as have labor lessened.

Each year, other farmers as well as myself complained that the high prices of bran, shorts, cornmeal and feed flour would soon do away altogether with the raising of hogs. That was only too true. But one day, when reading an article about the sugar beet, I decided that when seeding time came, I would plant some and try them out. I learned that these beets were extensively grown in Iowa, U. S., and I found that the climate of that State and our country were identical, so I knew the beets would flourish here. I planted a quarter of an acre, using stable manure, and sowing like turnip seed, though not quite so thickly.

They grew beautifully, and when fully grown, I boiled some and got a rich, dark syrup from them, but it had a strong taste. Having heard that charcoal was used in refining sugar, I put the syrup to boil with a large piece of that substance in it, and after straining I used the syrup to stew cranberries and make gingerbread. It gave no different flavor from that of other sugar when employed in this way. Thus I cut my sugar bill down considerably. I gave the hogs and poultry some of the sugar beets, cut up and boiled in the farm boiler for the swine, adding just a little crushed

oats, and throwing the beets raw to the poultry, as green feed for the winter season. I had plenty of eggs during that long, cold winter, when my neighbors had none whatever. The hogs I wintered were fat and heavy, beating the two-hundred-weight in March. They cost me very little.

I plant sugar beets every year, and raise better hogs than my neighbors do on store feed. Also, there is more money and less work. There is always a good market for hogs, especially the bacon type.

The sugar beet has a large percentage of sugar, and sugar in any shape is a highly nutritious article of food. Our Government might do as the Danish Government is doing, namely, encouraging the growing of root crops by offering certificates of merit to growers who select and produce sorts which are of distinctive value.

The sugar beet is a great milk producer, and the cattle relish it. It makes good beef also, and will fatten more quickly than any other feed. If the farmer will grow the sugar beet, of which there are several varieties, he will be able to raise hogs very cheaply and better than before. The beets, owing to their habit of growing above ground are easily harvested. Their great crop of leaves may be used as silage, so that there is no loss whatever to the crop. They do not rot, and will stand a lot of cold before freezing. Clay land, or heavy loam is best for their successful growth. They are a paying crop, and should be more extensively grown in Canada.

Halifax Co., N.S.

M. McLAREN.

### Canadian Wools and How They are Graded.

EDITOR "THE FARMER'S ADVOCATE":

Figures compiled from statements of the grading of wool consigned co-operatively by some 12,000 sheep breeders scattered over the whole of Canada furnish an excellent opportunity for a study of the various classes of wool produced within the Dominion. There is, naturally, a wide range of wool types to be found because of great variations in soils, climates, methods of management and because of the many breeds of sheep.

All Canadian wools are divided into three main classes—Eastern Domestic, produced in Ontario, Quebec, New Brunswick, Nova Scotia and Prince Edward Island; Western Domestic, produced in Manitoba, British Columbia and parts of Alberta and Saskatchewan, and Western Range which is grown in the southern parts of Alberta and Saskatchewan. The term domestic is applied to wools grown on sheep kept in small flocks in connection with other farming operations—or, in other words, as only part of the general farming scheme. Range wools are those produced on sheep ranches where sheep raising is the main feature, and in these wools we find the Merino and the Merino cross-bred types predominating. In the domestic wools the Down breeds are most in evidence, with considerable Leicester and some Lincoln and Cotswold. Eastern wools are low in shrinkage, few lots shrinking more than 40 per cent., and the average being about 39 per cent. Western domestic wools are somewhat higher in shrinkage, and, naturally, the range wools show the greatest shrinkage of all.

The following table gives the Canadian terms used in grading, the corresponding American terms and also the approximate British terms in counts:

Canadian	American	British
Fine combing.....	Fine clothing.....	64's-70's
Fine clothing.....	1/2 blood combing.....	58's-64's
Fine medium combing.....	1/2 blood clothing.....	53's-58's
Fine medium clothing.....	3/8 blood combing.....	48's-54's
Medium combing.....	3/8 blood clothing.....	40's-48's
Medium clothing.....	Low 1/2 blood comb.....	36's-40's
Low medium combing.....	Low 1/2 blood cloth.....	
Low medium clothing.....	Common and braid.....	
Low combing.....		
Low clothing.....		
Coarse.....		

Co-operative wool growers' organizations this year consigned for sale 4,426,121 pounds of wool. Of this amount, 1,094,937 pounds were Eastern Domestic, 1,617,704 pounds Western Domestic, and 1,713,480 pounds Western Range. The following table shows the amounts of the various straight grades within such class of wool. To save space, the off grades, such as black, seedy, cotts, etc., are not given.

Grade	East. domestic	West. domestic	West. Range
Fine combing.....	14	2,627	30,504
Fine clothing.....	17	29,418	119,660
Fine medium combing.....	2,281	24,779	175,223
Fine medium clothing.....	5,820	104,689	259,724
Medium combing.....	167,182	246,248	436,845
Medium clothing.....	48,705	297,395	299,057
Low medium combing.....	353,063	369,070	258,611
Low medium clothing.....	9,361	893	153
Low combing.....	263,186	118,014	47,175
Low clothing.....		374	205
Coarse.....	122,022	50,790	14,700

NOTE.—The above figures are complete to date of Nov. 15, 1920. Wools have been arriving at Weston since that time.

The above table shows very clearly that the bulk of the eastern wools are deep grown and strong stapled, falling largely into the medium, low medium and low combing grades. This fact also shows the prevalence of the Down breeds. The Western Range wools, on the other hand, show a tendency toward the finer grades. It should be said of the Western Domestic class that some of the clips included are really range wools, coming within the domestic classification because the distinction was not carried to individual shipments but simply concerned organizations as established. Therefore, within some of the associations whose shipments were placed under the domestic class there were a few range lost.

It should also be stated that, because of the weak market, the wools were graded very strictly this year, and all grades made were on the high edge, so as to be attractive to the trade. The selling of wools on the graded basis has been a strong incentive to greater care in the management of flocks, and, consequently, the improvement of quality and condition in wool. Surprising results have been obtained in this direction during the comparatively short time that this method of selling has been practiced, and it is anticipated that much further improvement will be achieved in the near future.

A. E. MACLAURIN.

Live Stock Branch, Ottawa.

## THE FARM.

### Making Meal of Sweet Clover.

EDITOR "THE FARMER'S ADVOCATE":

Anyone having coarse sweet-clover hay from too thin a seeding or late cutting, and find it very hard and dry, will eliminate waste by running it through a cutting-box and fanning-mill and then grinding the coarse parts in a chopper. I had some ground this way at a near-by grist mill, into a fine meal. This meal is relished by hogs, hens and cows, after being soaked. All the lighter cut feed needs is to be well dampened, with a handful of salt added to each pail of water. One pail of water will moisten three bushels of cut feed, and when allowed to stand it will soften in a very short time. What is mixed one day should be fed the next, to avoid heating and molding. The chaff from threshing can be handled in the same way. A neighbor of mine had an alfalfa mill last season and was able to cut and grind at one operation. The whole straw and chaff, by-products of 300 bushels of seed, were handled in this way, and he highly recommends the meal as a dairy feed.

My own meal was from 55 acres of first-class cured hay. If you are going to be scarce of hay next year, fit a piece of ground early, giving a light coat of manure if not rich enough, and sow 200 pounds per acre alone. Cut this crop in harvest time. Mine was three feet high and gave three tons to the acre. The next season cut from five to six inches from the ground, the first week in June, and then cut again, close to the ground, for feed when in full bloom, or if for seed leave it until one-third or so of the hulls are brown. Cutting at this time, or when in blossom, kills the plant and fertilizes the land, leaving it clean for any other crop. Either of these last cuttings, if for threshing or for hay, are better done with the binder and the sheaves shocked and capped to retain the leaves. It will season or cure in this way very quickly, and will not bleach. It will give the most feed with the least expense. The same is also true concerning it as a pasture crop. On most any kind of soil it will sustain more cattle to the acre than anything else yet known. And now, as the European corn borer is here, sweet clover will take the place of corn, if need be, in the silo.

I would urge readers when they have a good thing to pass it on to other farmers, and "The Farmer's Advocate" is the best medium to do it in.

W. J. TEGG.

### The Season in Leeds County.

EDITOR "THE FARMER'S ADVOCATE":

I thought possibly a few lines from Leeds County might interest your many readers at home and abroad.

The past season has been a fairly good one, with the hay crop a little below the average, with grain an exceptionally good crop and potatoes a bumper one. Root crops have been good. Labor has been rather short, owing to the fact that the provincial highway has been employing all the available men and spare teams. While farm work has not been neglected, in many cases farmers are behind with their plowing. The cold spell caught many with roots still in the ground. The provincial highway is still being pushed in this district. There are plenty of men now looking for work, and many are being turned away. Concrete work is still progressing but it is an up-hill job on account of contractors being held up during the fine weather of November and the last part of October for the lack of cement. And when it did come the bad weather set in and this causes the work to go slowly.

As usual, at this time of year, auction sales are quite numerous. Live stock of all kinds are selling far below what they brought one year ago, due perhaps to the shortage of hay, and many farmers selling and moving to other parts. Drovers are picking up all surplus cattle at prices according to their condition. Select hogs are selling at 14 cents at shipping points, with sows bringing four cents less. Few horses are changing hands at this season of the year. Farmers seem to be well supplied with horses. For home use potatoes are selling readily at one dollar per bushel, but market reports look as though they would go higher. Dry,

hard wood, 18 inches long, is selling at \$4.50 per cord, but the mild winter so far has been easy on that commodity.

About one year ago, in a letter to "The Farmer's Advocate," I mentioned the erection of a consolidated school. At time of this writing it is well under way, but it will take some time yet before it is finished. When this school is completed it will be one of the best in Ontario.

I see by a local paper that Tom Moore, President of the Dominion Labor Congress, is of the opinion that wages are going to remain where they have been for the past four or five years, but that the cost of living must drop. It causes a farmer to laugh right and loud to think of paying men \$3.50 and \$4 per day to hoe potatoes, and then sell them at 50 cents per bushel. Farmers, as a rule, are a fair-minded lot of people, but they will ask for a drop in wages if farm products are going to come down to the pre-war level.

Leeds Co., Ontario.

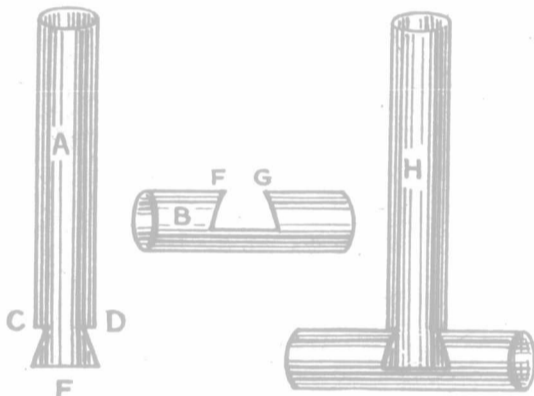
D. F. ARMSTRONG.

### How to Make a Rigid Fence.

EDITOR "THE FARMER'S ADVOCATE":

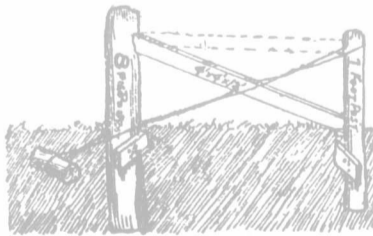
The material used on the majority of farms for fence posts is probably the old reliable cedar. It is grown locally in so many places and has such durability and comparative cheapness that it is still a favorite. Coupled with this is the fact that it lends itself to the manipulations of the ordinary farm mechanic.

To have a durable wire fence two things are necessary: First, absolute rigidity of the end posts, and second, no raising of posts in the hollows in the line. To secure this result, the end post and the brace post, which is next in line in the fence, must be cross-footed, as also must one or more in each hollow, according to the depth and length of the depression. Any handy man with axe and saw can cross-foot a cedar post and make a permanent job. The accompanying illustration shows



How Posts are Cross-footed

a cross-footed post, and it can be easily seen how such a post will hold. The post A is notched at C and D with a saw, and then chipped down with an axe from the end E to make the dove-tail C D E. The cross-foot B is sawed at F and G, about half way through, and the chip axed out. The dove-tail C D E should be flattened on the bottom so it will rest squarely in the cross-foot. The post is then laid on the cross-foot, the dove in the foot fitting the notch in the cross-foot, and they are driven together. As the pull is upward, it makes a permanent hold. To keep it snugly together, a 10-inch wire spike is sometimes driven through the post and cross-foot, but this is not necessary if the fit is good. The post and cross-foot should be nearly the same size to make a good joint. If the strain will be great, as must happen in stretches of 40 rods and upward, is it advisable to make the hole for the end post from three to four feet deep, and large, so it will hold considerable rock. Care should be taken in placing the stones to see that they bind against each other and



Posts Braced and Wired

the post. A large, flat rock should be placed perpendicular against the post on the inside to take the strain. The post should be set slightly off the perpendicular line, slanting away from the direction in which the strain comes, as there will be some give when the stretchers and tighteners are used and the posts should be upright when the fence is finished.

The brace post should be treated in much the same way as the end post, and a brace placed between the two posts with a No. 9 brace wire twisted around the brace and the two posts, as shown in the accompanying illustration. The posts in this diagram are not cross-footed and are liable to lift. Cedar is good material for this cross brace, and the pole ought to be four inches at the small end.

By using this method, coupled with judgment in rocking, according to the strain, an absolutely rigid fence is obtained, often with home materials and light costs.

Frontenac Co., Ont.

WALTER J. COOK.

### Rural Views on Farm Topics.

EDITOR "THE FARMER'S ADVOCATE":

Every up-to-date progressive farmer should boost his own profession. When Mother Eve ate the forbidden fruit she gave a boost to the clothing trade. Let us all be boosters. The farmer is the most independent man in Ontario to-day; he asks favors of no one; all we want is a square deal. We say things about the urban dweller because he demands his eight-hour day. He in return laughs at the farmer for putting in a sixteen-hour day. The city worker is welcome to his eight-hour day for he is at the beck and call of his employer. If he is not at his post when the whistle blows he is docked in his pay. Only during the rush season does the farmer put in long hours and then is it not to his own advantage? I think if we struck an average the farmer would not be putting in such long hours after all. I believe there are many men in the city to-day whose ambition is to be the possessor of a farm, be it large or small, anything to be their own boss. The suggestion has been made that the farmer should grow only enough to supply his own needs. I think this is a very selfish viewpoint. I believe he should produce all he can, providing it is not detrimental to his health. If the farmer and those connected with him cannot stand the strain of taking off a large crop when labor cannot be procured at any cost, and when it is known that there are men who can, but will not help him out, then and only then is he justified in curtailing production.

It is a grand thing to be a co-worker with nature. We sow the seed and watch it come to maturity. As the seasons follow one another there is a change of scenery to gladden the eye. What more glorious sight does nature afford us than the woods in autumn, with their blaze of colors? Agriculture is a noble calling. Let all who can remain on the farm and to those who contemplate the simple life, we wish them success.

The farmer, as a rule, when he retires, moves to the town. When he gets there he is like a fish out of water. Being used to a strenuous life he worries because he has nothing to do. Many farmers to-day are reserving a few acres of their farm, and on this property they erect a house and a small barn. They can keep a cow and hens, grow their own vegetables, and so have everything fresh for the table. They are more content away from the city.—"Far from the maddening crowd."

Perth Co.

JOHN DAVIDSON.

### The Sugar Tangle.

EDITOR "THE FARMER'S ADVOCATE":

Excitement over the Order of the Board of Commerce, prohibiting all imports of sugar and fixing the retail price at 22 cents per pound, died away almost as suddenly as it rose, when the order was rescinded. But wrath was hot while it lasted, and little wonder. The idea of being forced to pay from 8 to 10 cents a pound more for sugar than it should sell for was not palatable to the average customer. And the one reason given for the Order, that the refiners who had laid in heavy stocks might not suffer loss when prices dropped, somehow did not tend to allay feeling but rather to intensify it. The public who had become sensitive about the continued high prices of sugar and were calling the refiners profiteers, when calmly ordered to stand their losses were made furious as well as dissatisfied. The Government sensed the situation and made haste to suspend and reverse the Order.

People were pleased over one feature of the case, that there was plenty of sugar. They had been repeatedly told that there was great shortage and were glad to learn that it wasn't so.

As a plain and easily understood instance of the working of the protective system it was unique. Everybody saw it and, strange to say, few seemed to like it. Yet it was but an extreme case of what is going on constantly. Every time one buys an article on which a protective duty is levied, shoes, woolen goods, cottons, cement, automobiles, agricultural implements, and all the rest, including sugar, he is paying fee to the manufacturer. And it should really not be surprising that the sugar men, who had all along the legal right to levy a certain tax on every sugar user, should feel that a bigger levy would be all right too.

The fact is, the protective principle in action has warped the morals of all who benefit by it, and through their success and their interested influence the infection, the bad moral effect, has been spread to a great many of our people. How little is heard nowadays of that fine, stalwart maxim, "Fair play and no favors." It is our boast that wherever British rule is established there is justice and fair play. "British fair play" has indeed come to be a proverb; yet in all the press reports of the meetings of the Tariff Commission the absence of any reference to "fair play" has been most marked. Instead, there has been the bent knee and fawning attitude, the whine about the entry of American and British goods, and the begging for "more." Some of the farmers even, —the fruit growers of British Columbia and some few of the Ontario fruit men, and the tobacco growers, for instance,—have so far forgot their independence as to join in the plea for tariff help. How far removed from the boasted British attitude of self-help and self respect! Oh, for some of the princely spirit of King David when he refused the gifts of Araunah, the Jebusite, saying "I will surely buy it of thee at a price; neither will I offer burnt offerings unto the Lord my God of that which doth cost me nothing."

But we are met at every turn with the argument about the home market for farm produce. We have one instance of how that works out in the plea put up by Mr. Drummond, the sugar magnate, when asking for prices to be held up. (It was to be a hold-up all right!) It



may not be a fair sample of the working out of his home market argument, but it is one we can get at. "Remember," he said, "that a slump in the price of sugar would mean the closing of the refineries and three thousand men thrown out of work." Forget, if you please, the fact brought out in the daily papers that the refineries had then been idle for a month and those poor men without employment for that length of time. Take the statement as given. We may fairly assume that the number given, 3,000, was not smaller than the full number employed. Allow a family for every man, three thousand families. How much is the home market they would provide worth to the Canadian farmers? You may try to figure that out. Just now, instead let us see how much this home market costs. The duty on refined sugar coming into the country is "on all refined sugars testing not more than eighty-eight degrees, per one hundred pounds—\$1.93, and for each additional degree over eighty-eight degrees per one hundred pounds, 1 1/3 cents." That means two cents per pound practically, a little under or a little over according to the purity. The official returns of raw sugar imports for home consumption for 1919 are 359,470 tons; for 1918, 382,807 tons. That amount would be lessened by refining, but, on the other hand, there is a very appreciable amount of beet sugar produced in Canada which should be added to the amount imported. Returns of the sugar refiners to the Government give the consumption of sugar in Canada for the year 1919 as approximately 370,000 tons—740,000,000 pounds. \* It may fairly be assumed that, as there is a duty of two cents per pound on refined sugar imported, our refiners keep the price two cents per pound higher than what it sells for across the line. That is how the market stands at this time. Allowing for variations, that is probably the case generally. But, to be generous, knock off a half cent per pound and call the extra price Canadians pay for this home market 1 1/2 cents per pound. On the 740 million pounds used that amounts to \$11,100,000. Divided among three thousand families each would get \$3,700 yearly. That is paying too much for the whistle. Some would say twenty times too much. Quite true, even if the whistle, the boasted home market, were all that it is claimed to be. But farmers know that so far as their staple products are concerned the price is fixed, not at home, but in the markets of the world.

From the whole sugar situation we learn among other things, first, that protection is another name for a tax on the mass of the people; second, that the vicious system has poisoned the public conscience from the big interests downwards, so that instead of fairness there is a general game of grab; and third, that it would be cheaper in many cases to pension liberally the employees of protected concerns than to pay the tariff-increased price of what they manufacture.

Middlesex Co., Ont.

T. BATY.

## THE DAIRY.

### What Red Calves in Black Breeds of Cattle Mean.—Part II.

The early history of the Holstein-Friesian cattle, like that of other breeds, is largely a matter of conjecture, and many of the statements in the literature cannot be accepted at their face value. For example, it has been assumed by some that the present black-and-white color originated shortly before the beginning of the Christian era by the crossing of black cattle brought by the Batavians, who settled in the region between the Rhine and the Meuse, and "pure white" cattle of the Friesians. Not only is it improbable in the first place that these early tribes possessed cattle which approximated definite breeds, uniform in color and markings, but it is exceedingly improbable from a genetical viewpoint that a pied pattern like that of the Dutch cattle should arise from the crossing of black

and white stock. The statement of Hengeveld, so often quoted, to the effect that "the genealogy of Netherland cattle is pure and unadulterated, and is at least 2,000 years old," can not be accepted at its face value. It is true that the region of the Netherlands has apparently possessed cattle of special value since early Christian times, or possibly before, but there is no evidence to show that there have not been intermixtures with it; in fact, there is positive evidence to the contrary. In the matter of color alone it seems fairly certain that perhaps the most general color of the cattle in the Netherlands and the surrounding provinces, until within a century or two, was red or fawn (or some shade of dun), and that black-and-white piebald as a predominating color is of comparatively recent introduction. Red-and-white breeds still occur in Holland and the West German provinces, such as East Friesland and Oldenburg.

The fullest and most critical discussion of the color of the Netherland cattle is that of Bakker, published in 1909. He remarks that recent authors assume Netherland cattle to have been black-and-white since earliest times, but says there is no basis whatever for such an opinion. On the contrary, he believes that there were no black-and-white cattle in Holland previous to about the middle of the eighteenth century. This conclusion is based very largely on the evidence afforded by early Dutch paintings in which cattle are depicted. Bakker examined nearly 4,000 paintings in the Imperial Museum at Amsterdam and found that while many of them contained cattle, no black-and-white cattle appeared prior to the second half of the eighteenth century. The senior author of this bulletin, at that time unaware of Bakker's work, came to a similar conclusion from a casual examination of the paintings in the Old Picture Gallery in the Mauritshuis at the Hague in 1911. Storer also, in his work on "The Wild White Cattle of Great Britain" (1879), states that the famous paintings show the Dutch cow of 200 or 300 years ago to be quite different from the one of to-day; black was then rare, different shades of red being most common, but mouse-colored and white with red ears being frequent.

These facts have led Bakker to conclude that the Netherland cattle are descended from the old red native breed which constituted the original cattle of all Central Europe; that they were, therefore, not originally black-and-white, but that this color dates from the latter part of the eighteenth century; and that it was introduced into Holland by importations of Jutland cattle from Denmark. There is, furthermore, historical evidence of such importations to support this view. The white face marking has, however, been common in the Netherland cattle from earliest times, and is characteristic of one of the present breeds in Holland.

The black-and-white color must have found great favor in Holland, for after its appearance it seems to have become the predominating one in a relatively short time. Furthermore, the fame of the Netherland cattle, especially those of Friesland, rapidly extended them to neighboring countries, and more recently to all parts of the world. Nevertheless, as late as 1865, John H. Klippart, who made a tour of Europe for the Ohio State Board of Agriculture, reported regarding the color of these cattle at the International Fair at Stettin, Germany, that "the most in popular favor are the white, with red, grey, blue-grey, or black spots," showing that even then the breed was far from uniform. Various statements confirm the conclusion that black-and-white came into predominance very rapidly after its introduction, a thing which could very naturally happen, since black is dominant to red.

At the present time there are three distinct breeds of cattle in Holland: (1) the black-and-white Friesian-Dutch, a strictly dairy breed; (2) the white-faced black Groningen cattle, of a relatively heavy beef type; and (3) the Yssel breed, red-and-white in color and intermediate in type between the other two. Importation of other breeds is not allowed. It is interesting to note the way in which these three breeds have selected among the available color and pattern characters. The

Friesian-Dutch has the black piebald pattern supposed to have come in from the Jutland breed; the Groningen has the imported black color, but retains the old white-face character of so many early Holland cattle; while the Yssel (sometimes called "Oberijssel" or "Mass-Rhein-Yssel" breed) is red-and-white spotted, the red color presumably being directly descended from the old native stock. At the present day one sees practically nothing but black-and-white and red-and-white cattle in journeying through Holland; the other colors appear very largely to have been eliminated.

It is generally recognized in Holland that red-and-white calves are occasionally thrown in both the black-and-white breeds mentioned, namely, the Friesian-Dutch and the Groningen. In the early herdbooks no distinction was made between them, and they are still registered in the Friesian cattle herdbook. We have not had copies of the Friesian and Netherland herdbooks in order to make a study of the relative proportions of red-and-white animals entered in succeeding years, as was done in the case of the Aberdeen-Angus, but it is the generally accepted opinion that their number is growing continually smaller. A great decrease in the proportion of red-and-white animals registered from 1872 to 1905 is shown. Since that time the relative numbers have remained much the same, and to the traveller through Holland in recent years it is noticeable that one or more red-and-white cows may be seen in nearly every herd grazing in the pastures. We estimated these to be in about the proportion of one in ten in 1911. While, therefore, as we have seen, there has been a strong and growing popularity of black-and-white in Holland, the prejudice against red-and-white has never been so great as it has in America. Indeed, the demand for nothing but black-and-white animals for exportation has undoubtedly had an important influence on breeding in Holland. So far as we are able to learn only black-and-white cattle have ever been imported to this country from Holland, and no other color can be registered in the Holstein-Friesian herdbooks. That red-and-white calves are occasionally dropped, however, by imported stock, and by pure-bred descendants of such stock, is fairly well known to most breeders of Holstein-Friesian cattle. The prejudice is so strong against them, however, and they are looked upon with so much disfavor and suspicion, as possibly indicating some irregularity, if not indeed actual cross-breeding, that the fact is not advertised when they do occur. For this reason it is impossible to form any adequate estimate of the frequency of their occurrence in American herds, but discussion with numerous breeders indicates that they occur much less frequently in herds with several generations behind them in this country than in those which are nearer to their imported ancestors. This is exactly what might be expected, since the selection is so much more rigorous in America than in Holland.

It would be possible to give many instances of the occurrence of red-and-white calves as the offspring of pure-bred Holstein-Friesian parents in this country, but two will suffice as examples. On account of the prejudice against them, which would also be likely to attach to the animals which throw them, the names of the animals and the breeders concerned will not be given.

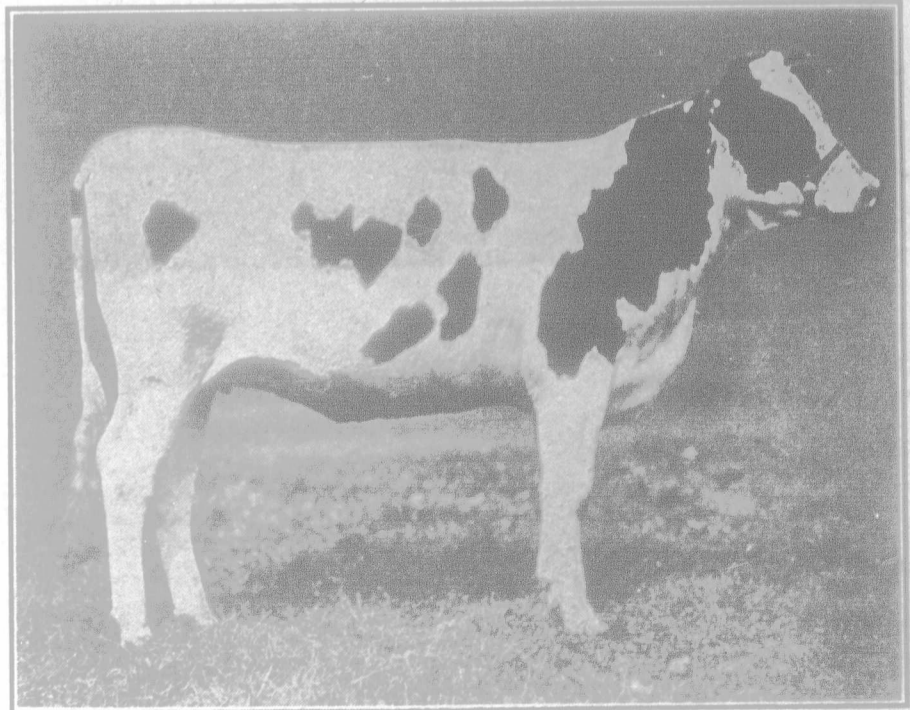
In one case a bull owned by a successful and well-known breeder was throwing 2 to 4 per cent. red-and-white calves while in this breeder's herd. He had produced 69 advanced registry daughters, and it may be of interest to call attention to the fact that half of these daughters may be expected to throw some red-and-white calves if they should chance to be bred to a bull of the composition of their sire. Another breeder of pure-bred Holstein-Friesian reports a case of twins in which one of the calves was black-and-white and the other red-and-white.

While by individual inquiry many other cases could be accumulated, this is sufficient to indicate that the appearance of red-and-white calves in Holstein-Friesian of American breeding is by no means infrequent, and



Palmerston Hyacinth 8th.

Junior Champion Ayrshire female, Toronto, 1920, for E. E. Budge, Montreal, Que.



Madame Pauline Sylvia 2nd.

Junior Champion Holstein female at Toronto, 1920, for A. E. Hulet, Norwich, Ont.

they may be expected, though with diminishing frequency, for many years to come, in spite of the rigid selection imposed by the breed requirements in this country. As has been said, only cattle black-and-white in color, no matter what their parentage or other characters, can receive recognition in this country as pure-bred Holstein-Friesians. The fact that there is an undercurrent of red in the breed which may come to the surface at any time is not generally known, or, if known, is not understood. Animals which produce red-and-white calves are looked on with suspicion as to their value, if not, indeed, as to their purity of breeding. Sometimes the dam is considered to be at fault; sometimes the blame is laid to the sire; and it is usually a great surprise to the breeder to learn that they both must be equally responsible. Failure to understand the simple facts of inheritance involved in the case occasionally leads to serious misunderstandings which may involve transactions of considerable financial importance and charges of insincerity of dealing, or even deception and fraud. A more general knowledge of the facts will be of great value to the breeder of pure-bred cattle.

As has been fully demonstrated, the appearance of red-and-white Holstein-Friesian calves is not necessarily evidence of lack of pure breeding. On the other hand it must be borne in mind that crossbreeding or outbreeding with red cattle or with animals carrying red would introduce this character into the hereditary makeup of the offspring and the red might appear whenever two animals carrying it chanced to be mated. That is, its inheritance is the same whether it has been carried down from generation to generation from an original red-and-white parent in Holland, or whether it should be introduced by crossbreeding. There is, then, it would appear, some ground for suspicion of the latter possibility when a red calf appears, and in such a case it is very proper that the pedigree and breeding of the animals concerned should be looked into very carefully. The integrity of the breeder is, of course, another factor in the situation. If the suspicion falls, however, on an animal that has been bought or brought in from another source, it would be well for the breeder to recall that when a red calf is dropped, both of its parents are equally to blame. Since grade cows are more likely than pure-breds to carry the inheritance of red, this explains why they more often drop red calves than do pure-breds. But again, it must be remembered that they will produce red calves only if the bull also carries the trait. If a black bull sires a red calf it proves that he is a "masquerader" carrying red, no matter whether the cow to which he is bred is herself red or black.

Finally this question might be raised. Since it is natural for black Holstein-Friesians occasionally to produce red calves, is it desirable that the standard should admit only the former as belonging to the breed, whereas it has been shown that the latter are in every way as purely bred, and undoubtedly stand fully as good a chance of inheriting the good economic qualities of the breed? This is a complicated question and cannot now be discussed fully. The great disadvantage of throwing out the red calves is that it limits to that extent the range of possible selection for other points. No matter how good an animal it may be in other respects, the red calf must be discarded on the basis of breed dictates. On the other hand, there are decided advantages in having a breed uniform in obvious characteristics. It not only seems to bespeak purer breeding and more rigid selection, but as the breed comes by rigid elimination of other characters to be more nearly "pure" for those which appertain to it, there is more reason to look on any non-conforming individual with suspicion.

The present method of eliminating all red animals from the herd is rapidly decreasing the number of animals carrying red, and consequently the appearance of red-and-white Holstein-Friesian calves will become correspondingly more infrequent. This process could be greatly hastened by eliminating immediately from further breeding all animals, both dams and sires, which ever produce red-and-white calves, but the end to be attained would in no way justify the cost of such a procedure to the breeder and to the breed. On the other hand, it would be an easy matter, if it were worth while, to test bulls as to their purity for black, in which case they could be sold with a guarantee that they would produce only black calves. This test could best be made by breeding the bulls to a sufficient number of red cows, which would be used for that specific purpose. Whether such a guarantee would sufficiently enhance the value of the animals to recompense for the trouble and cost of the testing is a question we are not in a position to answer. Furthermore, most bulls are disposed of at an age before such a test could be made.

There is no question that the present attitude with respect to the occurrence of red-and-white Holstein-Friesian calves has proved of vital importance to many breeders. We could cite instances in which the prejudice against the animals of certain breeders, resulting from this cause, has made it necessary for these men virtually to close out their stock and to start anew, and this, too, in the case of men whose integrity could not be questioned. This is unfortunate, and it would seem that a more liberal-minded attitude would be of benefit to all concerned. At present it is considered almost a disgrace, or at least a very disparaging admission, to have it known that a red-and-white calf has been dropped in a Holstein-Friesian herd. If the natural liability of such an occurrence were more widely recognized and openly admitted by all breeders of these cattle, it would be possible by more direct means to select in such a way as to effect the final elimination of the color from the breed. The only financial loss then would be the difference in price which the red-and-white calf would bring from not being eligible to registry. Such calves,

when heifers, should not be vealed, but being from high-milk-producing stock should be sold to dairymen who are producing milk but are not breeding. Vealing them, or what is probably more common, disposing of them secretly with no return whatever, is an unnecessary loss not only to the owner, but to the food-producing resources of the country. It is fully recognized, however, that this course cannot well be followed without a distinct change in sentiment on the subject, and it is hoped that wider knowledge of the matter may contribute somewhat to that end.

### Successful Convention of Creamerymen.

On Thursday and Friday, December 9 and 10, a very successful annual convention of the Canadian Creamery Association of Ontario was held at the Carls Rite Hotel, Toronto. A very large number of members were present from all parts of the Province, and the usual interesting and business-like atmosphere of the Creamerymen's Convention was in evidence.

The address of the President, J. A. McFeeters, Toronto, called attention to the unfavorable market conditions which creamerymen are facing at the present time. The markets which looked good early in the fall, gave away in September and market prices of creamery butter receded along with those of wheat, meat and other products. Montreal receipts of butter to date were stated by the President to be about 71,000 packages less than last year, an amount equal to 160 car loads, or a comparative decrease of 16 per cent. The output of the Western Provinces will be about equal to 1919, but Ontario and Quebec will show quite a shrinkage. A rather unusual occurrence is the fact that local creameries in fair-sized towns have recently been drawing butter from Toronto cold storages to supply the local demand. This has been due to the fact that production of dairy butter has decreased. Mr. McFeeters believed that with further deflation lower margins for creamerymen are in sight, and the patrons will also want all they can get for the raw material. This means that efficiency must be the watchword of the creameryman. Leaks in the creamery business must be plugged, and makers of No. 2 butter in 1921 will certainly have to peddle it.

#### THE NATIONAL DAIRY COUNCIL.

Mac Robertson, Belleville, reported to the convention as the representative of the association of the National Dairy Council. He believed the Council had done some splendid work and thought it should be supported generously. He wished, however, to make clear his position with regard to the recent raise in salary which has been granted the Secretary of the National Dairy Council by the executive of that body. Mr. Robertson said that this matter had not been brought before the full Council, as he believed should have been the case, and that not being a member of the executive he had had no opportunity to object. He felt that Mr. Scott had done excellent work, but that the Council could not afford the salary which they had agreed to pay.

D'Arcy Scott, Secretary of the National Dairy Council, was the next speaker, and dealt largely with the work of the National Dairy Council. He pointed out that five out of the nine members of the executive are creamerymen, and that the interests of the creamerymen were therefore well taken care of. The objects of the National Dairy Council were threefold: namely, to increase production, to increase consumption, and to improve marketing conditions as respects dairy products and the dairy industry. Some attention was paid by the speaker to the necessity of milk campaigns in towns and cities, and the statement was made that following an increased consumption of milk the consumption of butter, cheese, ice cream, etc., had almost invariably been found to have increased also. It was thought probable that a milk campaign would be put on in the City of Toronto shortly, under the auspices of the Canadian Public Health Association.

As regards oleomargarine, the National Dairy Council had gone on record last winter in Winnipeg as opposed to the continued manufacture and importation of oleo. Legislation has, however, been passed permitting oleo to be imported and manufactured in Canada until September 1, 1921, but the speaker thought that through the efforts of the Council greater restrictions in its sale have been imposed. From December, 1917, to January 31, 1920, 28,900,000 pounds of oleo were sold in Canada. The total amount consumed in Canada amounted to 37,585,000 pounds, of which 15,100,000 were imported. The manufacture of creamery butter in 1919 amounted to 101,500,000 pounds, which together with the 125,000,000 pounds of dairy butter, made a total butter production in Canada, in 1919, of 226,500,000 pounds. Of this amount, 17,000,000 pounds were exported. Mr. Scott felt that the dairy interests and the manufacturers of oleo should get together in order that an annual fight over the matter of oleomargarine could be avoided.

With respect to the matter of his salary, Mr. Scott had no apologies to make to the creamerymen. He had taken over the duties of treasurer and felt that his services were worth \$5,000 per year to the dairymen, in addition to an allowance of \$2,000 per year for office accommodation and clerical assistance. At any rate, he said he would not do the work for less than he was getting.

#### CREAMERY METHODS.

The feature of the convention was undoubtedly the presence of Professor O. F. Hunziker, Manager of the Blue Valley Creamery Company, Chicago. Professor Hunziker's is regarded as the foremost authority of butter-making in the United States, and addressed the

convention on the relation of methods of manufacture to flavor and keeping quality of butter. We intend giving Prof. Hunziker's address practically in full in a later issue, and will only briefly review the subject here, as outlined by the speaker. The subject was chosen with particular reference to the condition of the butter market during the last three months, and it was evident from the outset that Professor Hunziker's reputation rested upon a solid foundation of knowledge and experience. To begin with, the speaker made it quite plain that no matter how excellent the method of butter making, a poor quality of cream will never make No. 1 butter. "Butter" said the speaker, "is just as much an inherent part of the quality and character of the cream as is the child a part of the flesh and blood of the parent. You can not draw blood from a turnip." The only means of inducing the patron to take good care of cream, in the opinion of the speaker, was to grade the patrons' cream and pay for it on a quality basis. Clean cans are an essential for good butter making. They should be washed so thoroughly that they are clean; steamed so thoroughly that they are sterile; and dried so thoroughly that they are bone-dry. Pasteurization was described as the greatest of the newer innovations designed to improve the quality, flavor, and keeping quality of butter. When cooling hot cream, it was suggested that about the worst thing that could be done with it was to pass it over a coil cooler. This injures the keeping quality of the butter through the encouragement of oxidation. It is difficult to get a good quick method, but any method is better than surface cooling.

In the opinion of the speaker, no apology was needed for a neutralizer, and lime was the only neutralizer he would consider. A lime mix is made by using three pounds of dry, hydrated magnesium lime to eight and three-tenths pounds of water. In order to reduce 100 pounds of cream to approximately .25 per cent. acid, .01644 pints, or .01 per cent., of the lime-mix would be required. The use of a starter was declared to be a vital matter. High flavor and keeping qualities are diametrically opposite rather than synonymous terms. The starter should not be used for cream ripening but merely to secure uniformity in a pasteurized and properly manufactured butter.

#### THE CREAM PURCHASE ACT.

A rather lively discussion was created when the matter of the "Cream Purchase Act" was brought up. G. A. Putnam, Director of Dairying, pointed out that the Act was being administered from the standpoint of education rather than of persecution. The creamerymen, however, seemed to feel that variation of one-half or one per cent. in the cream test was not sufficient allowance. Those charged with the enforcement of the Act, however, stated that one-half of one per cent. should be the aim of every creameryman, and that it was only the persistent offender who would be checked up if the variation was as wide as one per cent.

#### GRADING DAIRY PRODUCTS.

J. A. Ruddick, Dairy Commissioner, Ottawa, addressed the convention on the subject of the official grading of butter, and pointed out that there are many ways of looking at the question of grading dairy products. Grading may be educational or commercial in purpose; may be compulsory or optional; or it may be applied to export or domestic business. It may be done by federal or provincial governments, or by dairy organizations. It was pointed out that all of these forms of grading and control are in force here and there in different countries. New Zealand has the first and most complete system of grading. Grading in New Zealand is comparatively easily applied, and is both educational and commercial in its objects. In Australia, grading is controlled by the State, while in the United States various methods are adopted. Canada also has several systems. Denmark has a system of government control without grading, by which all exports of butter must bear the "Lur" brand, and no creamery is allowed to use this mark until the product reaches a certain standard. Sweden has a system somewhat similar to Denmark, while Holland supplies a mark or brand to creameries under control by the Government.

The object of grading, said Mr. Ruddick, should be to give the maker of a high-grade article full recognition, to facilitate business; to promote confidence in the product; and to educate those connected with the industry. The grader's report will show the maker where he failed, and this information will be forthcoming whether the buyer is satisfied or dissatisfied with his purchase. Under the present system the buyer only complains when he is dissatisfied, or when the market is falling. Grading also will eliminate disputes as to quality, and the seller need not be bluffed about his product. The opinion of the speaker was that it will be necessary for Canada to adopt some system of grading, if only because our principal competitors have already done so.

A very enjoyable banquet was held on Thursday evening, at which several interesting addresses were presented. On this occasion Mr. Ruddick referred to the rather general statement that the market for butter at the present time is bad. This impression he said was wrong, since the market has never been better since the Armistice, and butter in England is selling for very high prices. The difficulty is almost entirely one of exchange, and some of our competitors, such as New Zealand, which uses pounds, shillings and pence, have no difficulties to confront in this way, as their money is at par with that in England.

#### OFFICERS.

The officers for the following year were elected as follows: President, W. Mac Waddell, Strathroy; First Vice-President, R. M. Payer, Walkerville; Second Vice-President, G. A. Gillespie, Peterboro; Secretary-

Treasurer, H. S. Johnston, Lindsay; Directors: J. A. McFeeters, Toronto; D. Reddick, Cornwall; G. R. Taylor Guelph; P. Christie, Ottawa. Representatives to the National Dairy Council: Mac. Robertson, Belleville.

**Oxford Holsteins Sell Well.**

The fourteenth consignment sale of the Oxford Holstein Breeders' Club was held at Woodstock, on Wednesday, December 15. Messrs. Moore, Dean and Pullin were successful in disposing of seventy head, consigned by twenty-nine consignors for a grand total of \$16,030, or a general average of \$229. Included in the sale were seven bull calves, averaging \$242.14; twelve yearling bulls, averaging \$190.83; one two-year-old bull, \$110; one aged bull, \$190; three heifer calves, averaging \$66.66; three yearling heifers, averaging \$230; twelve two-year-old heifers, averaging \$232.91; ten three-year-old cows, averaging \$260.50; ten four-year-old cows, averaging \$243.50; and eleven mature cows averaging \$274.55. There were forty-three females, two years old and over, that averaged \$252.44.

Generally speaking, the cattle were in fairly good condition, but there were a few consignments that it probably would have paid the Club to leave at home. The sale average was also lowered to some extent by the number of bulls sold, there being twenty-one in all. The crowd was, we understand, the largest that ever attended an Oxford County sale, and was certainly too big for the seating accommodation provided, in spite of the fact that the latter was much more liberal than is usually the case with consignment sales. The sales stable was also warm and comfortable, although the selling space was crowded more than is desirable. The high price of the sale was secured for Sir Paul Colanthus, a great grandson of May Echo Sylvia, and whose four nearest dams averaged 34.11 lbs. of butter and 738.37 lbs. of milk in seven days. This bull is out of Lady Pauline Colantha, a 26-lb. cow, and he is by King Paul Pontiac Echo, the dam and sire's dam of which averaged 37.67 lbs. butter and 848.40 lbs. of milk in seven days. This young bull went to Wm. B. Poole, of Ingersoll, for \$635. The next highest price of the sale was \$500, received for Madoline Dolly De Kol, consigned by Wm. Stock & Son, Tavistock. This was an eight-year-old cow with 14,173 lbs. milk and 621.35 lbs. of butter at four years, and 25.23 lbs. butter in seven days. She is also a daughter of Baroness Madoline, a former Canadian champion, with a record of 23,673 lbs. milk and 1,122.5 lbs. butter at seven years. Her best seven-day record is 34.48 lbs. butter. This cow went to John W. Moote, Canboro. Following is given a list of the consignors, and a list of individual sales for \$100 or more.

**CONSIGNORS.**

Wm. Stock & Son, Tavistock, (3); Walburn Rivers & Son, Ingersoll, (1); M. McDowell, Oxford Centre, (3); A. Dunn, Ingersoll, (1); E. D. Hilliker, Burgessville, (1); Haley & Lee, Springford, (6); S. R. Lee, Springford, (2); F. E. Hilliker, Norwich, (2); A. E. Hulet, Norwich, (3); C. N. Hilliker, Burgessville, (2); W. C. Shearer, Bright, (1); J. G. Currie & Son, Ingersoll, (1); J. C. Kaufman, Bright, (3); A. E. Cornwall & Son, Norwich, (2); Geo. Oliver, Bright, (3); T. H. Dent & Son, Woodstock, (2); B. D. Smith, Springford, (3); M. L. Haley & Son, Springford, (2); J. A. Lammiman, Curries Crossing, (2); W. E. Thomson, Woodstock, (2); J. W. Innes, Woodstock, (3); Fred Row, Currie's Crossing, (2); Willard Scott, Currie's Crossing, (2); Geo. Hill, Burgessville, (1); A. T. Walker, Burgessville, (1); Adam Knox, Bright, (2); Arbogast Bros., Sebringville, (2); McGhee Bros., Beachville, (3); M. & W. Schell, Woodstock, (6).

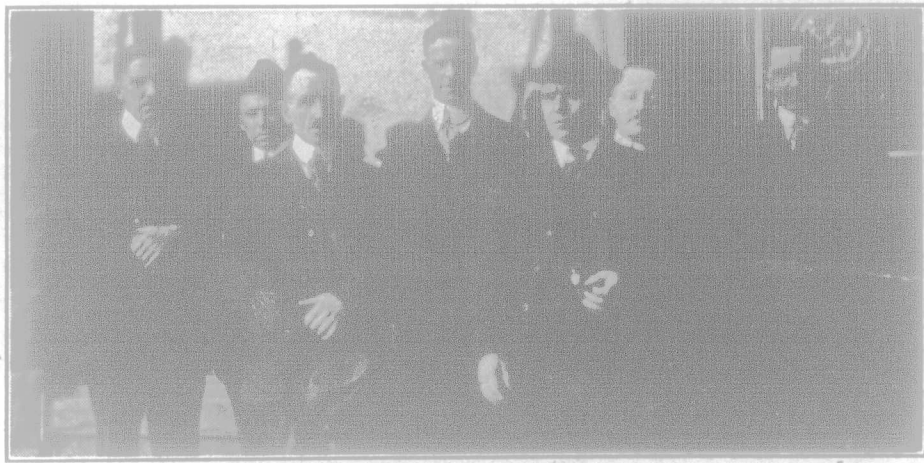
**FEMALES.**

Madoline Dolly De Kol, John W. Moote, Canboro \$500  
Sovereign Pontiac De Kol, Wm. D. Gray, Britton 200  
Pioneer Wayne Hartog, Walter McLennan, Millbank 310  
Dina Pontiac Posch, W. Sagle, Woodstock 210  
Alice Pontiac Walker, Jas. E. Casler, Salford 180  
Countess Hengerveld Walker, W. G. Ellis, London 215  
Rivermead Lady Faforit, Fred Ure, Maidstone 225  
Valdessa Mercena Fayne, Donald Jack, Newton 320  
Sylvia Bell Fayne, Wm. Winer, Guelph 200  
Cornish Lodge Margaret Mercedes, T. Dunham, Salford 430  
Mary Veeman Mercena, Burns Sutherland, Embro 195  
Fairmont Daisy Alcartra, R. T. MacDonald, Hamilton 405  
Forest Ridge Segis Lady, Alen R. McKay, Charlottetown, P. E. I. 230  
Lowlands Pontiac Belle, J. Wilson, Ingersoll 200  
Prilly Fayne Calamity, Provincial Secretary's Department, Woodstock 280  
Jean Sylvia Fayne, Wm. Caslick, Bright 180  
Colantha Aaggie Beauty, Biggar Bros., Oakville 245

Bessie Bluebelle Calamity, Jas. Chambers, Currie 160  
Mercena Pietertje Johanna, C. A. Griffiths, Thorold 210  
Grace Fayne Lyons, S. Lippert, Embro 200  
Pauline Pontiac Pet, Prov. Secretary's Department 300  
Lady Minto Mercedes, Prov. Secretary's Department 225  
Rose Echo Pietertje, Fred Ure 250  
Susie Segis Baroness, Jas. Davis, Thorold 240  
Cherry Butter Colantha, Wm. Winer 175  
Springbank Nappy Jewel, Jas. Davis 305  
Re-Becky Clothilde Wayne, John Hird, Curries Crossing 250  
Re-Becky De Kol of Cedarbrae, Prov. Secretary's Dept 265  
Jill Mechthilde Colantha, Alex. R. McKay 335  
Hengerveld Segis, C. A. Griffiths 210  
Silver Fayne Brookbank, Jas. Crawford, Embro 110  
Brookbank Grace Segis, Jas. Davis, Merriton 190  
Francy Segis Korndyke, R. Taylor Jr., Woodstock 170  
Pietertje De Kol Hengerveld, Roderick Jack, Newton 205  
Sarah Fayne Korndyke, Bert Swale, Woodstock 330  
Roxie Segis, Wm. Winer 210  
May Butter Baroness, J. Campbell, London 215  
Bessie Posch Schuiling, M. B. Shaver, Canboro 310  
Star's Nancy De Kol, Geo. McComb, Burgessville 180  
Nettie Snowball, Alex. R. McKay 350  
Countess Bonnie Mechthilde, A. Groves, Ingersoll 375  
Bessie Canary Posch, J. R. Tisdale, Norwich 365  
Polly Mercena, Harry Yates, Orchard Park, N. Y. 245  
Patsy Brookbank Butter Girl, Alex. R. McKay 275  
Bessie Albino Fayne, Alex. R. McKay 200  
Mechthilde Walker Korndyke, Wm. L. Sutherland, Thamesford 240  
Daisy Posch Segis 2nd, E. H. Snarey, Woodstock 135

**MALES.**

Sovereign Champion Segis, John C. Brown, Stamford 350  
Pioneer Toitilla Duchess King, Arthur Budd, Beachville 205  
Centre View Peter, Wm. L. Sutherland 185  
King Cubana Hartog, Wm. Reed, Princeton 110  
Sir B. B. Pontiac Sylvia, J. R. McLaren, London 190  
Prince Colantha Korndyke, J. F. Dunlap, Chatham 190  
Sir Paul Colanthus, Wm. B. Poole, Ingersoll 635  
Prince Teake Houwtje, Arthur Thomas, Salford 220  
Burke Johanna Lad, W. H. Armitage, Ettrick 180  
King Alcartra Johanna, Chas. G. Griffiths 100  
Springbank Baron Echo, Arthur McKay 180  
King Pietje De Kol, Cedric Snell, Norwich 105  
Baron Echo Sylvia Posch, S. R. McVitty, Muncey 365  
Ormsby Hartog Fayne, Spencer Egan, Innerkip 105  
Mechthilde Hengerveld Walker, Wm. Sage, Woodstock 175  
Sir Fayne Segis, S. Fiddy, Burgessville 155



**Officers Canadian Creamery Association of Ontario.**  
Left to right: J. A. McFeeters, Toronto, Past President; Mac Waddell, Strathroy, Pres.; F. A. Keyes, R. M. Player, Walkerton, 1st Vice; E. E. Patterson; H. S. Johnston, Lindsay, Sec'y-Treas.; G. A. Gillespie, Peterboro, 2nd Vice.

Duke Mercena Wayne, John S. Amos, Woodstock 150  
Segis Gano Walker, E. H. Snarey 125  
Gay Sylvius, Frank Pike, Curries 240  
Colantha Fayne Cornucopia, H. Fiddy 150  
Colanthus Shadeland Segis, Mack McPherson, Embro 170

**Perth Holstein Breeders Sell 55 Head.**

The fourth consignment sale of the Perth District Holstein Breeders' Club was held at Stratford, on Thursday, December 16, and a total of fifty-five head were sold for the sum of \$9,792.50, or a general average of \$178.04. Excluding four calves at foot, which were sold separately from their dams and which sold for an average of \$60, the general average was \$187.25 for fifty-one head. Thirty-nine females, two years old and over, averaged \$209.10. The averages by ages were as follows: 10 bull calves, \$78.25; 3 yearling bulls, \$135; 1 heifer calf, \$70; 3 yearling heifers, \$90; 13 two-year-old heifers, \$208.46; 8 three-year-old cows, \$220.62; 5 four-year-old cows, \$244; 13 mature cows, \$197.69. The high price of the sale was \$350, secured for the two-year-old heifer, Rea Hartog, consigned by Arbogast Bros., Sebringville. The next highest price was \$335, received for Evergreen Abbekerk Tensen, consigned by Harold Thistle, St. Pauls. The first-named cow was sold to Donald Jack, Newton, while the second went to B. D. McCarty, Thamesford. There were not

more than half as many people at the Perth sale as at the Woodstock sale the day previous. The cattle offered, moreover, were not in such good condition on the whole and showed less size. The lower average at Stratford is also accounted for, to some extent, from the fact that many of the dams had not been tested. The following is a list of the consignors, and of all sales for \$100 or more.

**CONSIGNORS.**

Wm. Steinacker, Stratford; Wm. Stock & Son, Tavistock; John F. Turner, Carlingford; Nelson Oliver, St. Mary's; Wm. Bolton, St. Mary's; Gleason Hill, Russeldale; Harold Thistle, St. Pauls; John R. Archibald, Seaforth; Arbogast Bros., Sebringville; Chas. Baird, St. Mary's; McNamara Bros., Stratford; Ezra G. Schweitzer, Stratford; Park & Arnoldi, Listowel; Tig Wood, Mitchell; R. S. Oliver, St. Mary's; P. Dill, Dublin; J. C. Harkes, Listowel; Wm. Tinning, St. Pauls.

**FEMALES.**

Lady Jane Dewdrop, Geo. E. Carter, Parkhill \$150  
May Hengerveld Veeman, Provincial Secretary's Department, Kingston 250  
Greenfield P. W. Betsy, Prov. Secretary's Department 180  
Pontiac Posch Princess, Chas. Matthies, Tavistock 200  
Sunnyside Alcartra Lily, Roderick Jack, Newton 170  
Nettie Netherland, G. E. Carter, Parkhill 225  
Alma Pontiac, J. W. Innes, Woodstock 205  
May Hartog Pietertje, Fred Miller, Gowanstown 135  
Fay Abbekerk, O. H. Killer, Stratford 270  
Countess Lily White De Kol, B. B. McCarty, Thamesford 250  
Kathleen Pietertje Posch, Harry Sargeant, Owen Sound 215  
Queen Justeen Natsey, Prov. Secretary's Department 230  
Sadie Lyons Pietertje, O. H. Killer 200  
Evergreen Abbekerk Tensen, B. B. McCarty 335  
Hartog Lass, Geo. E. Carter 325  
Natsey Lyons Mercedes, Wm. N. Jeffrey, St. Pauls 190  
Maple Lodge Lady, D. W. Osmond, Ingersoll 260  
Queen De Kol Aaggie, Prov. Secretary's Department 235  
Hester Calamity Segis, Wm. Cornish, Stratford 200  
Teake De Kol Creamelle, Henry Sargeant 150  
Elmcrest Lenora De Kol A., O. H. Killer 210  
Beauty Girl Snow Ball, Ed. Tinning, St. Pauls 280  
Creamelle Natsey, Prov. Secretary's Department 250  
Lighter Day Mechthilde, J. W. Innes, Woodstock 265  
Kitty Abbekerk Natsey, Wm. N. Jeffrey 150  
Rea Hartog, Donald Jack, Newton 350  
Jane Abbekerk Peerless, Frank Famme, Stratford 195  
Dolly Korndyke Wayne, J. W. Innes, Woodstock 155  
Toitilla Aaggie Abbekerk, Wm. H. Nicholson, Parkhill 255  
Two-year-old heifers, J. W. Innes, Woodstock 185  
Eleanor De Kol, O. H. Killer 150  
Cedar Grove Lady Ormsby, John C. Murray, St. Pauls 120  
Olive Pontiac Schuiling, Prov. Secretary's Department 255  
Princess Segis Edith, Prov. Secretary's Department 250  
Katie Faforit, Chas. Matthies 205  
De Kol of Rosarden 2nd, Henry Sargeant 165  
Mercena Grange, Amos Jutzi, Gad's Hill 145  
Rosarden Canary Segis, W. D. Gray, Britton 230  
Sylvia Gano De Kol, Chas. Finnegan 195

**MALES.**

Sovereign Gretqui Sir Changeling, Fred Dunseith Stratford 180  
Abbekerk Waldorf Pietertje, Walter Rae, St. Pauls 110  
King Korndyke Lee, H. Purcell, Listowel 105  
Rosarden Maud's Colantha, Geo. Nichol, Listowel 150  
Sovereign Segis Hengerveld, Wm. H. Douglas, St. Pauls 115

**Brant Holsteins Average \$220.**

A total of \$9,715 was received for 44 head of purebred Holsteins at the tenth semi-annual consignment sale of the Brant District Holstein Breeders' sale. The general average was \$220.79, while for 40 head of females, two year old or over, the average was \$226. There was not much young stuff offered as compared with other sales, and the averages for cattle of different ages were as follows: 3 yearling bulls, \$155; 1 yearling heifer, \$210; 9 two-year-old heifers, \$207.77; 6 three-year-old cows, \$223.33; 7 four-year-old cows, \$218.55; 18 mature cows, \$238.88. The high-priced animal of the sale was the six-year-old cow Flora Mercena of Homedale, consigned by F. W. Woodley, Wilsonville. She was sold to W. L. Davidson, Meadowvale. The same consignor also sold the second highest-priced cow for \$390. She was Abbekerk Posch De Kol, and went to the same buyer. Following is a list of the consignors and a list of all sales for \$100 or more.

**CONSIGNORS.**

E. C. Chambers, Hatchley Station; W. H. Shellington, Harley; Chester Lee, Kelvin; C. Duff Nelles, Scotland; C. C. Haviland, Wilsonville; Robt. Shellington, Hatchley Station; W. H. Simmons, New Durham; F. W. Woodley, Wilsonville; G. B. Robb, Branchton; Lewis Kelly, Scotland; Wilbert A. Butler, Norwich; C. G. Gurney, Paris; N. P. Sager, St. George; Chas. E. Butler, Norwich; A. H. Bevin, Burford.

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## FEMALES.

Mercena Johanna Korndyke, H. Miller & Sons, Bridgeburg.....	\$215
Royalton Korndyke Queen, T. Wilcox, Smithville.....	190
Lulu Wayne of Annfield, T. Wilcox.....	340
Ormsby Butter Girl, T. Wilcox.....	265
Lizzie Butter Girl Posch, T. Wilcox.....	155
Black Beauty Calamity, Ira Shaver, Cainsville.....	160
Francy Spofford, W. L. Davidson, Meadowvale.....	150
Minnie Hartog Butter Girl, Geo. H. Bethune, Ryckman's Corners.....	180
Clothilda Spofford Rooker, H. Miller & Sons, Bridgeburg.....	145
Lila Mechthilde, Harvey Plant, Brantford.....	135
Mechthilde Hartog, Prof. H. H. Dean, Guelph.....	160
Posch Mercena Fayne, H. Miller & Son.....	245
Segis Maud Korndyke, G. H. Bethune.....	140
Tidy Johanna Spofford, H. H. Potts, Lynnville.....	225
Lady Laurier Gano, T. Wilcox.....	230
Princess Colantha Daisy, F. H. Peer, Norwich.....	165
Lily Korndyke Schuiling, L. C. Snowden, Bowmanville.....	255
Pietertje Schuiling Posch, L. C. Snowden.....	270
Pietertje De Kol Gano, J. Lorne Stevens, Bowmanville.....	275
Braeside Segis Maud, E. C. Gurney, Paris.....	205
Maud Segis Fayne, Roy Teal, Ridgeway.....	245
Bessie Johanna Fayne, W. L. Davidson.....	185
Matilda Johanna Brook, W. L. Davidson.....	130
Johanna Pride, J. E. Brethour, Burford.....	140
Bessie Johanna Mechthilde, Prof. H. H. Dean.....	225
Bessie Colantha Francy, J. W. Roulston, Hagersville.....	180
Aaggie Colantha Francy, J. W. Roulston, Hagersville.....	170
Abbeckerk Posch De Kol, W. L. Davidson.....	390
Flora Mercena of Homedale, W. L. Davidson.....	410
Allied Daisy Posch, H. German, Paris.....	210
Pauline Posch De Kol 3rd, Ira E. Shaver, Jerseyville.....	280
Beatrice Posch, T. Wilcox.....	300
Fairy Princess, W. F. Emmott, Newport.....	205
Lilly Pontiac Schuiling, Hamilton Health Assn., Hamilton.....	210
Lady Segis Mutual, L. C. Snowden.....	195
Countess Pasma Calamity, W. L. Davidson.....	300
Johanna Pontiac Pauline, Frank Riddle, Wilsonville.....	225
Korndyke Artalissa Maid, G. H. Bethune.....	375
Alice Smith, H. H. Bailey, Paris.....	275
Wayne Pasma Calamity, Hamilton Health Assn.....	320
Royalton Korndyke Leone, F. H. Peer, Norwich.....	175

## MALES.

Prince Johanna Schuiling, Martin L. Vansickle Middleport.....	140
Braeside King Pontiac Fayne, Lloyd Taylor, Brantford.....	125
Braeside King Pontiac Calamity, Wm. McClellan, Harley.....	200

According to a cream separator company 100 pounds of skimming capacity in August 1920 cost \$14.50 as compared with \$45.46 in 1890. In other words it is calculated that 26 17/20 pounds of butter were required to pay for 100 pounds skimming capacity in August 1920, as compared with 227 3/10 pounds of butter in 1890.

Ireland now exports 15,273 tons of cheese to Great Britain as compared with a pre-war average of 310 tons. This change which is said to be largely a war development brought about by the requests of the authorities to make cheese rather than butter has caused a decrease in butter exports from Ireland from 36,110 tons which was the average quantity exported from 1909 to 1913 to 16,585 tons in 1920.

## HORTICULTURE.

## Results From Dusting Apples in 1920.

EDITOR "THE FARMER'S ADVOCATE":

The McIntosh red apple is without a doubt the most susceptible variety to scab and the hardest to keep clean. On unsprayed trees, the terminal growth is generally badly infected by fall, and much in the interior part of the tree dies the following spring as a result of scab infection. Practical experience has proved that it requires at least two seasons of thorough spraying before the holdover area has been sufficiently reduced so that one has a fighting chance of controlling infection and getting a fairly clean crop the third year.

The writer has undertaken a series of spraying experiments on McIntosh for the past four seasons in connection with his regular work at "Springhill Orchards," Fredericton, N. B. The formulae were prepared by Geo. E. Sanders, Dominion Entomological Laboratory, Annapolis Royal, N. S.

## RESULTS FROM LIQUID SPRAY.

The first three years liquid sprays were used and a summary of these results shows conclusively that, by all odds, the best control was 3-10-40 Bordeaux. Hydrated lime and granulated bluestone, were used for speed and convenience in mixing. On the after blossom or calyx spray this gave considerable russetting and of the many substitutes for this particular spray, the writer favors triple-strength arsenate of lead, 3 to 40. Soluble sulphur gave about as good results, but the lead was the best sticker in wet weather. Lime sulphur

proved a good fungicide but in effective strengths caused yellowing of the leaves and serious dropping of the fruit.

## DUSTING.

The past season the trees were dusted, and the results have been highly satisfactory. The materials used were the new "Sanders Copper Arsenic Dust" and standard 90-10 sulphur. The Sanders dust cost about \$5.50 per cwt., the sulphur cost \$8 per cwt.; and as the base of the former is hydrated lime, while the latter is sulphur, we found the Sanders dust to have twice the volume of the latter. A duster with a 3-inch discharge pipe driven at maximum speed will cover 15 year old trees set 30x30, with 50 lbs. of Sanders dust per acre. We dusted 50 acres of young trees having an average diameter of 6 feet with about 25 to 30 lbs. per acre. by giving each tree a shot as the team passed.

The first application was Sanders dust applied May 24th and 25th, when the blossoms were just about ready to burst. The second application, June 5th and 6th was 90-10 sulphur applied after the petals were off. As it was very showery weather an application of the same was made June 8th to 10th, using nearly 100 lbs. per acre. On July 10th and 11th, we again dusted with Sanders dust, driving slow; machine at full capacity and coating the trees white. We used a little over 50 lbs. per acre. We did intend making another application on July 25th, but other circumstances prevented. However, the application of July 10th was plainly visible on the trunks and branches, until September 1st.

On a number of average barrels, hand graded, scab showed less than 3 per cent., counting everything to the size of a pin head. There was practically no russetting and we did not find a burned leaf. Part of the trees were in a fertilizer test—receiving from 3 to 5 lbs. each nitrate of soda—so that the foliage was heavy. Some of these trees picked nearly 3 barrels. They are 15 years old, but owing to neglect in their first years are about a 12-year size.

We packed out 126 barrels. Number ones were graded 2 5/8 inches up. Number two graded 2 3/8 to 2 5/8 inches and threes nothing below 2 inches, and no scab larger than a five-cent piece. On number one's, we packed 46 barrels or 36 per cent. Of number two's 45 barrels, or 35 1/4 per cent. Of number three's 26 barrels, or 20 1/2 per cent., and of Domestic's 9 barrels or 7 1/4 per cent. In consigning them they were guaranteed not to contain over 5 per cent. scab in the three's and 10 per cent. in Domestic's. There were 2 1/2 barrels of culls.

## COMPARISONS.

In an unsprayed adjoining orchard and under otherwise identical conditions, the McIntosh were 100 per cent. scabby. In two blocks of Milwaukee trees, one of which received only one dusting (applied in showery weather) with Sanders dust, the fruit was badly affected with "pit". The other block, which received the same applications as the McIntosh, were absolutely clean.

It is impossible to compare liquid spraying with dusting for scab control. The dust is so superior and so much cheaper that it eliminates comparison. Its one apparent weakness so far in New Brunswick is its very slight effects on the oyster shell bark louse.

The Sanders dust is absolutely safe on apple foliage either wet or dry and its only objection is the slight russetting on some varieties when used for the calyx application.

## A FEW HINTS ON DUSTING.

We got best results—most even distribution—in the evening, and between 6 and 10 o'clock in the morning. Before 6 a.m. the wind is variable in this locality. Wire a barrel of dust to the side of the machine and have a large oval funnel, with very little slope, to fit the hoel

in the hopper. Use a large flour scoop to fill hopper. It can be done without stopping the machine. Time is worth money in dusting.  
York Co., N. B. S. B. HATHWAY.

## POULTRY.

## How to Get New-Laid Eggs.

If pullets have been brought along from the time of hatching so that they do not receive any setback, and if they have been hatched fairly early, there should be no difficulty in getting a fair number of eggs during the winter months from the flock. They will start to lay earlier if they have been put into winter quarters some little time before they should begin to lay.

Elaborate winter quarters are not necessary. Naturally, the cheaper the house the more economically will eggs be produced, provided it is light, well-ventilated, dry and free from drafts. It is a matter of first importance that any pullets being put into winter quarters should be examined thoroughly, and those which do not show a good constitution should be culled out. Moreover, some treatment for lice should be given, the best probably being a small piece of blue ointment about the size of a small pea rubbed below the vent and under the wings. It is also necessary that birds which have been accustomed to a great deal of exercise on the range should not be confined too closely when brought in to winter quarters. Give plenty of clean, deep, litter, and make the pullets work for what they get. Green feed is also more necessary, if anything, at this time than at any other time, because the pullets have been accustomed to green feed all summer.

Experience and experiment have shown that where artificial light is available it may be used with good success at certain periods, in order to increase production. Where birds of the type of Plymouth Rocks or Wyandottes have been hatched from the middle of March to the middle of May, the peak of production for the pullets would naturally come in February, March or April. If these pullets are put under artificial light, so as to lengthen the day for two or three hours, it is stated that the peak of production may be advanced to December. Similarly, late-hatched pullets or old hens may be brought to laying earlier by the use of artificial light.

As far as feeding is concerned, it is a good idea to keep a hopper of dry mash before the flock at all times. Equal parts of bran, middlings, cornmeal, finely-ground oats and beef meal make a good mash. The following feeding suggestions are offered by George Robertson, Poultry Division, Central Experimental Farm, Ottawa: In the morning, feed scratch grain in the litter,—cracked corn, wheat and oats, equal parts by measure or some simpler mixture. This should be fed sparingly, just about a pint to 25 birds will be sufficient. At noon give green feed, sprouted oats, mangels or something similar; a little scratch grain may be scattered to start the birds to work.

A moist mash may be fed either at noon or in the evening, whichever is most convenient. A considerable proportion of this moist mash should be greens. At night the flock should be given a full feed of scratch grain. The birds should have grit, oyster shell, charcoa and clean water before them at all times. If milk can be had mix the moist mash with it, also supply it as drink; if milk is not available keep a hopper of beer-scrap before the flock.

In feeding the endeavor should be to supply everything that is required to encourage the flock to consume as large a proportion of mash feed as possible, as records show that increased production corresponds to increased consumption of mash.



Packing Apples in a Warehouse for the British Market, Kentville, Annapolis Valley, N.S.

# THE APIARY.

## Sweet Clover as a Soil Improver and Honey Plant.

EDITOR "THE FARMER'S ADVOCATE":

As a soil improver sweet clover is excellent. By its vigorous growth and the decay of the large roots it will replace humus where it has been weathered away, and by its power of taking nitrogen from the air will bring up in fertility, poor, rundown soils. The plant takes nitrogen from the air by means of the nitrogen-gathering bacteria which inhabit nodules about the roots. This adds more nitrogen to the soil and makes possible the growth of other plants. The bacteria which inhabit the root-tubercles of sweet clover and alfalfa are identical, or at least capable of living on either plant, and for this reason sweet clover is valuable as a pioneer crop for alfalfa, insuring proper inoculation of the soil.

Besides, the large, fleshy roots of the biennial, sweet clovers store up a great deal of plant food the first year of growth, in order to get an early and running start in the spring of the second year. This supply of food, not altogether used up, goes back to the soil on the death of the plant, adding to and enriching the humus. The roots, being fleshy instead of fibrous, decay more rapidly and so hasten the increase of fertility. Their rapid decay, moreover, releases the stored up nitrogen about the ends of the rootlets sooner than do the roots of the clovers. The exceeding rapidity of the decay makes plowing an easy operation—much easier than plowing an old alfalfa field.

In contrast to the other legumes which gather nitrogen in the same way, but which need considerable humus, sweet clover thrives where humus is quite absent. This emphasizes its value as a pioneer crop. The long tap-

roots, piercing the lower layers, make way for roots of other crops which are not able to penetrate where the ground has not been broken up. The continual growth and decay of the heavy roots slowly converts sand into fertile soil.

### AS A HONEY PLANT.

Sweet clover is one of the most important honey plants in the world. Widely distributed all over the United States, it is becoming more and more abundant. While it does not yield any surplus in the East except in limited areas, the bees are always busy on it when in bloom which is from the close of white clover clear on up to fall. It is therefore, invaluable for brood-rearing, particularly as the beekeeper can depend on it every year, wet or dry. In the West, carloads of almost pure honey are produced. I said "almost pure" because there are other plants usually in bloom the same time. This very fact makes it more saleable, because a strictly pure sweet-clover honey is a little too strong, and a slight admixture of the other honey gives it a better flavor. Conversely, a little sweet clover in any other honey adds a quality or flavor that is very delightful. For that reason bottlers of honey like to get it to mix with other honey. Taking it all in all, sweet-clover honey will always have good demand as a blender. This will be better understood when it is stated that cumarin, a substitute for vanilla, is extracted from the sweet clover plant. It is this vanilla flavor in sweet-clover honey that makes it so desirable for blending purposes.

The plant furnishes nectar for a long season. A clear, light-colored honey, lighter even than the honey from white clover, is its product; the greenish tinge which has been reported seems to be found only in certain parts of the East.

In Northern Kentucky, where sweet clover grows more than anything else, there is a famous honey-producing section. In one certain district there are more than 4,000 colonies. The honey crop is not always a success, however, even there, since sweet clover must

have plenty of moisture for nectar. It is not as dependable a yielder as alsike clover.

Sweet clover is almost the only plant which it pays the beekeeper to cultivate for its nectar alone. Other plants have been recommended—catnip is suggested for a person who is going to grow a plant for this purpose—but only sweet clover has established its right to this distinction. It has been extensively distributed by beekeepers who planted for bee pasture.

Farmers who keep bees should be first to try it out and urge their neighbors to plant it, as we see has been done a great deal already. A number of beekeepers all over the Province have been blessed by sweet clover, from which the bees get the white, clear honey.  
York Co., Ontario. M. A. BOAG.

## FARM BULLETIN.

### Luxury Taxes Abolished.

Suddenly, on Saturday last, the Federal Government abolished the Luxury Tax; the abolition to take effect on Monday morning, December 20. It was not an absolutely clean sweep, however, for liquors, medicines containing alcohol, fruit juices, perfumery, playing cards and confectionery are still subject to the tax. The Sales Tax collected from manufacturers, wholesalers, and importers remains in full force.

The official statement declares that the prices on many commodities have dropped so that the income from the Luxury Tax has fallen greatly. The purpose of the Tax, it is claimed, was to discourage extravagant buying and bring down prices. This having been accomplished to a large extent it is deemed expedient to abolish the Tax and thus help business and if possible prevent serious unemployment problems.

# United Farmers Convene in Massey Hall.

THE seventh annual convention of the United Farmers' Organization and its allied associations convened in Massey Hall, Toronto, during the week of December 13. The organization has passed through another successful year, and has not only a greatly increased membership but has become a much more powerful factor in the government of the country. The Co-operative Company has had an immense turn-over in business, thus showing that the farmers can and will buy and sell through their own organization. The meeting was attended by delegates from every county in the Province. These delegates returning from the convention imbued with interest and enthusiasm for the movement should do much towards further increasing the membership and power of the organization. The leaders had the confidence of the delegates present who realized that the directing of affairs must largely rest with the directors or executive; therefore, it becomes essential that the best men in the organization be elected to the directorate. The members should exercise care and judgment in the selection of their county directors. With over 2,000 delegates in the meeting, it is rather difficult to have a free discussion of all the problems which confront the delegates from the different clubs. All present cannot in the limited time express their views on the various questions. There seems a need for smaller conventions in different centres to discuss problems and select delegates to the central convention. The strength of the organization depends a good deal on giving members an opportunity to express their opinion and to having their problems straightened out by those in a position to give authentic information. The central convention is no place to discuss local affairs or to air petty grievance, and the chairman was perfectly justified when, on different occasions, speakers were ruled out of order when they got off the question under discussion. The U. F. O. has developed into a big and powerful organization, and from the enthusiasm of the meeting one would gather that it is destined to become bigger and still more influential as the years go by. An appeal was made for contributions to the support of the Muskoka Free Hospital for Consumptives and for relief of distress in China. The meeting responded liberally to both causes.

### THE PRESIDENT'S ADDRESS.

In his presidential address, R. W. E. Burnaby gave a resume of the growth of the United Farmers' organization, pointing out that seven years ago the organization lacked influence and the commercial enterprise was a very small factor in the business world. To-day the reports show the phenomenal growth. "The influence and prestige of the organization is by no means local, said the President, "as the eyes of the whole Dominion are on the U. F. O., and our Provincial Government, which is the direct outcome of our organization. Large business institutions, governing bodies, educational and other associations without number are seeking our business and representation on their boards and committees. Officers are frequently invited to speak at gatherings where a short time ago our organization would have been treated as a joke. Those who were in power in our legislative halls, who held us up to ridicule, have been replaced by the voters of Ontario by many of the men whom they opposed so bitterly. In a federal way we have placed a man in the field in every by-election, and in every case the people have endorsed and elected the man who stood on our platform." Mr. Burnaby accounted for this wonderful development by the fact that the institution is founded

should be guarded. It is the common people's weapon and safeguard, said Mr. Burnaby. Continuing, the President said: "The future is what we as individual members make it, and depends upon our realization of the responsibility of citizenship. Never in the history of Canada has there been a more opportune time or a greater need of an organization with aims and ideals such as the U. F. O. stands for. We must forget party and power and fight for principles and ideals. We must put the business of the government of our country on a higher plane than it has been in the past. We believe our task is to give the people all the facts and then trust the people. Our duty is to keep to the front in our discussion in our clubs the big question of public policy, debates and lectures, and carry on an educational campaign. The organized farmers have blazed a new trail which not only leads to democracy, but started from democracy. Its foundation is the people, and just so far as the people are prepared to forget their old party prejudices and work together in building this great democratic highway, just so soon will the old party cross-roads be discarded.

### SIXTY THOUSAND MEMBERS.

In presenting the seventh annual report, J. J. Morrison, the Secretary-Treasurer of the U. F. O., not only gave statistics to show the standing of the Association, but gave a review of the present problems and their probable effect upon the future of the organization. There are now 1,465 clubs, or a gain of 325 over last year. While there have been no abnormal conditions prevailing which would tend to stimulate organization there has been a steady growth in membership. The Secretary believed a new vision has possessed the rural mind as steady, determined progress and loyalty is everywhere apparent. It was claimed that rural consciousness and self-assertiveness will overcome any obstacles that may lie between us and our goal of equal rights to all, special privileges to none.

The financial statement showed the Company to be in good standing. At the end of the financial year, October 31, there was a surplus of \$23,623.84 on hand, a gain of \$7,822.84 over last year. Expenditures this year amounted to \$42,468.95, which was a considerable increase over a year ago, due largely to the cost of special directors' meetings, to sending delegations four times to Ottawa in the interests of the agricultural industry in opposing increased railway freight rates, ocean freight rates discrimination, award of Commerce Board on sugar price fixing, etc. There has also been a substantial increase in the office maintenance. The meeting of expenses of speakers at public meetings throughout the Province also cost considerable. It was not deemed fair for clubs to engage public entertainers at a considerable sum and then allow the central office to pay the expenses of the speakers. The Secretary believed that the central fund should only be used for the introduction of the movement in unorganized districts, and for the promotion of schemes in the interests of the industry and of the Association as a whole. Lack of funds to successfully carry through different projects which were believed to be of benefit to rural people generally were regretted. The financial statement showed last year's convention expenses, including railway fares, to cost nearly \$15,000. This year, owing to the increased number of delegates and a twenty-per-cent. raise in passenger rates, expenses will be over \$23,000. The Secretary believed that the time had arrived when some better plan for conducting the annual meeting might be devised. The attendance has become so large that the



R. W. E. Burnaby.  
Re-elected President of the U. F. O.

on sound fundamental principles, as equal opportunities to all, special privileges to none; an honest effort to establish the personal responsibility of the electors; to secure real responsible government. By fighting the fight and keeping the faith by standing by our principles, and refusing to look either to the right or to the left when a question of principle is involved, the President did not think there was much danger of the organization failing. Reference was made to the action of governments in protecting industries, especially as regards the guaranteed cost plus profit which was allowed some industries during the war, and the speaker pointed out that there had been no such inclination to protect the producer of milk, cheese, butter, pork, beef, hides, wool and other farm products. It was believed that Canada's fiscal policy for the past forty-two years has been one that has created a privileged class, where the many were taxed for the benefit of the few. This has had a tendency to breed and foster combines and trusts, thus eliminating competition. It has put agriculture, Canada's basic industry, in a position where it cannot compete on the labor market with other industries. "Agriculture," said the President, "is quite prepared to carry its own burdens, but it strenuously objects to carrying the burdens of exploiting parasites and then have to compete on the open markets of the world with its products." The protective tariff system of raising public revenue was characterized as wasteful and expensive. It was claimed that if a government is wrong, citizenship is wrong, and can only be righted by a gradual education in fundamental principles. Each individual should realize what the franchise stands for, what it has cost, what it may do, and how its functions

educative elements of debate are lost. Mr. Morrison thought that the meeting might well consider the advisability of holding a number of conventions at convenient points, from which selected delegates could be sent to an annual meeting, naturally of less proportion but with more possibilities for usefulness. The expenses above mentioned cover the cost of promoting the U. F. W. O. and of maintaining it. The Secretary believed that as the Farmer's Sun is the official organ of the U. F. O. that the organization should have an interest in the publishing company. Various matters and recommendations which were later to be brought before the convention were referred to by the Secretary in his report.

#### ONE HUNDRED AND TWELVE U. F. W. O. CLUBS.

The work of the U. F. W. O. was ably presented by the Secretary, Mrs. Laws. During the year about sixty clubs have been organized, bringing the total to one hundred and twelve. The speaker believed it essential that the women get to understand public questions. It was believed that right ideals should be established in the individual as to politics and citizenship, and it was also believed that the responsibility of citizenship should be incorporated in the educational system. Mrs. Brodie, past-President of the U. F. W. O., pointed out the deficiencies in city life as compared with the free, open country. Organization, education and legislation were mentioned as the foundation to work on, but the speaker feared that there was danger of legislation superseding education. Mrs. Brodie believed that the farmers' organization should be working to put their business on an equal basis with the industries. It was necessary that the organization work for something bigger than putting a man in Parliament. Politics should not be allowed to run away with education. It was believed that if conditions could be made sufficiently attractive on the farm it would hold the boys and girls there.

Mrs. Glenn, another ardent worker in the U. F. W. O., spoke on solving labor problems in the farm homes. It was believed that women should not neglect their homes and children to work for the State, but that if conditions for doing the work were improved, women would have more time to devote to questions of citizenship. Co-operative laundries and bakeries would save two days' work a week, or a hundred and four days a year, said the speaker. These would not be new ventures, as in sections of the United States they are operated with success and with a great saving of work to the farm women. The speaker believed that co-operation should be applied to women's work as well as to that of men. As conditions are at present in many homes, there is neither time nor money to enjoy the pleasures of life. The home was characterized as the heart of the nation, and in every home there should be time for rest, recuperation and enjoyment.

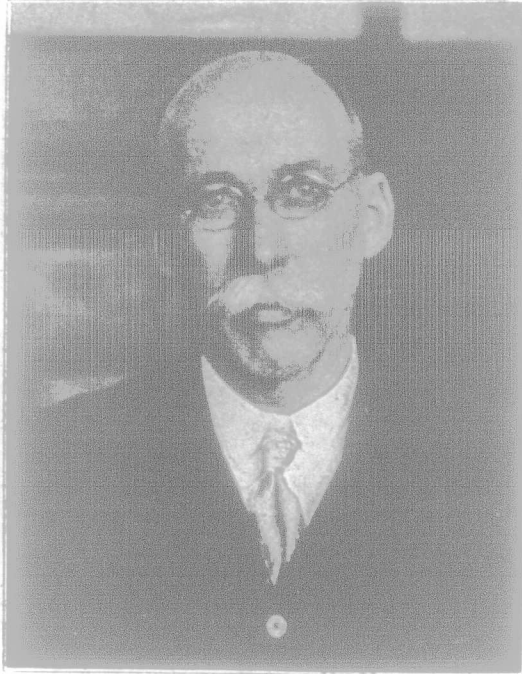
#### PREMIER DRURY REVIEWS PAST YEAR'S WORK.

On the evening of the 15th, Massey Hall was packed to the doors with men and women to hear addresses from Premier Drury; J. B. Reynolds, of the O. A. C.; and H. W. Wood, of the Alberta Farmers' organization. After congratulating the farmers on the success of the convention, the Premier stated his regret at not being so closely identified with the farm movement as an organization as he had been, but he had with him his credentials as a delegate from his local club. At the end of a year as head of the Provincial Government the Premier stated, "I am not badly satisfied with the year's work as there has been certain definite progress on definite lines, and we have been able to place on the statute books a program of advanced and needed legislation." The fair-minded manner in which the Opposition in Parliament had entered into the discussion of public questions was commended by the Premier, and it was claimed that it was with their co-operation that progress had been made. Complimentary reference was made to the democratic nature of the U. F. O. convention, and this same spirit was found to prevail at political picnics, gatherings, etc., which had been attended through the summer. Government was claimed to be the business of the people, and it was gratifying to see greater interest being taken in it. "The Government does not expect servile support," said the Premier, "but we want to feel that the people are back of us. We want the support that consists of loyalty and of standing behind us. I welcome constructive criticism; it is a faithful friend who dares tell his friend what is wrong, and I am very glad for suggestions that come from any part of the country." The Premier admitted that mistakes had been made, and that probably more would be made, but his intentions were good. It was pointed out that the country is now entering upon a period of lower prices and deflation, and that private interests must be sunk for the good of the whole. The Premier declared that the farmers had done their part, as the prices of field crops of Ontario have shrunk from the maximum prices fifty-one per cent., while the prices of live stock products have shrunk forty-seven per cent. It is necessary now for other interests to bring down their prices. The present Government was characterized as the child of the U. F. O., but the Premier contended that the child must be let live its own life, with the helping hand of the parents.

#### TOWN AND COUNTRY.

The address by Professor J. B. Reynolds, of Guelph on "Town and Country," was listened to with a great deal of interest. It was pointed out that the town and country represent different points of view and different contributions to the national welfare, and that these should be in the proper proportion necessary to a well-rounded national life. The growth of the town and city, at the expense of the country, was clearly depicted. The amalgamation of separate industries into one big

factory has eliminated the small village shops. Then, the factories have endeavored to locate close to lines of railways, which has resulted in the building up of great centres of population. The village, said the Professor, belongs to the surrounding country, as its industries use the raw material and products of the farm, and its business is designed to serve the wants of the farmers' families. The city, on the other hand, is different from all this. The raw products used may be brought from the ends of the earth, and the finished product may be sold as advantageously a hundred miles away as in the city of its origin. The city in its rapid growth has lost local interest, and in its speculative and trading instincts cannot abide the slow process of agriculture, or the narrow restrictions imposed upon native industries. By reason of the dominance of the town and city, it was claimed that the country is fast losing its distinctive appearance, character and individuality. The drain of manhood from the farm to the town shows its effect in the steady decline in food production. Industrial education was believed to be one remedy, especially if it will restore some share of small shops and factories to the country towns and villages, and break up in part the extreme type of huge factories with their endless disputes about wages and hours. Along with this, however, must come a change in our social ideas, claimed the speaker, and this is a matter of education—social propaganda, whereby useful industry will be honored, and the youth of Canada induced to seek in larger and larger numbers the opportunity offered in trades and on the farms. It was claimed that the farmers' movement must aim at the conquest of the towns, whose life is fed from the farms. "When the business of the town is done through co-operative societies, owned and managed by men who till the soil; when the financial institutions are designed to promote the agricultural industry; when the schools and churches have become strongholds of outdoor ideals; when the town is content to be small, and beautiful and comfortable; when the boys and the girls of the farm come naturally to the town to share its social pleasures, and not merely as visitors to see its sights, then the town will have been redeemed and the country will have come into its own," said the speaker. Professor Reynolds' address will appear more fully in an early issue of "The Farmer's Advocate."



J. J. Morrison.

Secretary of U. F. O. and U. F. O. Co-operative Company.

#### THE EFFICIENT GROUP.

H. W. Wood, President of the United Farmers of Alberta, brought greetings from the Western organization. The speaker contended that there had always been groups, but only one efficient group, and that was the military for the destruction of life and property. An endeavor is being made to promote an efficient group which will develop the social and true laws of life, as it must be realized that affairs of civilization are being dealt with. The speaker pointed out that we must consider the laws operating in the past in order to understand and forecast conditions for the future. Competition was claimed to be a false law, while co-operation was the true law. During his address, Mr. Wood traced the development of civilization, showing that competition among the various classes tended towards the survival of the fittest and the destruction of the weak. The two laws were each forcing the other to a higher standard. The weaker have formed groups to withstand stronger competition; then the stronger have united in the making of still stronger groups. This system has led to the amalgamation of different nations for warfare, and now a commercial warfare is on, claimed the speaker. Co-operation is just beginning to assert itself in the commercial field. This development is forced by strong competition. In the manufacturing world when competition becomes too strong there is a merger in order that they may protect themselves against themselves. This but increases the strength of the unit. The smaller must then unite to hold their place. It was pointed out that the manufacturers raise prices automatically until they come into competition with foreign manufacturers and then legislation is appealed to for protection. Lacking votes

to carry their object, money was found to be effective. A clamor then arose for the breaking down of the merger, but the speaker claimed that it was impossible to disorganize and that it was necessary to meet them with counter forces, or, in other words, to build up a democratic force which is greater than theirs. This has led to the co-operative movement where common interests and one viewpoint is necessary. After mobilizing the strength it is necessary that people learn to co-operate with each other and think together. It was believed that redemption would come about by the people developing efficiency, rather than by an individual leader. Many have said that competition is the life of trade, but the speaker believed that it might be the death of the community. A great co-operative organization has been created in order to protect the common people.

#### U. F. O. POPULAR AMONG FRENCH SPEAKING CANADIANS.

The French Canadian members were represented on the program by a son of J. H. Caron, an ardent worker in the United Farmer's Movement, who is a director for Prescott, and spends a good deal of time in organization work. The speaker referred to the work starting among the French Canadian people in Essex, then spreading to the Eastern Counties. It was claimed that these people see the benefit to be derived from organizing and that the principles of the movement "Equal rights to all" appealed to them. From a small beginning five years ago membership among the French-speaking people has increased to over 5,000, and the speaker believed that by next convention the membership would be doubled and possibly trebled.

J. P. Brady, Secretary of the United Farmers of Quebec, brought greetings from the Eastern Province. Obstacles to progress of the movement were referred to but these were being overcome. While there are only twenty clubs organized at present the speaker believed that by the end of another year practically two-thirds of the Province will be organized. One big difficulty to the more rapid spread of the movement was lack of speakers. It was believed that when the women of Quebec became organized, as they are in Ontario, the movement will receive a new impetus. The discussion which has at times arisen between the two races was believed to be caused largely for political purposes. The farmer movement was welcomed in Quebec claimed the secretary from that Province.

J. B. Levert, of Nipissing, the new French-Canadian director, on the Co-operative Organization, was loudly applauded when he appeared on the platform. He voiced his delight that he could speak the language of the great Shakespeare. Then he carried the large audience with him as he illustrated the strength and effectiveness of the organization. Mr. Levert is a fluent and able speaker, and pointed out that the farmer movement is destined to cement the two races into a great Canadian nation.

"The solution of the problems of those who toil lies in our organization," said the speaker, who continued. "The French with their vivacity and their quick impulsive methods working in co-operation with the English tenacity and perseverance will put Canada in a position of first place among the nations of the civilized world."

Jas. H. Duthie, Secretary, of the National Waterways' Association of Canada, took considerable time in presenting arguments in favor of deepening the St. Lawrence river so that ocean going vessels might navigate up through the great lakes. It was claimed that traffic can be carried by an all-water route at approximately one-third the cost of rail transportation. By opening the St. Lawrence river for ocean traffic, it was claimed that it would have the effect of bringing a material reduction in tolls charged by railways, and would also result in production of a large amount of electric energy.

Col. J. L. Fraser, President, of the Farmer's Publishing Co., dealt at length with the effort made to raise funds to start an official organ of the farmer's movement and of the purchase of "The Sun". The success of the political elections was attributed largely to having an organ through which to express the farmers views. At present there were over 35,000 subscribers and it was hoped that the number would increase to 60,000 within the coming year.

#### WORK ACCOMPLISHED BY DAIRY COUNCIL.

The National Dairy Council was represented on the program by its secretary, D'Arcy Scott, who pointed out the aims and objects of the council. An effort is being made to stimulate the consumption of milk and its products as it has been proven that milk is one of the cheapest and best foods for human consumption. A campaign is to be put on in the larger centres to prove to the people the value of milk in the diet. The transportation problems have also been dealt with, and through the efforts of the council, by preventing increase in rates, milk shippers were saved a great deal. If the proposed increase rates had gone into effect it would have cost the milk shippers \$240,000 annually. The Cream shippers have also been saved a vast sum. The feed problem has also been dealt with by the council. For instance, the steamships were giving a preference of 25 cents per hundred on wheat which resulted in wheat rather than flour being exported thus lessening the amount of bran and shorts available for Canadian farmers. Through the efforts of the council working in conjunction with other interests they have succeeded in reducing it to five cents thus increasing the amount of wheat milled in Canada, making more millfeeds available. Mr. Scott described at some length the various lines of work taken up by the council in the interests

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of the producer, and in establishing suitable markets for dairy products.

NUMEROUS RESOLUTIONS.

On Thursday afternoon the time was taken up by considering resolutions which had been submitted by various members. Free discussion of the merits and demerits of the resolutions took place by the different members. These resolutions were to the effect: One congratulating the Drury Government on its work of investigating the handling of the forest resources of the Provinces, and of the action taken to recover money of which the Province had been defrauded. The meeting urged that those found guilty of defrauding the Provincial treasury be made to feel the full weight of the hand of the law.

It was deemed advisable that every Federal riding be incorporated for political purposes.

The law providing for mothers' allowances was endorsed. This resolution was ably supported by Mrs. Goltz, of Muskoka, who is chairman of a board in the North.

In regard to hydro-radials the action of the Government in appointing a Royal commission to investigate the advisability of extending the radial scheme, was indorsed by the meeting.

The effort put forth to promote reforestation of waste lands in older Ontario was approved and still more aggressive efforts along this line was urged. The need for the creation of a Rural Credit Co-operative Banking System was championed by M. Stables. Credit systems in Quebec, Manitoba and European countries were mentioned and the fact pointed out that out of hundreds of systems in existence not a cent has been lost. The Convention advised the creation of the Co-operative Banking System in Ontario. Jas. McEwing while approving the scheme took the stand that the meeting should have further information before voting to ask the Government to enter into so large a scheme. Thos. McMillan, a member of the commission, investigating the credit system the past summer commended the Government in taking the matter into consideration, and felt that the success of the many systems in operation was proof of the advisability of Ontario taking it up.

Prof. Sharp introduced a resolution that a more adequate system of registration of births, deaths and marriages be provided in unorganized districts of Ontario.

W. L. Smith moved that the legislation be enacted to institute the right of the re-call system. The re-call was characterized by one speaker as the best means of ending graft. As, when a member knows that he may be re-called if he fails to stand up for the principles on which he was elected he strives to meet the wishes of his electors. After some discussion the motion carried unanimously.

J. J. Morrison spoke on the following resolution: That whereas under the present system of Government the elector has not assumed his share of responsibility to the state and whereas the elected member has often not shown his full share of responsibility to the electorate, therefore, some form of consultation between the elected representative and his constituents should be established with a view to promoting co-operation between them. The older systems were severely criticized and it was claimed that the resolutions passed on at this convention become crystalized into the platform of the party. Or in other words the people not the machine formulates the platform.

Mr. Ascough, of Kenora, moved that the Government be asked to appoint competent engineers to instruct the road supervisors in Northern Ontario, and that road construction be done by contract. The speaker believed this would lead to better and more satisfactory roads being constructed in the Province. Mr. Sangster, Ontario County, spoke in favor of having work done by day labor under proper supervision, rather than by contract. H. Currie of Middlesex, brought up the matter of railroads not living up to the law in regard to planking railroad crossings on farms. It was claimed that removing planks early in fall and not replacing them until late spring made it difficult and dangerous to farmers having to team over such crossings. It was moved that the Government be requested to force the railroads to keep the crossing in condition for teaming.

The making of further grants from the Provincial Treasury to the Navy League for the purpose of assisting in carrying on the propaganda now being conducted by that organization was vigorously opposed.

The meeting endorsed a resolution to the effect that the Government be urged to appoint a commission to determine the cost of producing the principal commodities produced for sale on farms devoted to mixed farming.

On motion of R. W. E. Burnaby the meeting endorsed the third party in parliament as the exponents of the National Farmers' Platform, with T. A. Crearar as leader.

W. L. Smith and Mrs. Laws spoke forcefully in opposition to inaugurating military training in our schools and suggested physical training as a substitute.

The Ontario Government was requested to make a thorough investigation into the feasibility of establishing a Provincial system of local and long distance telephone service. A land tax, where the line passes was suggested by one speaker as a means of assisting in meeting the expense.

The meeting endorsed a resolution to the effect that no increase in sessional indemnity voted by Legislature become effective until confirmed by a legislature or parliament fresh from the people.

The convention strongly condemned the practice of soliciting contributions from candidates for any institutions, fairs, churches, etc.

A surtax on idle lands in New Ontario in order to bring them into use was recommended.

The U. F. O. executive was requested to take up with packers the question of stabilizing prices of hogs.

Outside of assistance for the organization of new clubs, the meeting decided that the travelling expenses and hotel bills of speakers be paid by clubs asking for speakers rather than by the central organization.

The proposal that steps be taken to secure for the United Farmers, stock of the Farmers Publishing Company was adopted.

A good deal of interest and spirited debating developed when the amendments to the farmer's platform came up for discussion. The meeting favored a substantial, all-round reduction in the custom tariff and of reduction in the tariff on British imports, but when the clause dealing with free trade with United States was presented, it was evident that the delegates were not all of one mind. After considerable discussion the proposed amendments were laid over for a year, on motion of J. J. Morrison, so that the clubs would have ample opportunity of discussing them.

CHANGES IN CONSTITUTION.

A large number of notices of motion for changes in the constitution came before the annual meeting. Among these was one to change Clause 5 so that young people from thirteen years up might join the young people's section of U. F. O. for a membership fee of 25 cents. Mrs. Webster, speaking to this motion, claimed that the young people's section of the movement should be as great or greater than the parent organization. There was considerable discussion regarding the motion to change the representation of delegates from one delegate, from each branch up to twenty members, to one delegate for fifty members. This would lessen the number of delegates attending the convention and reduce the expenses. Many felt, however, that the delegates received a great inspiration at the meeting and carried it back to their home communities; therefore the larger representation the better. The motion was lost, but later on the question was opened again and the meeting carried it unanimously. It was also decided that there should be a lady director in each federal riding. Section 25 of the constitution was rescinded and the following inserted: Each club president, by virtue of his office may be a member of the board of representatives for his federal electoral district, provided, however, that there shall be at least one representative in each township in the riding; and in townships where there are not clubs a representative may be appointed for that township by the board of representatives for the remainder of the riding. The executive of the U. F. O. was increased by four, by having two members of the U. F. W. O. elected. It was also decided that the U. F. O. may take and hold shares in other companies carried on with a similar aim, and that representation on these companies be through the president or other member appointed by the board. As it is sometimes difficult to get a quorum at the directors' meeting, it was decided that thirty members of the board of directors would constitute a quorum, but to pass anything required a majority. If a director cannot attend a meeting, the vice-president is empowered to do so.

When the chairman called for nominations for president and vice-president there was a motion that the same officers be reinstated for the ensuing year. When put to a vote this carried unanimously, making R. W. E. Burnaby President, and W. A. Amos, Vice-President of the U. F. O. for 1921.

Executive of U. F. O.: J. G. Whitmore, York; S. J. MacDonnell, Stormont Co.; A. G. Farrow, Halton. The women members are Miss Agnes MacPhail, Mrs. Goltz, Mrs. W. Glea, and Mrs. F. Webster.

United Farmers' Co-operative Company.

The growth of the Farmers' Co-operative Company has been phenomenal, there being a turnover of nearly \$19,500,000 as compared with \$8,500,000 the previous year. President A. A. Powers presented an optimistic report to the Company's annual meeting. After referring to the great increase in business the President pointed out that along with other business concerns the Company has suffered by the exigencies of trade, consequently the profits are not correspondingly as great as in 1919. A year ago the authorized capital of the Company was \$250,000, this was increased to \$1,000,000, and \$32,850 over the amount asked for was subscribed. The meeting approved of further increasing the authorized capital to \$1,250,000, and from the tone of the meeting this additional capital will soon be subscribed. Among the activities of the Company mentioned by the President was the opening of 21 stores during the year with preliminary work under way for the opening of four additional ones. Previous to October 31, 1919, seven stores had been opened. The volume of trade going through these stores was reported as satisfactory, but the Company believed it impossible to make any appreciative distribution of profits on purchases this year.

There has been great expansion in business during the year, which has enacted expense. The acquiring of the Toronto creamery and engaging J. A. McFeeters as general manager opened a market for cream, and the enterprise has been highly gratifying, and proves that a business of this kind can be handled to the advantage of the producers. The opening of an egg and poultry department was an innovation, but the tangible results have, according to the President, been very satisfactory. Payment is made on a quality basis, and a great portion of the products have been sold for export. R. H. Ashton, of Morrisburg, who has had wide experience along this line, is manager. The

live stock department was reported as being in a flourishing condition, the total turnover at the Union Stock Yards aggregating nearly \$11,000,000, and at the recently opened branch at Montreal over three-quarters of a million dollars worth of business has been done. The seed department, under the management of H. W. LeMay, has proven a beneficial branch of the business. The commission department, according to Mr. Powers' report, showed a loss. However, the financial statement showed a substantial reserve and fair profits for the year's business. Dividends at the rate of 7 per cent per annum upon the capital stock was recommended by the directors.

The Company has over 19,000 shareholders, but not over 1,000 were present at the meeting. The election of directors and routine business took considerable time. Many names were placed before the convention for election to the directorate. The nine chosen were: R. W. E. Burnaby, York County; A. A. Powers, Durham County; A. Van Allen, Dundas County; R. J. McMillan, Huron County; Elmer Lick, Ontario County; J. Z. Fraser, Brant County; H. V. Hoover, Hastings County; R. H. Ashton, Dundas County, and L. B. Levert, Nipissing.

The Co-operative Company have recently secured the services of H. B. Clemes as Manager. Mr. Clemes formerly had charge of the Sales Department of Gunns, Limited, and starts on his new work with ample qualifications for looking after the interests of a big concern. Although it is only a few years since the Co-operative Company had its inception, the growth has been very rapid, and so large is the turnover and so diversified the interests that it requires a man with great business ability to handle it to the satisfaction of the shareholders and of the members doing business with it.

J. J. Morrison, the able Secretary, gave a resume of the growth of the organization. He referred to the 1914 convention with two hundred and forty-three delegates present, with the first member being secured in March, 1914. In December, 1920, there were sixty thousand members. The United Farmers' Co-operative Company commenced business in a very small way, and with but \$10,000 capital. This was soon increased, however, to \$250,000, while now the authorized capital is \$1,000,000. The Company has never failed to pay seven per cent dividend on subscribed stock. Mr. Morrison mentioned some of the difficulties which the Co-operative Company had to contend with at the beginning. Business concerns and wholesale houses did their best to throttle this new enterprise of the people, and it was found difficult to buy goods in quantity at the right price. Members of the organization have also been at fault. It has not been uncommon for a club to order a carload of goods or feed and then if the price dropped to cancel it, leaving it on the hands of the Co-operative. Then, too, in purchasing produce from the clubs there has been a tendency for them to refuse delivery on a rising market. The speaker urged those present to learn to be business men and to be fair. From a \$230,000 turnover in 1914-15, the business has grown until in 1920 there was a turnover of \$19,500,000. The work is divided among ten departments with over three hundred employees. There are at present nearly 19,000 shareholders, and the speaker claimed that the dynamo that has caused this phenomenal growth was the enthusiasm of the people. It has been proven that the farmers are capable of handling big business, and the speaker pointed out that there was as good material on the back concessions as there was on Yonge street of Toronto, but they must be imbued with enthusiasm and taught to be proud of their calling.

Forty-Sixth Annual Meeting of the Dominion Grange.

The forty-sixth annual meeting of the Dominion Grange was held in Toronto, on December 13, and in his opening address, J. C. Dixon claimed that the Grange always has stood firmly for the betterment of social conditions on the farm, and has been the fountain-head of inspiration and assistance to all farmers' organizations in the Dominion. Mr. Dixon pointed out that in the cure for present-day ills in nation and state there must be industry, efficiency and economy, and with these co-operation, collective bargaining, direct buying and direct selling. He did not believe that all middlemen should be removed, but that there are many useless ones from an economy standpoint. It was believed that farming is practically the only industry, business or occupation on a purely competitive basis, and on this basis profiteering was impossible. Now was believed to be the time for farmers to stand together and to speak. J. G. Lethbridge, M. P. P., claimed that to-day we are reaping the harvest of what the Grange has sown in the days that have gone, and if we look over the past history we may see many reforms that it has brought about. The beginning of the organization in Ontario was depicted by D. Kennedy, one of the oldest members of the Grange. While there were only a score or more of members present, there was a good deal of interesting and educative discussion. The officers elected for the ensuing year are: Master, Howard Bertram; Overseer, James McEwing; Secretary-Treasurer, Miss Hattie Robinson; Assistant Secretary, Mr. Harry Priest; Chaplain, John Prichard; Lecturer, Dawson Kennedy; Steward, Mr. D. McLean; Assistant Steward, Mr. John Kay; Gatekeeper, Mr. W. E. Wardell; Ceres, Mrs. W. Oke; Pomona, Miss Mary Murdoch; Flora, Miss May Thompson; Lady Assistant Steward, Miss Flossie Munro; Executive Committee—H. C. Dixon, H. Bertram, W. E. Wardell; Fair Representatives, J. G. Lethbridge, W. E. Wardell.

# Toronto, Montreal, Buffalo, and Other Leading Markets

Comment on week ending December 16.  
Quotations on last Monday's Markets.

## Receipts and Market Tops.

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

	CATTLE						CALVES					
	Sales		Top Price		Good Steers		Sales		Top Price		Good Calves	
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
Toronto (U. S. Y.)	6,342	7,029	*4,616	A\$17.00	\$13.50	\$12.50	580	818	*497	\$18.00	\$23.00	\$16.00
Montreal (Pt. St. Chas.)	345	1,959	549	11.50	12.50	—	258	394	304	17.00	18.00	15.00
Montreal (East End)	1,206	1,585	658	11.50	12.50	—	314	404	507	17.00	18.00	15.00
Winnipeg	5,784	8,420	7,139	9.50	12.00	8.50	356	526	402	8.50	10.00	8.50
Calgary	1,832	5,503	2,675	7.75	10.75	7.75	158	399	363	7.50	8.75	6.90
Edmonton	989	1,842	1,428	8.00	11.25	8.00	108	150	112	8.25	8.50	8.25

	HOGS						SHEEP					
	Sales		Top Price		Selects		Sales		Top Price		Good Lambs	
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
Toronto (U. S. Y.)	5,524	6,549	*5,214	\$16.00	\$17.00	\$15.25	9,519	4,805	*8,558	\$13.50	\$19.00	\$13.50
Montreal (Pt. St. Chas.)	1,225	1,301	1,351	16.50	16.90	16.50	1,007	887	793	13.50	16.00	13.50
Montreal (East End)	1,471	738	868	16.50	16.90	16.50	2,281	1,434	1,596	13.50	16.00	13.50
Winnipeg	4,013	5,871	2,375	13.75	15.50	13.75	2,115	2,073	1,808	12.50	14.50	12.00
Calgary	618	1,086	1,213	14.00	15.75	13.25	3,952	80	1,584	11.00	15.00	11.00
Edmonton	542	718	574	13.75	15.25	13.25	378	496	321	10.00	12.50	10.00

\* Thursday sales not included.  
A One extra quality reached this figure.

### Market Comments.

**Toronto (Union Stock Yards).**  
The sales for the week amounted to 6342 cattle, 580 calves, 9,519 sheep and 5,524 hogs. In addition there were 56 cattle and 202 hogs on through billing; this is the lightest volume of through billed stock made this year. The sales for the week included a considerable number of left overs from the previous week end. Buying for Christmas shop trade was the chief object of the trade during the week. On superior cattle prices realized were encouraging. Baby heaves were picked up on a snappy market at prices ranging from \$12 to \$14 per hundred. Choice kinds of butcher cattle were advanced 25 cents, the majority moving from \$10.50 to \$11.50; good kinds of steers moved from \$9.50 to \$10.50 and common kinds from \$6 to \$7. Cows indicating high dressing percentages moved from \$8 to \$10 per hundred, and the file from \$6 to \$7. The market for canner stock showed a little more snap, and sales were made fairly readily at an average price of \$3.50 per hundred. The bull market was not neglected; good kinds of bulls in fair flesh weighed up from \$7 to \$9, and the light stuff from \$5 to \$6. Demand for store cattle was practically dead, and it is not expected to exhibit any marked liveliness until after the Holidays. Farmers have been buying very cautiously and only in small lots. However, the cattle that are being shipped back to the country are of a quality which indicates that purchasers are buying only the very best. No stock weighing under 700 pounds was moved out; good feeders were priced from \$9 to \$10.75 per hundred, and the fair kinds from \$8 to \$9. Offerings of calves were meagre, and under a keen demand prices were advanced \$1 per hundred, the best stuff selling from \$15 to \$17, the medium from \$11 to \$14 and the common from \$5 to \$10.

The market for lambs was perhaps a shade higher than during the previous week. There were a few picked lots moved off the scales at \$13.50, but most of the good stuff moved from \$12.50 to \$13 and thin kinds from \$7 to \$8. Butcher sheep were rather hard to move but all sheep eligible for breeding purposes commanded attention. Several loads of good breeding ewes were moved off the market during the week. Prices on good ewes were quoted at \$7 and \$8 per head.

The hog market is moving sharply upward. During the week there was a rise of from 75 cents to \$1 per hundred. Receipts were very light and competition keen from small butchers and the packing industry. Selects sold on the closing market within a range of \$15.75 to \$16. The market closed in good tone.

The total receipts from January 1 to December 9, inclusive, were: 279,412 cattle, 72,352 calves, 286,272 hogs and 249,693 sheep; compared with 361,979 cattle, 64,663 calves, 378,618 hogs and 284,628 sheep, received during the corresponding period of 1919.

**Montreal.**  
The total receipts at the two yards for the week amounted to 2,051 cattle, 572 calves, 3,288 sheep and 2,686 hogs. There was considerable improvement in the tone of the trading on the cattle

CLASSIFICATION	No.	TORONTO				MONTREAL			
		Avg. Price	Price Range	Top Price	Avg. Price	Price Range	Top Price		
STEERS									
heavy-finished	280	\$11.75	\$11.00-\$12.50	\$12.75					
STEERS good	452	10.25	10.00-10.50	14.50	54	\$11.00	\$11.00	\$11.50	
1,000-1,200 common	73	8.50	8.25-8.75	9.75					
STEERS good	1,124	10.09	8.50-11.25	14.00	20	10.00	10.00	11.00	
700-1000 common	432	6.72	5.00-8.00	9.75	73	7.50	6.75-7.75	9.00	
HEIFERS good	1,100	11.22	9.00-12.50	14.00	19	9.50	9.00	11.00	
fair	266	8.14	7.50-9.25	9.75	22	8.00	7.50-8.50	8.50	
common	212			8.50	116	6.70	5.75-7.50	7.50	
COWS good	292	8.08	7.00-9.00	10.50	49	8.60	8.50-8.75	8.75	
common	661	6.48	5.50-7.50	7.50	182	6.25	5.00-7.50	7.50	
BULLS good	69	7.50	7.00-8.00	9.00	3				
common	144			6.00	98	5.60	4.75-6.00	7.25	
CANNERS & CUTTERS	641	3.81	3.25-4.50	5.00	193	4.00	3.00-4.50	4.50	
OXEN									
CALVES veal	580	14.74	9.25-16.50	18.00	203	12.50	10.00-14.00	17.00	
grass					55	5.25	5.00-5.50	5.50	
STOCKERS good	314	8.50	8.00-9.00	9.00					
450-800 fair	256	7.00	6.25-7.50	7.50					
FEEDING good	26	10.50	10.00-11.00	11.00					
800-1,100 fair									
HOGS selects	5,391	15.48	15.25-16.00	16.00	988	16.25	16.00-16.50	16.50	
(fed and watered) heavies					12				
lights					171	14.25	14.00-14.50	14.50	
sows	131	11.92	11.25-13.00	13.00	51	12.25	12.00-12.50	12.50	
stags	2				3				
LAMBS good	7,120	12.66	12.25-13.25	13.50	383	13.25	13.00-13.50	13.50	
common	360	7.76	7.00-9.00	10.00	388	11.00	10.50-12.00	12.00	
SHEEP heavy	121								
light	1,439	6.09	6.00-6.50	7.25	120	5.60	5.50	6.00	
common	479	3.36	2.50-4.00	5.00	116	5.00	5.00	5.00	

Montreal hogs quoted on basis of off-car weights.

markets. There was less indifference on the part of buyers and trading was fairly brisk throughout the week. On Monday four or five loads of good cattle were offered; there was considerable bargaining over the price of these cattle and they were not sold until all other grades had been weighed up. Fifteen steers averaging 1,210 pounds but lacking in real finish were sold at \$11.50 to a local farmer for feeders. Twenty butcher steers of a thicker type and averaging 1,225 pounds brought \$11. The same figure was paid for a lot of seventeen head made up of three or four heifers and the balance of the steers averaging for the lot, 1,155 pounds. A straight load of fat cows, averaging 1,215 pounds was weighed up at \$8.75. One choice heifer cow of beef type was sold at \$10 per hundred. Light and rather common grades of butcher steers and heifers, of which there has been a preponderance this fall, were in much better demand. Many sales of this grade of stock were made around \$7.50 and \$8. The average quality of the plain big-bodied cows of dairy type was slightly improved. Some of the better grades of these sold as high as \$7.50, and the general run around \$5.50 to \$6.50. Cannery were 25 cents up and sold at \$3. The increased prices on cannery and

cutters was due in a large measure to the better killing quality of the stable stock. Bulls also were stronger and whilst a few of very light yearlings from the East were sold for \$4.50, the majority of the bulls offered brought over \$5. The heavier bulls and those of a little better quality brought from \$6 to \$7.25. There was no change in the prices for grass calves. Quotations on veal calves were nearly equal to those of the previous week but sales were difficult to make at prices asked, and there was a weaker undertone. Packers predicted a drop of \$1 per hundred. This was the only kind of stock showing weakness. Drivers were a little less particular about the age and quality of the calves offered. Out of fifty calves on sale on Wednesday, seven were held for post mortem inspection.

The best lambs brought \$13.50. Lots of good average quality were sold at \$13, which was the quotation for good lambs. Sheep when graded brought \$6 for the tops. Average runs of common quality sold at \$5.

There are not enough hogs arriving at Montreal to supply the demand. A few hogs were weighed up on Monday at \$16. The general price was \$16.50, whilst an odd sale was reported as high as \$17. Market closed strong. Sows

weighed out \$4 less than selects, lights, \$2 less than selects, and sows sold to outside buyers from \$14 to \$14.50.

**Pt. St. Charles.**—The total receipts from January 1 to December 9, inclusive, were: 43,570 cattle, 65,669 calves, 71,252 hogs, and 106,602 sheep; compared with 64,801 cattle, 70,866 calves, 82,662 hogs, and 102,400 sheep, received during the corresponding period of 1919.

**EAST END.**—The total receipts from January 1 to December 9 inclusive, were: 50,034 cattle, 57,141 calves, 63,093 hogs, and 75,204 sheep; compared with 71,700 cattle, 56,861 calves, 59,217 hogs and 71,863 sheep, received during the corresponding period of 1919.

### Wool Market Report.

Very little activity has been reported in the Canadian wool trade during the past week. Prices remain steady.

United States advices indicate that a large part of the 1920 clip still remains in the hands of growers or in growers' pools.

London, England, wool sales of December 13th were not very successful, only 15% of the offerings being sold. Reserve price limits were reduced on greasy Merinos and fine crossbreds by 5 to 10 per cent. Most of the wool sales scheduled for January have been suspended.

(Markets continued on page 2238)



Markets

Agriculture, Live  
Intelligence Division

Food Calves	
Week Ending	
19 Dec. 9	
00	\$16.00
00	15.00
00	15.00
00	8.50
75	6.90
50	8.25

Food Lambs	
Week Ending	
19 Dec. 9	
00	\$13.50
00	13.50
00	13.50
00	12.00
00	11.00
50	10.00

Top Price	
	\$11.50

	11.00
75	9.00

	11.00
50	8.50
50	7.50

75	8.75
50	7.50

00	7.25
50	4.50

00	17.00
50	5.50

50	16.50
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50	14.50
50	12.50

50	13.50
00	12.00

	6.00
	5.50

selects, lights,  
sows sold to  
\$14.50.

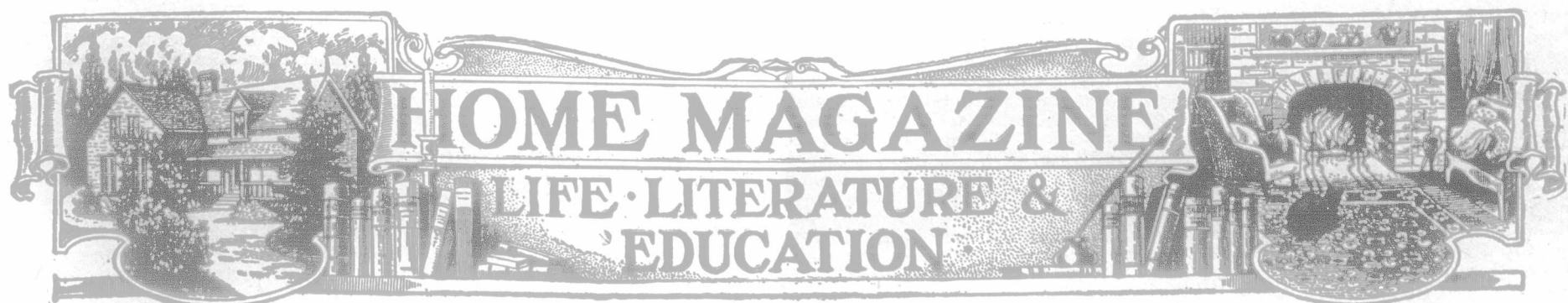
total receipts  
or 9, inclusive,  
calves, 71,252  
compared with  
82,662 hogs,  
and during the  
19.

receipts from  
inclusive, were:  
calves, 63,093  
compared with  
calves, 59,217  
received during  
1919.

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The Old Loveliness.

By CHARLES HANSON TOWNE.

Old Books, old friends are best,  
Old things are loveliest:  
Old houses, and the glamour of old days,  
The olden peace, the olden quiet ways.

Old gospels, and old dreams!  
With new delight life teems  
When these are read, when these are told:  
All youth at last grows old.

In bleak December, lo!  
A whirlwind of white snow.  
O heart! lost April then  
Seems wonderful again.

Yet dream new dreams, be glad  
For all the soul once had.  
Old books, old friends are best—  
Old love is loveliest!

The Fellowship of Books.

THE winter is the season during which the farmer and his family have most time to read. From the first of April to the last of October, or even later, there are too many duties about the farm, and the worker's body is too tired to leave much time for books or much energy for intellectual effort, but when the evenings are long and darkness reigns without there are few indeed who cannot find, somehow, an odd hour to spend, book in hand, beside the living-room lamp.

Of course, there are some people who do not care for reading—at least, they think they do not. Perhaps they have never tried, or they may have tried to begin and have chosen the wrong kind of books for their especial need. Tastes differ. The person who enjoys to the full one of Conrad's sea stories may not care at all for Ruskin's "Unto This Last," or Wells' "First and Last Things," yet all of these are literature worth reading. Some people like novels best, some biography, some history, some essays, some scientific books, and a few even like poetry. Every one of these "tastes" is good, provided the books chosen be good of their kind, but happy he or she who has learned to appreciate all,—for then the feast is ever varied, and each class comes with the zest of novelty.

There are some folk, too, who come to a time when they would like to cultivate a taste for reading, but do not know where or how to begin. They want to become acquainted with good literature, but have not the faintest idea what good literature is when they see it. In this case there is the necessity for learning to read as a child learns to walk, learning to step slowly before he tries to run. "Easy" books (that still are literature) must be read first, and allowance made by easy and natural stages until the subject knows that he knows good books and can enjoy them. Always it is advisable for the would-be reader who begins thus handicapped, to put himself or herself under the guidance of some one who loves and knows real literature. In most neighborhoods there is to be found at least one such person.

At all events the effort is worth while. The man or woman with ideas is the interesting person in a company, the one whose counsels are sought in a community on all but the barest practical things. One of the finest looking and most attractive men (at first sight) that the writer of this has known soon palled because he had no ideas. He never read a book; he had not patience enough even to read a newspaper past the locals. A man of action? Certainly. But because he knew nothing outside of himself his talk constantly reverted to himself, what he was doing *ad infinitum*. His vision was narrowed, the horizon of his world very small indeed, his ideas limited.

Having said that, in other respects he was a "pretty good fellow," but he fell short of what he might have been by the expenditure of a little effort along broader lines.

Now books help to beget ideas, and so to develop a personality that lasts and grows upon those who come in contact with it.—One reason for reading.—Another is for information; a third for pleasure—for who is happier than a booklover immersed in a fascinating book?

And is there not a wonderful satisfaction in knowing that, by means of the little printed page, one may come into actual touch with the very thought of the greatest minds of all time:

"The dead, but sceptered sovereigns  
who still rule  
Our spirits from their urns."

The great souls whose words we read not only give us their thought. They do more. They stimulate us to independent thinking for ourselves, set us off to blaze new trails on our own account. "Only those souls are alive," says an original modern thinker (Bouck White) "who perpetually are in motion onward." By reading we help to keep ourselves from stagnating and so we become more and more "alive," learn more and more to really live.

And when we really live our thought must find issue in action. The bookworm who is contented to merely read and dream, without doing shows that he has missed the mark entirely.

Many people have exclaimed over the startling absence of books from the average farm home. We do not think the books are absent because the farmer and his wife do not appreciate them, or are too stingy to buy them, but rather because they don't know what books to ask for and don't want to risk spending their money for trash.

It is a safe plan to read a book before you buy it, get it from a public library or a friend first, and so be sure it is one you want to read again and again, and so want in your library. But the choice among volumes that are "literature" is surely legion. Think of just a few. In fiction: Dickens, Thackeray, George Eliot, George Borrow, George Gissing, J. M. Barrie, Conrad, Haw-

thorne, Hergesheimer, Hugh Walpole, Ernest Poole, Sir Gilbert Parker, Winston Churchill, David Grayson, Dumas, Pierre Loti, Tolstoi, Turgeniev, Among the essayists and in general literature: Lamb, De Quincey, Ruskin, Richard Jefferies, Washington Irving, Emerson, Oliver Wendell Holmes, Thoreau, Charles Dudley Warner. In poetry and drama: Shakespeare, Goldsmith, Burns, Tennyson, Keats, Shelley, Masefield, Goethe, Schiller, Yeats, Rann Kennedy.

How these lists might be extended!—adding to them all the great biographers historians, and writers of travel and scientific discovery, not forgetting the wonderful scribe of the great War, Sir Philip Gibbs.

At all events, it is very important to have books—good books—about the house, and to see that they are used and also that they are taken care of. It is a poor policy to let the movies kill the library.—For we need to look well to our idols, and among those in the forefront of our lives we may well put all those things that train us to finer, more refined, living. Whenever the artistic appears in the movies it is no harm to go to see that especial picture, but let us not forget the artistic in our homes—pictures, music, literature. Some men make money a god, some women make housekeeping theirs. Is either idol worth while when it excludes better ones? For may not inordinate saving of money make a man as cramped in soul and personality as the miser in "Silas Marner", may not inordinate devotion to a house make a woman as uninteresting and unlikable as Ellen Montgomery's aunt in "Wide, Wide World?"

There is an Eastern proverb, "If you have two loaves, sell one and buy a lily to feed your soul." With poetic license of exaggeration, that proverb voices a great truth. Prof. J. A. Thompson of Aberdeen University, in a Galton lecture, in which he sought to elevate to their true place in everybody's life, love of pictures, music, the drama, literature and higher education, expressed much of the thought at the back of that Oriental proverb when he said: "Let us prune our comforts before we pinch our souls. For apart from ourselves, economizing on the nobler luxuries means hardship and celibacy to those finer spirits who

are the salt of the earth, whose virtue all must wish to see conserved in the natural inheritance of the race."

It is easy to start a library in any farm home. A single shelf, two feet long, with a few well-chosen books, will make a good beginning. When that is filled a second may be added, then a third, and finally, perhaps, a Globe-Wernicke bookcase which keeps the books so well away from dust and may be extended as necessity arises, may be given the place of honor in the living-room. The effort to start such a library going is well worth while. If the love of books and reading be developed, nothing else about the place will give more continuous satisfaction: for every new book will come as an added treasure.

"Style in Books." Poetry.

"STYLE" in writing is that elusive quality which, more than anything else makes the difference between literature and mere writing. One writer may write of an occurrence and his story will be just a straight account, accurate but comparatively uninteresting; another may take the same occurrence and make his story of it—literature.

An investigator has classified "style" into five classes: (1) The forceful and convincing; (2); the companionable and ambling; (3), the musical—like the breaking of waves on a shore; (4), the dainty, suggesting embroidery; (5), the plaintive like a minor song. To this list might be added a sixth, the picturesque—which brings a series of pictures vividly before the mental eye.

When reading it may be an interesting diversion to notice the class into which that with which one is engaged may be placed.

Of poetry another student (Holbrook Jackson) has said: "To tell a good poem from a poor one without assistance of the author's name is to be able to read poetry with true critical acumen."

This is very well put.—For the people are legion who confuse mere lines that rhyme more or less regularly with poetry—failing to discern that poetry lies in the spirit, the rhythm, and possibly in every word of the expression, rather than in the mere endings of the lines.

To those who would begin the study of poetry, good advice is to begin with comparatively easy poems, that are true poems, proceeding by easy gradations to the more difficult. Beginning with Kingsley's "Three Fishers," or Tennyson's "Break, break, break," one may go on to appreciate, eventually, Goethe's "Faust," or Browning's "The Ring and the Book."

Work for Winter Evenings.

Rugs. Workbox.

AT last the winter evenings are here, and there is time to make up some little things needed for the house. Braided rugs are very fashionable now—yes actually fashionable—for bedrooms and living-rooms as well as for kitchens, and very artistic they may be if the colors are carefully chosen. Everything depends upon the color of the rugs harmonizing, or forming just the right contrast if contrast be needed, to the prevailing tone of the room.

When the floor is good and nicely stained or painted light or dark brown, no other floor-covering is needed except three or four of these rugs. Sometimes they are made "hit or miss," and these are very nice for the kitchen, but for other rooms better effects are gained by first dyeing the rugs to match (or contrast with, if preferred) the general color-tone. For instance in a bedroom with cream walls, blue was the contrasting



New Officers of the U. F. W. O.

On the right of the picture is Mrs. J. A. Wallace, Simcoe, President; on the left is Mrs. J. S. Amos, Vice-President. They were elected at the annual convention in Toronto on December 14th.

note chosen, hence the rugs were dull blue with just a line or two of burnt orange, and the curtains were blue checked gingham with a bar of orange woven in.

To make these rugs the rags are cut about the same size as carpet rags, and may be doubled, if necessary, for braiding. You can sew them as you go. As the chief difficulty is to keep the rugs from buckling up the braiding must not be too tight; also considerable slackness must be given when sewing. Sew on the wrong side, using the strongest carpet thread. . . . Another way is to sew the rags together first, then crochet round and round in "singles", using a heavy bone hook.

If you have a small hand-loom you can make beautiful woven rugs by choosing soft, artistic colors. The rags may be doubled or trebled so the rugs will lie flat; if woven singly a heavy lining will be required to keep the rugs from wrinkling or turning up easily. . . . Old carpet of any kind is now made into very durable small rugs by several firms.

In short there is no woven material about a house that cannot be made, either at home or elsewhere, into some sort of rugs, and the money so saved may be put to other uses; it costs a good deal to buy store rugs nowadays.

The table work-box shown in our illustration needs no explanation. It is made of a cheese-box (the lid for the upper part) nicely lined, stained on the outside and held together with wooden legs stained the same color.

### Your Health.

By "MEDICUS."

[Note: Kindly enclose stamped, self-addressed envelope if an early reply is necessary. Full name and address must be given, but if you choose a pen-name that alone will appear. Keep the same pen-name. Save your papers or clip out the "Medicus" department; we cannot promise to supply back numbers or to repeat.]

#### "Growing Pains." Bed-Wetting.

Mrs. R. C. Boy 12 years old. Has to get up two or three times in the night, and sometimes does not wake. Sometimes his joints are stiff; he has "growing pains."

Ans.—"Growing pains" in a lad of 12 is just as serious as Acute Inflammatory Rheumatism. So often it causes heart disease. The cause is likely pus somewhere in the body and the tonsil is the most likely spot. I would ask your doctor to examine his throat, and I would not delay it too long, for fear that some permanent harm damage may be done to his heart.

"Enuresis" or bed-wetting is not nearly as important as his "rheumatism." Enlarged tonsils, adenoids, phimosis (a need for circumcision) may cause it. Do you know how much urine he is passing in 24 hours? It is possible he is passing a large amount in the 24 hours. I would ask the doctor if Diabetes Insipidus (drinking diabetes) might be the cause. It is possible that removal of his tonsils may cure both his "rheumatism" and enuresis.

#### Hernia or Rupture.

For "J. E."—There is only one cure for Hernia (or rupture) and that is an operation. Don't waste your money on trusses or any of the so-called cures. The operation is one that is not serious and should only lay you up 10 days or two weeks. Your rupture may come down on you when you are out in the field alone and become strangulated, and that would mean an immediate operation, which is very serious. Don't take too many chances.

The operation may cure you of your constipation. If it doesn't, write us again.

#### Infected Tonsils. Rheumatism.

Mrs. H., New Ontario. "Am 52 years old. I suffer a lot with my throat, enlarged tonsils. Am I too old to have them removed? I get cold easily, have a choking sensation, tonsils get inflamed. Also have a nasty pain in left shoulder at times, and am sore on pressing between stomach and bowels."

Ans.—You should get a great deal of relief if you had your tonsils removed. You certainly are not too old for the operation, especially if a local anesthetic

is used. Your throat should improve and eventually you should get rid of your aches and pains.

In the meantime gargle your throat with hot water with salt (teaspoonful to a pint) three or four times a day. See article in "Farmer's Advocate" for March 4th, 1920.

#### Rheumatism.

Subscriber.—"Have been laid up for months with swollen knees; also some of the joints of my fingers are swollen. I don't think medicine will cure me. Please let me know how I can get cured?"

Answer.—I would suggest that you find the cause of your rheumatism. Now, what is the most likely cause? Teeth.—Why? An abscess may form at the root of your tooth, and the pus or poison cannot get out and so is absorbed into your blood, and then it attacks the parts of the body that are not well supplied with nourishment or blood, for example, the joints. You know how white the joint of an animal is. It is white because there is little blood there. How can you find out if there is an abscess at the root of some of your teeth? An X-ray picture is the only method. An abscess in your

former seems to be losing its effect, as I have to repeat the dose several times before the bowels will move. I am not constipated myself. I have tried to eat lots of fruit and vegetables, but without any apparent effect on him, also have taken cascara myself.

He seems to be troubled a good deal with wind on his stomach, especially after each feeding. He is fed regularly every 3 hours and once at night. He used to take hot water and would get relief, but I cannot get him to take it now."

Answer.—One of the most common causes of constipation is too little sugar in the breast milk. If that should be the trouble in your case, I would suggest that you give your babe one bottle a day of malted milk, or Mellin's Food, or even plain granulated sugar, say 4 ounces of water and 1 teaspoonful of sugar gradually increasing to 4 teaspoonfuls of sugar. If the bowels are too loose or the napkins green, lessen the sugar or stop it altogether.

I would try this treatment faithfully, but at first, if you feel you must give medicine, I would suggest either Milk of Magnesia, one-half to two teaspoonfuls, or Nujol (Liquid Vaseline) or Aromatic Cascara.

needle through the drop, a "reaction" will occur, that is, a big hive will soon appear if the patient is susceptible to this particular food. By using extracts of several foods the doctor is able to tell if any of these foods is the cause of the skin rash. Excess of sugar in the diet, especially in children, is a very common cause of skin rashes.

The local treatment of any acute skin rash is very similar.—(1) Don't wash with soap and water. Soap is especially irritating to the skin. Some of the popular skin soaps are nothing less than "a snare and delusion." Water also is irritating. You know how it smarts when you put it on a raw surface. To make it more soothing, add a teaspoonful of ordinary salt to a pint and use lukewarm. Don't wash more often than is absolutely necessary.

(2) Don't scratch. You may infect it.

(3) Use Calamine Lotion (your druggist can put this up for you). Apply night and morning.

(4) If the itching is very troublesome, a tablet of acetylsalicylic acid (the Germans call it aspirin) 5 grains, three or four times a day, will give relief. Violet ray would likely make the rash more irritable.

Ask your doctor to test out on your boy with food extracts, and find out if the cause of the rash is from some food he is eating.

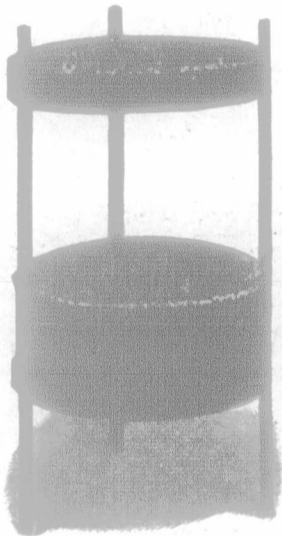
### Whence the Christmas Tree?

IN 1900 a writer on folk-lore said "Although we are accustomed to consider Germany the home of the Christmas tree, it has not been general there for more than a couple of centuries. Old people are still living whose parents never saw one in Germany. The decoration of houses with olive-leaves and green branches, as in England at Christmas, is a far more ancient custom, and can be noticed in Botticelli's picture of 'The Adoration of the Shepherds,' in the National Gallery in London." It is, as Fritz Ortwein observes, a distinct remnant of an ancient heathen custom, as at the turn of the year during the twelve days of the Jul festival in honour of Woden greenery could be fetched by all from the woods without punishment, and every hall was decorated with green leaves and branches. Again, in old works on English customs we find many references to the decorating of the interior of the dwellings, as well as the pious adornment of the churches with greenery, and the introduction of a fir tree as symbolical of the palm. In the halls of the barons and the squires and in the gigantic kitchens of the farmers a fir tree ever held prominent place, but whether ordinarily decorated or not is not specifically recorded. Here we are in doubt. In all probability the remaining fruits of the orchards of the year were hung upon the branches as a propitiation to the gods of the fruits of the earth to ensure good harvests.

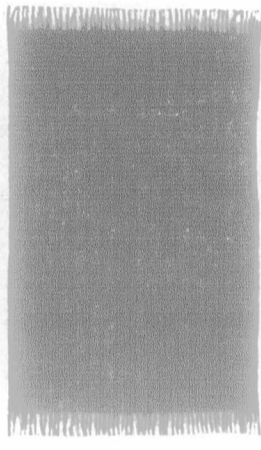
#### The Shepherd Play.

Going abroad we get fuller knowledge of these things. The custom of carrying away branches and trees from the woods at Christmastime in various parts of Austria became so extensive on account of the superstitions of the peasantry that at Salzburg, in 1755, and at Nuremberg, in 1768, severe by-laws were issued against persons purloining from the forests. In some regions of Hungary before the War a solemn procession with a decorated tree took place through each village before the Shepherd Play began. "It was adorned with ribbons and fruit, and was supposed to symbolize the tree of knowledge. Although most of the Christian customs adhered to by the Austrian-German peasant can be traced back to heathenish German rites, some dispute the use of a tree at the Jul festivities; nevertheless it is certain that in Sweden needle-pines and firs were set up at this time before the houses." Teutzel, of Saxony, an antiquarian authority on these subjects, says: "The ancient heathen sat before their houses between two crossed pine trees, and ate and drank at the turn of the year for nineteen days."

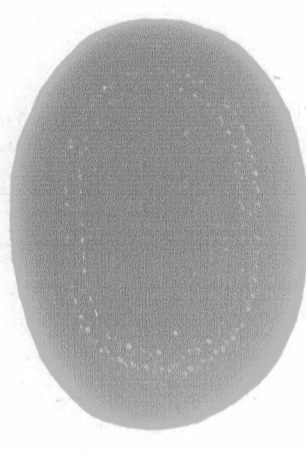
The Christmas tree was introduced into Austria some ninety years ago by a Duchess of Wurtemberg, and spread throughout Germany. About 1840 it is supposed to have taken fresh root in England, and become highly popular.



Work-box Made from a Cheese Box.



Hand-Woven Rug, Buff and Green.



Braided Rug.

#### Food Anaphylaxis. Skin Rash.

"Interested Mother."—"My son suffers from a skin eruption on his face. It first appears as a headless pimple which breaks and a watery substance oozes out, then a scab forms. As the disease advances the scabs come off and the skin underneath is very red. The pimple when it first appears is itchy, but gets sore as it advances. Would you advise using the Violet Ray?"

Answer.—The important thing, of course, is to find out the cause of the rash, and the first thing that I would investigate is "food anaphylaxis" or, for a better term, food poisoning. For example, if certain people eat strawberries, they will suffer from "hives." Canned salmon with other people will cause a rash. Dr. Chandler Walker, of Boston, has studied this problem and he has made extracts of the more common foods. If a drop of one of these food extracts is put on the arm and then the skin punctured with an ordinary sewing

tonsil may cause your rheumatism in the same way. Pus in the appendix or gall-bladder or prostate (at the neck of the bladder) may also be possible causes. So, first have an X-ray of your teeth, and if any abscesses are found go to your dentist and have the teeth out. If your teeth are not at fault have your tonsils removed. I would suggest that you ask your doctor to carefully examine your urine for sugar and albumen.

You have no time to delay; otherwise you will not get relief for months, even though you have your teeth out, etc.

Drugs, electricity, mineral water, etc., cannot cure rheumatism unless you remove the cause, and the cause, in the majority of cases, is an abscess somewhere in the body that is sending poison to the joints and muscles.

#### Constipated Baby.

Mrs. R. W. N. W., Ont.—"My baby, age 2½ months—a breast-fed baby—is habitually constipated. I have used Castoria and given injections, but the



The Braided Rag Rug Now in Fashion Again.

rop, a "reaction" big hive will soon susceptible to this using extracts of tor is able to tell s the cause of the sugar in the diet, is a very common

of any acute skin (1) Don't wash Soap is especially n. Some of the nothing less than "Water also is how it smarts when face. To make it a teaspoonful of and use lukewarm. than is absolutely

You may infect it. otion (your drug- for you). Apply

very troublesome, lic acid (the Ger- 5 grains, three or give relief. Violet e the rash more

test out on your and find out if the n some food he is

Christmas

n folk-lore said accustomed to consume of the Christ- een general there ple of centuries. ng whose parents ny. The decora- leaves and green at Christmas, stom, and can be picture of 'The epherds,' in the ndon." It is, as a, a distinct rem- hen custom, as at uring the twelve l in honour of be fetched by all punishment, and ated with green Again, in old ms we find many rating of the in- , as well as the e churches with production of a the palm. In the the squires and s of the farmers prominent place, y decorated or recorded. Here all probability the orchards of on the branches the gods of the re good harvests.

Play.

et fuller know- The custom of and trees from stime in various e so extensive on stitions of the lzurg, in 1755, 768, severe by- st persons pur- s. In some re- the War a solemn rated tree took lage before the "It was adorned nd was supposed of knowlwdge. hristian customs Austrian-German ck to heathenish ute the use of a es; nevertheless den needle-pines this time before of Saxony, an these subjects, then sat before wo crossed pine k at the turn of s." was introduced y years ago by erg, and spread about 1840 it is a fresh root in highly popular.

Both Thackeray and Dickens seized hold of the idea of happiness begot of Christmas gatherings and the Christmas tree and Charles Dickens in 1850 used "The Christmas Tree" as a title for one of his annual stories. Thackeray in his "Round About Papers" has a particularly pleasing article entitled "Round About the Christmas Tree." Southey sang:

And as when all the summer trees are seen So bright and green, The Holly leaves a sober hue display, Less bright than they. But when the bare and wintry woods we see, What then so cheerful as the Holly tree?

Holly is indeed the true Christmas tree at large, beautiful to behold, with its "native coral bright and armed leaves," but the real Christmas tree for the children is the fir, which is for all time the Christmas tree each year.

The Windrow

A Stevenson Club has been formed in Edinburgh, and has bought No. 8, Howard Place, where Robert Louis Stevenson—"R. L. S." was born 70 years ago.

A great deal of interest, and some adverse criticism, are being stirred up in the United States in connection with the portraits chosen for the new national "Hall of Fame" which is being established at the University of New York. Among those so far accepted are: Mark Twain; Augustus Saint Gaudens, sculptor; Roger Williams, advocate of religious liberty and founder of Rhode Island; Dr. Morton, discover of ether; and Alice Freeman Palmer, educator and President of Wellesley College—the only woman given a place by the Committee. Critics are asking: What of Walt Whitman? John Paul Jones? Edwin Booth? Whistler? And Pocahontas?

One of the new measures elaborated for the reconstruction of Bulgaria is the so-called Labor Conscription Law, which has been put into effect in combination with a law for "expropriating the surplus land of individuals who cannot cultivate it themselves." The law provides that all Bulgarian citizens of both sexes, who have completed, the men 20, the women 18 years of age, are subject to obligatory labor. The men will work 16 months and the women 10 months. The conscripted persons will be put upon tasks for which they are fit and part of their time of service will be devoted to mental and manual training. As stated in the preamble of the law the aim of this obligatory labor is: "(1) To organize and utilize the social forces in order to increase production and general welfare. (2) To stimulate in all citizens, irrespective of their social and material condition, devotion to public things and love for physical labor. (3) To elevate the people morally and economically by cultivating among the citizens the sentiment of duty to themselves and society, and by teaching them-rational methods of work in all the domains of national economy." In spite of these economic innovations, Bulgaria shares with Turkey the distinction of being one of the nations of the defeated alliance which retains their monarchical system practically unaltered by the War. The present Czar, Boris, is said to be democratically inclined.—Literary Digest.

Great Inventions of Modern Times.

The forty greatest inventions of modern times are credited to six nations—Great Britain, America, France, Germany, Italy and Norway. Most of them are attributed to one nation in their entirety, but a few are laid to two nations jointly. Great Britain is credited with being responsible for the steam engine, the Bessemer process, aniline dyes, the steam turbine, the locomotive, the hot blast for the blast furnaces and spinning jenny, half of the open-hearth process, the cyanide process, the rotary printing press, and half of the regenerative furnace.

Germany gets credit for the other half of the regenerative furnace, the gas

engine, the Diesel motor, the by-product coke oven, and the X-ray; France is hailed as the home of photography, the Jacquard loom, artificial refrigeration and parts of the development of the open-hearth process and of aluminum. Italy, of course, is credited with wireless, and Norway with half of the work necessary to develop the fixation of nitrogen.

Then comes the American list, starting with the cotton gin, the reaper, telegraphy,

vulcanized rubber, the sewing machine, the air brake, the telephone, the incandescent light, half the work of aluminum the induction motor, the airplane, the kinetoscope (foundation of the moving-picture industry), the linotype, the steamboat, electric welding, highspeed steel, half the labor in connection with the fixation of nitrogen, the typewriter, the phonograph, the trolley car, and the Cottrell precipitation process.



How Pickles Learned a Lesson.

PERHAPS they called him Pickles because he was such a sour-tempered dog. It was indeed a name that suited him—for nowhere could you have found a dog that was so mean.

It was too bad that Pickles was so mean, too, for he was a handsome dog with a jet black, glossy coat that must have been quite warm. He was a big dog, too—and oh, how fierce and strong he looked though, to tell the truth, inside his heart he was a very cowardly dog.

Being a coward, Pickles greatly feared the young dog, Prince, who lived at the farm-house close to the woods. Prince was much smaller than Pickles, but what a brave dog he was! He had fought wolves and jackals and coyotes and other fierce animals, Pickles had heard. Because all the other dogs admired Prince, the bad dog hated him.

One day, however, poor Prince was sadly hurt in a fight with wolves in the woods. He had lost some of his teeth and had many cruel wounds. Then Prince took a fever that left him very weak and thin. His Master feared that another fight with the wolves would end his pet's life, so he chained Prince to the kennel in the yard. How Prince did fret at his chain, and how his spirits sank—he felt so miserable he became thinner and weaker than before.

Imagine bad Pickles' delight one day as he chanced to pass and saw Prince in such a sorry plight. How brave the bully felt when he saw the hero dog so humbled and so wretched looking.

Pickles knew the chain held Prince secure, so he went forward very boldly and growled taunts at the sick dog. The mean dog could see that the other dog was weak, but just the same he kept out of reach of Prince.

"So here you are Mr. Smarty," said

Pickles, horridly. "Come out and fight me. What a miserable looking wretch you are, Ha, ha."

Prince felt too wretched to answer. He just looked at Pickles with contempt, for he knew quite well what a coward Pickles was.

Pickles tried again and again to anger the smaller dog, but at last had to go away, very angry himself because of his failure. He guessed that Prince was unable to defend himself and quickly he hatched a plan.

What a thing it would be to be able to say that he had thrashed the best fighting dog in the country, he told himself. Even though he knew how weak Prince was, he feared to attack him in daylight, and so he went to the woods to wait until nightfall.

It was quite dark when Pickles returned to Prince's kennel. He could see a black object asleep inside and he guessed that it was Prince. Quickly he pounced upon the sleeping animal.

What a roar there was then! Pickles felt himself grasped in two great paws, sharp claws dug into him and sharp teeth pierced his neck. What strength was in those teeth! Pickles had never been given such a thrashing in his life as he got that night.

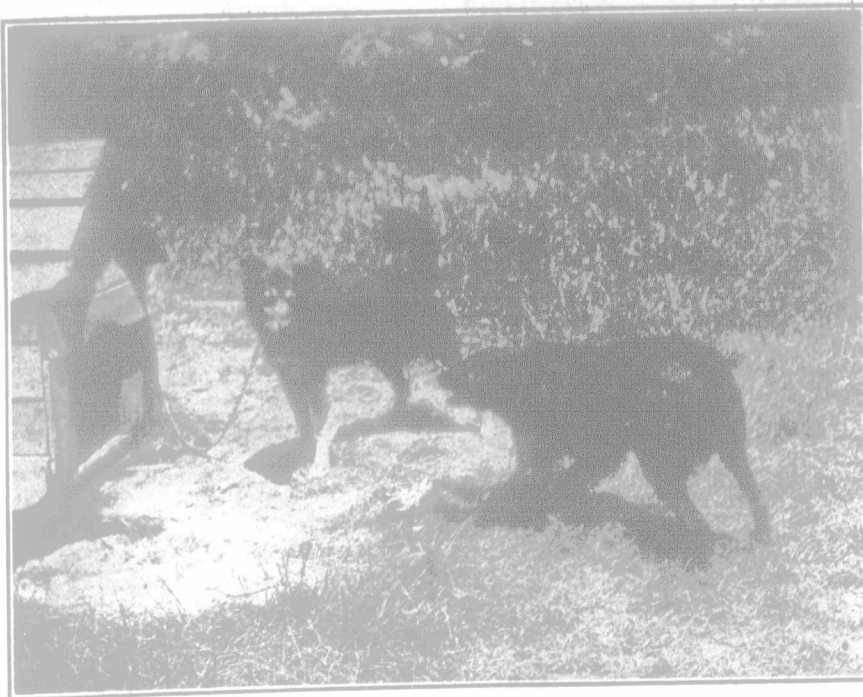
When at last he did manage to escape he was badly cut and scratched and he felt as if all his bones had been broken.

"And I thought he was sick!" Pickles groaned as he limped homeward.

Of course in the dark he thought it was Prince who had punished him so. Wouldn't he have been surprised if he had seen Prince in the house calmly sleeping before a fire and feeling better for the first time for days. But he would have been more surprised if he had seen the big black bear shuffling out of Prince's kennel and starting for his home in the woods—very angry that his sleep in the kennel had been so rudely disturbed.

(The End).

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He Growled Taunts at the Sick Dog.

Hope's Quiet Hour.

Follow on to Know the Lord.

Let us follow on to know the Lord; His going forth is sure as the morning.—Hosea 6:3. (R. V.)

The prophet was appealing to the priests, princes and people, asking them to turn from their evil ways and follow humbly and penitently the Leader Who would guide them along the right way. His going forth is "sure as the morning". There is absolutely no risk in choosing Him as a Commander, for He cannot be defeated. "Sure as the morning!" Though a night may seem unusually long we can always look confidently forward to the daylight, which will surely come. Even in the long darkness of our Great War we knew that peace would come; though we could not be certain of the hour. When I see the confident statement in the newspaper every day that the sun will rise at a certain hour, I think of the dependableness of the sun's Master. How amazed we should be if the sun were a few minutes late for business one day in a year, or a century or in a thousand years! "Let us follow on to know the Lord; His going forth is sure as the morning." If we follow Him faithfully we shall make a real success of this perplexing business of living. As we can depend on His sun, knowing that it will rise at the appointed moment, so we can depend on our unchanging God. He is the same to-day as He was in the days of Abraham. His mercies fail not and they are new every morning; as the sunbeams are new every day, and yet the same from generation to generation. We have confidence in the rising of the sun, even though clouds may hide its light from us;—and yet the sun might possibly fail, but God is eternal and unchangeable. We have been warned that a day will come when the sun will be turned into darkness; but even then we can find light and safety in the love of our Almighty Father.

For several days these words from the Book Exodus have been ringing in my head. "And we know not with what we must serve the Lord, until we come thither". Pharaoh had given permission to Moses to go into the wilderness with all the people of Israel and "serve the Lord," as they had requested. But, he said "let your flocks and your herds be stayed." The king of Egypt wanted to hold on to his slaves, but Moses said decidedly: "Our cattle also shall go with us; there shall not an hoof be left behind; for thereof must we take to serve the Lord our God; and we know not with what we must serve the Lord, until we come thither."

When our Lord called men to follow Him, long ago, they turned from their nets and boats, or whatever they were doing, placed themselves unreservedly under His orders. It was a soldierly thing to do. When our men enlisted they were prepared to follow wherever they were led, even though it might be "over the top" into a land unknown. They knew not what sacrifice might be required of them until they came right up to it. What should we have thought of them if they had stipulated that they would only follow orders if it suited them? They might be "volunteers;" but when they had volunteered they had no choice but to obey, even to the death. Our Captain invites volunteers into His army; but those who enlist are also under orders. He may lead them to some terrible Calvary; but He never sends a disciple where He shrinks back Himself. He does not say "Go for Me!" but "Come after Me!" A soldier of His army may shrink back in fear, saying:

"The night is black; I fear to go astray!"

but the reassuring answer comes:

"Hold My hand fast. I'll lead you all the way."

St. Paul was not a man who did anything half-heartedly. When he was fighting against Christ he did it with all his might; and when he enlisted under the banner of the Great Captain he counted his own comfort and safety of no consequence at all. There is a splendid recklessness in his declaration that he intends to press on to Jerusalem, not

knowing what shall meet him there, except that it will certainly be bonds and imprisonment. What a ring of triumph there is in his bold words: "I hold not my life of any account, as dear unto myself, in comparison of accomplishing my course, and the ministry which I received from the Lord Jesus."—Acts 20:24 (R. V. margin.)

What a glorious soldier he was! ready to endure hardness in the trench, on the field or in hospital.

We never know with what we must serve the Lord until we come face to face with responsibility—which is always Opportunity. It will not do for us to tie ourselves too tightly to earth, by collecting treasures which we can't bear to drop when the Master calls us to serve Him with both hands. Our business in life is to obey His orders, not to get rich. We don't know what opportunities of service may await us in 1921. We stand on the threshold of the New Year, ready to follow as we are led. Our way may be through green pastures and beside waters of comfort, or it may be over mountains of difficulty. We shall know with what we must serve the Lord when we come thither; if we have surrendered our lives to Him and are following where He leads us.

Looking back over the past we feel ashamed, as we close the record of another year's failures and give it into the keeping of the All-Holy. We intended to follow our Lord in brave endurance, in loving kindness, in purehearted loyalty to the best things. We have not lived splendidly; but have been selfish and worldly, caring for our own comfort and pleasure, and seeking the admiration of men more than the praise of God.

We have no cause for boasting and great cause for shame. Well, so had the people to whom the words of our text were addressed. Priests, princes and common people had all failed, and the prophet was calling them to repent and return unto the Lord. He accused them of horrible crimes, saying that even the priests were murderers and adulterers. And yet the Lord was prepared to heal their sin-sick souls and to raise them up from the death of wickedness. Though Israel had turned away from God, as a married woman going after many lovers, yet His love was not killed. Very tender are the pleading words: "How shall I give thee up, Ephraim? how shall I deliver thee, Israel? . . . I will not execute the fierceness of mine anger. . . for I am God, and not man. . . They shall come trembling as a bird out of Egypt, and as a dove out of the land of Assyria; and I will make them to dwell in their houses, saith the Lord."

If our safety depended on our own faithfulness and goodness, we should have good reason to face the coming year with trembling fearfulness. But the love of our God is "sure as the morning." Though we forget Him, He will never forget us. His call to repentance is thrilling with tenderness: "I will heal their backsliding, I will love them freely: for mine anger is turned away from him. I will be as the dew unto Israel; he shall blossom as the lily, and cast forth his roots as Lebanon. . . They that dwell under his shadow shall return; they shall revive as the corn, and blossom as the vine. . . Ephraim shall say, What have I to do any more with idols."

When the Divine Sower has planted living seed in a soul He waits in patience for the time of fruit. Let us also learn to wait in hopeful patience, though the fruit of the Spirit may ripen very slowly in our own souls and in the souls of our friends and neighbors. There may be living roots, and tiny shoots of faith and love, which the Husbandman is nursing carefully in many a heart which we venture to condemn as entirely worldly and selfish. The Master was very patient with His disciples, who were slow to understand His ideals and whose faith in Him was weak. Through His tenderness and patience their faith and love grew stronger and stronger; until the men who had forsaken Him, and fled in fear of their enemies, became great and brave Apostles.

In a world of miracles it is very foolish to despise the day of small things. The tiniest acorn bears a great oak-tree packed away in its heart. A helpless and ignorant baby may some day become a great leader, whose words and writings can bring help and light to millions of souls. Even Jesus was once wrapped in swaddling clothes and cradled in a manger and yet to-day He stands as Bishop Ingram says—"towering like a great column on

the plain, and everyone else low beneath Him."

We are sure to follow some leader, therefore, it is important to choose one who will lead us forward and upward. There is a caterpillar, called "The Processional Caterpillar," which has a habit of walking in long lines, each following the one in front. One day a naturalist saw some of these caterpillars marching round a stone vase in his garden. He got some more and filled up the gap between the head and tail of the procession. The story goes that they walked round that vase for a week, persistently following their leaders, working hard and making no progress. Don't let us act in that foolish fashion. What is the use of marching through one year after another unless we are making headway? Let us follow on to know the LORD, for this is life eternal, to know the only true God, and Jesus Christ, whom He has sent.—S. John 17:3.

Every day, as well as every year, we have a chance to make a fresh start. "And spite of old sorrows and older sinning, And puzzles forecasted, and possible pain, Take heart with the day and begin again." Dora Farncomb.

**For the Sick and Needy.**

Some children in a public school sent \$2 for "needy little ones" and A. M. L. also sent \$2 for the Quiet Hour Purse. Many readers forwarded literature (S. S. papers, etc.) for the shut-in. Thanks to all! DORA FARNCOMB, 6 West Ave., Toronto.

**The Fashions.**

**How to Order Patterns.**

Order by number, giving age or measurement as required, and allowing at least ten days to receive pattern. Also state in which issue pattern appeared. Address Fashion Department, The Farmer's Advocate and Home Magazine, London, Ont. Be sure to sign your name when ordering patterns. Many forget to do this.

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Measurement—Waist.....Bust.....  
Date of issue in which pattern appeared.....

3450. An Attractive Play Garment. Cut in 4 sizes: 2, 4, 6 and 8 years. A 4-year size will require 3 yards of 36-inch material. Price, 15 cents.

3453-3449. An Attractive Blouse Suit. Blouse 3453 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 3449 cut in 7 sizes: 24, 26, 28, 30, 32, 34 and 36 inches waist measure.

With plaits extended, the skirt width at foot is 2 3/4 yards. To make the suit for a medium size will require 5 1/2 yards of 40-inch material. TWO separate patterns 15 cents FOR EACH pattern.

3436. Boy's Blouse and Knickerbocker trousers.

Cut in 5 sizes: 6, 8, 10, 12 and 14 years. A 10-year size will require 1 7/8 yards of 36-inch material for the blouse and 1 1/2 yards for the knickerbockers. Price, 15c.

3016. Ladies' House Dress. Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. Size 38 requires 5 1/4 yards of 36-inch material. Width of skirt at lower edge, is 2 1/4 yards. Price, 15 cents.

3460. A Neat Yoke Dress. Cut in 4 sizes: 2, 4, 6 and 8 years. A 4-year size will require 2 1/4 yards of 36-inch material. Price 15 cents.

3463. Misses Dress. Cut in 4 sizes: 14, 16, 18 and 20 years. An 18-year size will require 6 yards of 30-inch material. The width of the skirt at lower edge with plaits extended is about 2 5/8 yards. Price, 15 cents.

3457. Girl's Dress. Cut in 4 sizes: 8, 10, 12 and 14 years. A 10-year size will require 3 yards of 40, inch material. Price, 15 cents.

3023. Ladies' Apron. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42; and extra large, 44-46 inches bust measure. Size medium, requires 4 3/4 yards of 36-inch material. Price, 15 cents.



the skirt width at make the suit for require 5 1/8 yards of separate patch pattern.

and Knickerbocker

0, 12 and 14 years. require 1 7/8 yards of blouse and 1 1/2 yards of material. Price, 15c.

Dress. 38, 40, 42, 44, 46 measure. Size 38 require 3 3/4 yards of 36-inch material. Price, 15c.

Dress. 4, 6 and 8 years. require 2 1/4 yards of material. Price, 15c.

18 and 20 years. require 6 yards of material. Price, 15c.

12 and 14 years. require 3 yards of 40-inch material. Price, 15c.

32-34; medium, and extra large, etc. Size medium, require 3 3/4 yards of 36-inch material.

3429. Girl's Dress. Cut in 4 sizes: 4, 6, 8 and 10 years. A 6-year size will require 3 1/2 yards of 36-inch material. Price 15 cents.

3430. An Up To Date Style. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size will require 4 1/8 yards of 54-inch material. The width of the dress at lower edge is 1 7/8 yard. Price 15 cents.

3034. A Popular Style. Cut in 4 sizes: 2, 3, 4 and 6 years. Size 4 requires 2 5/8 yards of 44-inch material. Price, 15 cents.

3422. Ladies' Lounging or Rest Robe. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42; and extra large, 44-46 inches bust measure. A medium size will require 6 1/4 yards of 36-inch material. Price 15 cents.

3096. Girl's Dress. Cut in 4 sizes: 4, 6, 8, and 10 years. Size 10 will require 3 1/2 yards of 36-inch material. Price, 15 cents.

3407. Dress for Slender Figures. Cut in 3 sizes: 16, 18 and 20 years. An 18-year size will require 3 3/8 yards of 54-inch material. The width of the skirt at lower edge is about 1 3/4 yard. Price 15 cents.

3412. Girl's Dress. Cut in 5 sizes: 6, 8, 10, 12 and 14 years. An 8-year size will require 3 1/4 yards of 44-inch material. Price 15c.

3404. A Pleasing Apron. Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42, and extra large, 44-46 inches bust measure. A medium size will require 5 yards of 27-inch material. Price, 15 cents.

3441. A Set of "Short Clothes". Cut in 5 sizes: 6 mos., 1, 2, 3 and 4 years. A 2-year size will require 3 3/8 yards of 27-inch material for the dress, 1 1/4 yard for the slip, and 1 yard for the drawers. Price, 15 cents.

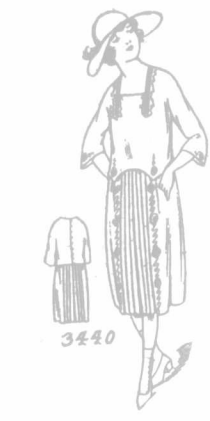
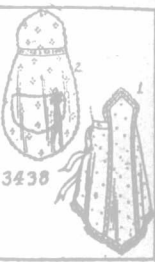
3443. A Youthful Gown. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A medium size will require 4 3/4 yards of 44-inch material. The width of the skirt at lower edge with plaits extended is about 2 yards. Price, 15 cents.

3434. Girl's Dress. Cut in 4 sizes: 6, 8, 10 and 12 years. A 10-year size will require 3 1/4 yards of 36-inch material. Price, 15 cents.

3439. Ladies Apron, Dress and Cap. Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size will require 7 yards of 27-inch material. The cap will require 7/8 yard. Price, 15 cents.

3438. Two Dainty Aprons. Cut in one size: Medium, No. 1 will require 7/8 yard of 36-inch material; and No. 2 will require 1 1/4 yard. Price, 15 cents.

3459-3445. An Attractive Costume. Waist 3459 cut in 7 sizes: 34, 36, 38,



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40, 42, 44 and 46 inches bust measure. Skirt 3445 cut in 7 sizes: 22, 24, 26, 28, 30, 32 and 34 inches waist measure. To make the costume for a medium size will require 3 yards of plain material and 4 yards of plaid or checked, 36 inches wide. The width of the skirt at the foot is  $1\frac{1}{8}$  yard. TWO separate patterns, 15 cents FOR EACH pattern.

### 3455. Girl's Coat.

Cut in 5 sizes: 6, 8, 10, 12 and 14 years. A 10-year size will require  $3\frac{3}{8}$  yards of 44-inch material. Price 15c.

### 3443. Misses Dress.

Cut in 3 sizes: 16, 18 and 20 years. An 18-year size will require  $4\frac{3}{8}$  yards of 44-inch material. The width of the skirt at the lower edge with plaits extended is about  $1\frac{1}{8}$  yards. Price, 15c.

### 3452-3383. A Smart Coat Suit.

Coat 3452 cut in 6 sizes: 36, 38, 40, 42, 44 and 46 inches bust measure. Skirt 3383 cut in 7 sizes: 24, 26, 28, 30, 32, 34 and 36 inches waist measure. For the entire suit in a medium size  $6\frac{3}{8}$  yards of 44-inch material will be required. The skirt with plaits extended measures about  $1\frac{1}{8}$  yards. TWO separate patterns, 15c. FOR EACH pattern.

### 3435. Girl's Dress.

Cut in 4 sizes: 6, 8, 10 and 12 years. An 8-year size will require  $4\frac{5}{8}$  yards of 27-inch material. Price, 15 cents.

### 3277. A Popular House Dress.

Cut in 7 sizes: 36, 38, 40, 42, 44, 46 and 48 inches bust measure. A 38-inch size requires  $6\frac{1}{4}$  yards of 36-inch material. Price 15 cents.

### 3458. Girl's Dress.

Cut in 5 sizes: 2, 4, 6, 8 and 10 years. Size 4 will require  $3\frac{1}{2}$  yards of 27-inch material. Price, 15 cents.

### 3134. Ladies' Dress.

Cut in 6 sizes: 34, 36, 38, 40, 42, and 44 inches bust measure. It will require  $7\frac{1}{8}$  yards of 38-inch material for a medium size. The width of skirt at lower edge is about  $1\frac{1}{8}$  yards. Price, 15 cents.

### 3440. Juniors Dress.

Cut in 3 sizes: 12, 14 and 16 years. A 14-year size requires  $4\frac{1}{4}$  yards of 44-inch material. Price, 15 cents.

### 3448. A Pleasing Apron.

Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42; extra large, 44-46 inches bust measure. To make the design for a medium size will require  $4\frac{1}{2}$  yards of 36-inch material. Price 15 cents.

### 3451. Ladies' Blouse.

Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size will require 3 yards of 38-inch material. Price, 15 cents.

### 3462. Ladies' Dress.

Cut in 6 sizes: 34, 36, 38, 40, 42, and 44 inches bust measure. A 38-inch size will require  $6\frac{1}{2}$  yards of 44-inch material. The width of the skirt at lower edge is  $1\frac{1}{8}$  yard. Price, 15 cents.

### 3454. Girl's Dress.

Cut in 4 sizes: 4, 6, 8, and 10 years. An 8-year size will require  $3\frac{1}{2}$  yards of 36-inch material. Price 15 cents.

### 3456. Ladies' Work Dress or Apron.

Cut in 4 sizes: Small, 32-34; medium, 36-38; large, 40-42 and extra large, 44-46 inches bust measure. A 38-inch size will require  $4\frac{1}{4}$  yards of 36-inch material. Price, 15 cents.

### 3446. Ladies' Corset Cover.

Cut in 3 sizes: Small, 32-34; medium, 36-38; large, 40-42 inches bust measure. A medium size will require  $1\frac{1}{4}$  yards of 36-inch material. Price, 15 cents.

### 3147-3447. A Pretty Gown.

Waist 3147 cut in 6 sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. Skirt 3447 cut in 6 sizes: 24, 26, 28, 30, 32 and 34 inches waist measure. The width at its lower edge is  $1\frac{1}{8}$  yards. To make the dress for a medium size will require  $3\frac{5}{8}$  yards of figured and  $4\frac{1}{2}$  yards of plain material, 40 inches wide. TWO separate patterns, 15 cents FOR EACH pattern.

### 3464. Girl's Dress.

Cut in 4 sizes: 8, 10, 12 and 14 years.

A 10-year size requires 4 yards of 30-inch material. Price, 15 cents.

### 3133. Ladies' House Dress.

Cut in 7 sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A medium size will require  $5\frac{1}{4}$  yards of 36-inch material. The width of the dress at its lower edge is about  $1\frac{1}{8}$  yards. Price, 15 cents.

### 3437. Child's Dress.

Cut in 4 sizes: 1, 2, 4 and 6 years. A 4-year size will require  $2\frac{5}{8}$  yards of 36-inch material. Price, 15 cents.

## The Ingle Nook

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

## Two Noted Women of Modern Times.

I WONDER if you readers of the Ingle Nook are as much interested as I am in anything you read concerning outstanding women.

To-day I have been reading about two who have come into the "fierce, white light" of publicity lately.

One of them belongs to the United States—Miss Alice Robertson, who was recently elected to Congress for Oklahoma. By all accounts this is a lady of no end of strength of character and a goodly fund of originality. For one thing, she is not afraid to appear contradictory; she occupies the rather unique position of being a persistent opponent of woman suffrage now seated in Congress. To be explicit, she steadfastly opposed woman suffrage until it came, then suddenly announced that she was going to see whether the country meant it or not and presented herself as a candidate for Congress. Her plan of "electioneering" for herself was somewhat out of the ordinary; it consisted in writing little paragraphs containing her political (and other) views for the daily papers in so crisp a way that people began to turn first thing to her corner to see what she had to say.

Although Miss Robertson is a spinster "up in years" she likes men and declares she always got along better with them than with women, perhaps because she has "always done a man's work, carried a man's burdens, and paid a man's bills," and so consistent is she in this that she is going to have a man for her secretary in Washington. Miss Robertson, by the way, was a warm friend of Theodore Roosevelt, who in 1903 made her post-mistress of Muskogee, the first woman to have charge of a first-class post-office.

Miss Robertson was born in the Indian Territory near Muskogee in 1854, but was educated in Boston and at Elmira College, whence she graduated with an M. A. degree. Her first position was in the Indian Office at Washington, but soon she went back to the Indian Territory as its first teacher of domestic science. She has always been greatly interested in the Indians, and herself established two schools for them. For a time she was supervisor of Indian Schools, then she became postmistress, and at the same time established a flourishing cafeteria for girls which still goes on. Among the many kindly acts told of her was the adoption of an illegitimate Indian baby girl—who is now, by the way, married to one of the richest men in Oklahoma. She has also mothered, more or less, dozens of orphan girls, who have been married in her home.

The second woman of whom I read to-day was a Japanese. Her name was O Nao Baasan, or Old Woman Nao, and at one time in her life she was a poor rag-picker, trying to support her eight children after she and they had been deserted by the drunken husband. Morning and night, however, she never failed to pray in the Shinto temple. At last, on New Year's Day, 1892, so the story goes, she became filled with the spirit of the Earth God of Shintoism and began to prophesy in the streets, and to scribble her revelations on the walls of buildings. At first people thought she was crazy, and when a great fire occurred in Ayabe—which she had prophesied—the police

arrested her on a charge of firing the place to make her words come true. She was turned over to her relatives on condition that they kept her locked up, which they did, keeping her in one room, where she wrote so busily that when she died in 1918 she left 10,000 volumes of manuscript.

The little room is now known as Zashiki Ro, or the Parlor Prison, and is preserved as a sacred shrine.—For upon her writings has been founded a new faith called Omoto-Kyo, or the Religion of the Fundamental Faith, which now has thousands of followers and is said to be gaining rapidly in spite of the efforts of the Japanese Government to suppress it. There is even a community at Ayabe, with many temples, where the people, all devotees of Omoto-Kyo, await the millennium, which, according to the prophecies of O Nao, will begin in 1922. Of course, the prophecies have a distinctly Japanese flavor, and according to them the Japanese followers will be the favored people.

No part of O Nao's writings have been translated into English, but the following synopsis of the "religion" has been made by Edwin E. Slosson, who had written of the cult for The Independent.

"The world is on the eve of blossoming like the plum-flower. One of the great gods shall soon appear in person, welcomed by blooming flowers and evergreen pines, and he shall reign over the whole earth and bring it peace. Japan is a divine country and must be divinely ruled. Foreign countries are under the control of beastly devils in human form. Even Japan has now become a land of beasts. This dirty world must be cleansed and made fit to be the abode of the gods. Occidental civilization is based upon individualism, that is to say, selfishness. All its literature and moral codes are inspired by selfishness. It has stolen society and stolen the state and would steal the world and the universe itself. All this must be destroyed by the abolition of individualism. The people of the world are clamoring for reform, but their reform is only the reform of formality. Such reform is like a house built on the sand. The reform designed by our gods is the reform of man himself."

The Omoto people also believe in faith-healing.

Reading the synopsis above one notices a queer mixture of prophecy, shrewd common sense, insight and racial prejudice. The odd thing is that the old rag-picker should have started, in this age, a cult that promises to rival the two reigning religions of Japan, Shintoism and Buddhism.

NEARING the first of the year, one always thinks of voting-time. Perhaps few who are now living can remember the old fisticuff times at the polls, when men sometimes used fists as well as tongues, and it was not an uncommon thing for the voter to go home at night "drunk as a lord" as well as somewhat battered in appearance. Voting has become a sane and sober thing nowadays, with sometimes scarcely enough excitement, considering the real importance of the occasion.

For we are governed—both locally and nationally—by the men we choose to represent us, and, in the long run government affects every part of our lives, from the education of the children to the price of the groceries in our pantries. Perhaps the last statement seems far-fetched, but it is nevertheless true that the prices we pay are more or less arranged by governing men.

The ballot, then, is a very important little slip of paper. One ballot may not seem a very potent thing, but "mony a mickle makes a muckle." Indeed, had we only vision enough, we might well agree with Bouck White, who says: "The ballot-box is going to be discovered as probably the one greatest spiritual contribution to mankind."—That is a statement that takes a good deal of thinking over. Yet the meaning cannot be so dense when one realizes that good government means a happy and prosperous people, and that prosperity, if rightly directed, may pave a way to spiritual things. It is hard to be very spiritual when one is grubbing day and night for just enough to eat and wear. Education and books help to spirituality, and how can they be obtained without any means? It is too often true, but not at all necessarily that, in the words of the poet, Pope, as "wealth accumulates," men decay:

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'Til fares the land, to hastening ills a prey,  
Where wealth accumulates, and men  
decay."

Women have had a long, long struggle  
to get the suffrage. Now they have it in  
nearly every country in the world, and  
one hopes that they realize the potency  
of it, and the necessity of keeping in-  
formed on the issues of the times so that  
they will make no mistake in voting.

That reminds me of a joke I saw in the  
paper:

"Dora.—'How did you vote?'"  
Flora.—'In my brown suit and squirrel  
toque.'"

It's a good thing there was a Dora  
as well as a Flora.

Perhaps as yet women on the whole do  
not know as much about government (I  
like that word better than "politics") as  
men—on the whole, but as time goes on  
and they learn more and more to realize  
what voting means, that difference will be  
rectified.

JUNIA.

**Worth Thinking Over.**

In the light of the facts and forces  
confronting the world to-day, we can  
find no fault with the clear, un-  
ambiguous statement of that vigorous  
thinker who says: "A democratic  
League of Nations may seem a  
Utopian dream, but the war is a  
witness that we have no other choice.  
It is Utopia or Hell."—Our Dumb Ani-  
mals.

Nothing but what is essentially  
humane education can save the world  
from the horrors of another cata-  
clysm worse even than that through  
which it has just passed. For humane  
education is nothing less than the  
teaching in the schools and colleges  
of the nations of the principles of  
justice, good-will and humanity to-  
ward all life, human and sub-human  
alike. A generation trained in these  
principles will solve its international  
difficulties as neighbors and not as  
enemies.

**Sane Dress, Etc.**

Dear Junia.—For months I have in-  
tended to write you, to say how much I  
admired your courage and good sense in  
showing up the follies of the fashion books  
and their faithful followers. I am so  
often in London—I see the same thing  
in other places for that matter—that I  
know your description of the silk stock-  
ing legs and pump shod feet was "true  
to life." And when oh! when will  
"fashion" allow women to walk on their  
feet instead of their toes? Why can't  
we see that those high heels may walk us  
into a doctor's office and invalid's chair  
or even into an early grave, but will  
never carry us through the great and  
grand things of life?

Your report of "new movements  
afloat" is extremely interesting, and I  
am very glad to hear that the Western  
University will send out lecturers. The  
next time our U. F. W. club meets this  
matter will be taken up. We have been  
planning for some time for something of  
this sort.

I was much interested in the letters  
you published this week, of those young,  
healthy, happy American mothers. Of  
course, there are just such women to be  
found here and there in neighborhoods,  
but from what I see of farm life they are  
the exception not the rule. I had oc-  
casions to visit about one hundred and  
forty farm homes this summer. And in  
most cases the wives and mothers, yes  
and even some of the men talked quite  
freely about their affairs generally. And  
I must say I did not find many of them  
so joyous over farm conditions as those  
Americans. About one hundred and  
twenty of them were willing to try any-  
thing that would reduce the farm work,  
such as organizing a community laundry  
or canning centre. I note with interest  
that Strathroy and Parkhill, according to  
the press, are both considering the  
question of community laundries, and  
the Exeter people have nearly all the  
required number of shares sold, and will  
call the shareholders' meeting as soon as  
Mr. J. J. Morrison, Secretary of the  
U. F. O., can be present to assist in  
organizing.

How do you account for the great  
rural depopulation and great number  
of American farms that are lying idle and

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The Piano worthy of your Home

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ty. Write us direct for the name of the one nearest to you.

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lumber is specially manufactured  
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ticulars of what you are planning.

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men alone on one and even two-hundred  
acre farms?

ANN CAMPBELL.

Huron Co., Ont.

**Fancy Cakes.**

**D**URING the winter, when parties are  
fashionable, is the time to try fancy  
cakes.

A good layer cake is capable of many  
transformations. For a basis any familiar  
kind will do, perhaps in winter one not  
requiring too many eggs. Here is a  
simple recipe: Cream together two-thirds  
cup of butter and 2 cups of sugar; add  
the beaten yolks of 3 eggs and 1/2 cup  
of milk mixed with as much water.  
Put this in gradually, alternating with 3 1/2  
cups flour; then fold in the stiffly-beaten  
whites of the eggs, with 2 teaspoons  
baking-powder and a pinch of salt.  
Flavor to taste and bake in either 2 or 3  
layers.

With this or any similar cake as a  
foundation, a number of fancy cakes may  
be created.

To make an orange cake of it, instead  
of putting in the milk and water, put  
in a cup the juice of 2 oranges and grated  
rind of one, and fill up the cup with water.  
For a filling scald a cup of milk in the  
double boiler, beat up 2 tablespoons  
sugar, one and a half tablespoons corn-  
starch, and 3 egg yolks; turn into the hot  
milk and cook until it thickens; add a  
pinch of salt, cover, cook 5 minutes, and  
then put in 2 tablespoons orange juice and  
the grated rind of one. Spread between  
the layers while they are warm. When  
cold ice smoothly and trim with little  
green leaves cut from candied citron, and  
some tiny orange-colored candies. In-  
stead of the orange pistachio or almond  
extract may be used to flavor.

"Mocha" cake is a name given to any  
cake made with a good deal of coffee.  
An easy way is the following: Make the  
cake as usual, and divide it, putting half  
into one tin. Color the other half brown  
with a little strong, black "made" coffee,  
putting in an extra tablespoonful of flour  
so it will not be too thin. While it bakes  
cook a cup of strong coffee with half a  
cup of sugar; thicken with a heaping  
tablespoon of corn-starch dissolved in half  
a cup of milk and add a pinch of salt.  
When thick spread between the two  
layers of cake. Slightly color the icing for  
the top with more coffee, and press a row  
of English walnuts around the top. A  
richer filling is made as follows: Beat 2  
eggs light, add 2 tablespoonfuls corn-  
starch and a small, half cup of sugar and  
cook until thick, then add 1 cup hot milk  
and a teaspoonful of butter, and, when  
it boils, half a cup of strong coffee.

A delightful maple icing is made thus:  
Mix 2 cups light brown sugar with 1 cup  
maple syrup and 1 cup water. Boil to  
the "soft-ball" stage (when tried in cold  
water) then add at once a third of a tea-  
spoonful of cream of tartar. Take off  
the fire at once and beat well until it is  
cool and smooth, then spread at once on  
the cake. Put an edge of walnuts all  
round.

A solid nut loaf cake is made as follows:  
Cream together a small cup of butter

## Twentieth Annual Ottawa Winter Fair and Pure-bred Bull Sale

OTTAWA, ONTARIO

January 18th, 19th, 20th, 21st, 1921

\$25,000 in cash prizes. Augmented prizes in all departments

Entries close January 3rd, 1921

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# PICKERING

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We have a few bull calves by Raleigh Meadowgrass born since the first of July. These are the last. Every one of them should go into a picked herd, where they will have the greatest opportunity.

And while we are discussing these calves, let us not forget that they are all grandsons of the most sensational Jersey cow that has ever been shown in Canada, and that their sire was never defeated at Canada's greatest Jersey show.

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and a cup and a half of sugar; add the beaten yolks of 3 eggs and a tablespoonful of vanilla. Sift 3 level cups flour with 2 teaspoons baking-powder, and add this and a half cup of milk alternately till all are in. Next put in 1 cup chopped pecan (or other) nuts, and last of all fold in the stiff whites of the eggs. Bake in a loaf and ice. Decorate with halves of nuts or a fancy border put on with an icing bag.

Small cakes are useful for party lunches. One kind may be made in this way: Mix 1 cup sugar with ½ cup butter and beat to a cream. Add ½ cup milk, 2 cups flour, and 2 small teaspoons baking-powder. Add flavoring, then fold in the stiff whites of 4 eggs. Bake in well-buttered patty pans. When done ice and decorate with leaves cut from candied citron, halves of candied cherries, nuts, etc.

The easiest icing is made by mixing confectioners' sugar with a very little milk. A plain, boiled icing may be made by boiling a cup of sugar with a third of a cup of water without stirring till it threads, then pouring it slowly into a beaten egg-white mixed with a third of a teaspoonful of cream of tartar, beating constantly till cool and thick, when flavoring may be added. This may be colored with chocolate, or chopped nuts and fruit may be mixed in.

Very delightful little cream cakes may be made in this way: Make small cakes as above, and when cool cut the tops off and scoop out the lower half a little with a very sharp knife. Fill with whipped cream or boiled custard flavored and mixed with nuts, put together again and ice. If preferred do not cut the cakes. Simply flatten the tops with a knife and pile with sweetened whipped cream, then cover with coconut.

A wafer which is quite unlike those usually seen is made in this way: Beat 2 eggs light and add 5 tablespoons flour mixed with a quarter of a teaspoonful of baking-powder and as much salt. Add half a pound of light brown sugar and a cup of broken nutmeats. Bake in a shallow, greased tin until brown. Mark into squares, but do not cut until cold.

"Sand" cakes are handy for passing with cups of tea. Cream together a heaping cup of butter and 2½ cups sugar, 1 egg and the yolks of 2 more beaten together, 4 cups flour and a teaspoonful of cinnamon. Roll thin, brush over with

slightly beaten egg-white and sprinkle with mixed cinnamon and sugar, or with chopped almonds. Cut into cakes or strips.

### The Scrap Bag.

Eggs will be less likely to crack when boiling if they are first dipped in cold water.

Remove matches from the box when they come home and put them in a tin box or a glass jar. This will obviate all danger of fire.

### Milk Spots.

Remove milk spots with cold water and mild soap. Hot water might set the stain, and is almost sure to if the material is boiled without first removing the stain with cold water.

### Cleaning Silver.

Make a boiling solution of one-fourth pound of sal soda to a gallon of water, dip the pieces of silver in, one at a time, rinse in hot water and polish at once with dry clothes or chamois.

### The Flower Window.

Cut from a beech or birch log a piece, of the right length, to stand on the floor, by the window, as a pedestal to hold a large blooming plant in a pot—or a rustic box filled with wood-ferns. Be sure the block is cut level at top and bottom and leave the bark on, for the beech's gray bark is beautiful. Put three small casters on bottom of block, if you like. This plan will make a "thing of beauty" for the flower-window.

## Serial Story.

### "The Money Moon."

BY JEFFREY FARNOL.

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

#### CHAPTER XI.

OF THE "MAN WITH THE TIGER MARK."

It is a moot question as to whether a curl can be more alluring when it glows beneath the fiery kisses of the sun, or shines demurely in the tender radiance of the moon. As Bellew looked at it now,—that same curl that nodded and beckoned to him above Anthea's left ear—he strongly inclined to the latter opinion.

"Adam tells me that you are going out, Miss Anthea."

"Only as far as Mrs. Dibbin's cottage,—just across the meadow."

"Adam also informs me that Mrs. Dibbin is a witch."

"People call her so."

"Never in all my days have I seen a genuine, old witch,—so I'll come with you, if I may?"

"Oh, this is a very gentle old witch, and she is neither humpbacked, nor does she ride a broom-stick,—so I'm afraid you'll be disappointed, Mr. Bellew."

"Then, at least, I can carry your basket,—allow me!" And so, in his quiet, masterful fashion he took the basket from her arm, and walked on beside her, through the orchard.

"What a glorious night it is!" exclaimed Anthea suddenly, drawing a deep breath of the fragrant air,—"Oh! it is good to be alive! In spite of all the cares, and worries, life is very sweet!"

After this, they walked on some distance in silence, she gazing wistfully upon the beauties of the familiar world about her while he watched the curl above her ear until she, becoming aware of it all at once, promptly sent it back into retirement, with a quick, deft little pat of her fingers.

"I hope," said Bellew at last, "I do sincerely hope that you 'tucked up' my nephew safe in bed,—you see—"

"Your nephew, indeed!"

"Our nephew, then; I ask because he tells me that he can't possibly sleep unless you go to 'tuck him up,'—and I quite believe it."

"Do you know, Mr. Bellew, I'm growing quite jealous of you, he can't move a step without you, and he is for ever talking, and lauding your numberless virtues!"

"But then—I'm only an Uncle, after all, and if he talks of me to you, he talks of you to me, all day long."

"Oh, does he!"

"And, among other things, he told me

that I ought to see you when your hair is down, and all about you."

"Oh!" exclaimed Anthea.

"Indeed, our nephew is much luckier than I, because I never had an aunt of my own to come and 'tuck me up' at night with her hair hanging all about her—like a beautiful cloak. So you see, I have no boyish recollections to go upon, but I think I can imagine—"

"And what do you think of the Sergeant?" Anthea enquired, changing the subject abruptly.

"I like him so much that I am going to take him at his word, and call upon him at the first opportunity."

"Did Aunt Priscilla tell you that he comes marching along regularly every day, at exactly the same hour?"

"Yes,—to see how the peaches are getting on!" nodded Bellew.

"For such a very brave soldier he is a dreadful coward," said Anthea, smiling, "it has taken him five years to screw up courage enough to tell her that she's uncommonly young for her age. And yet, I think it is just that diffidence that makes him so lovable. And he is so simple, and so gentle—in spite of all his war medals. When I am moody, and cross, the very sight of him is enough to put me in humour again."

"Has he never—spoken to Miss Priscilla,—"?

"Never,—though, of course, she knows, and has done from the very first. I asked him once, why he had never told her what it was brought him so regularly,—to look at the peaches,—and he said, in his quick, sharp way: 'Miss Anthea,—can't be done, mam,—a poor, battered, old soldier,—only one arm,—no mam.'"

"I wonder if one could find just such another Sergeant outside Arcadia," said Bellew, "I wonder!"

Now they were approaching a stile towards which Bellew had directed his eyes, from time to time, as, for that matter, curiously enough, had Anthea; but to him it seemed that it never would be reached, while to her, it seemed that it would be reached much too soon.

Therefore she began to rack her mind trying to remember some gate, or any gap in the hedge that should obviate the necessity of climbing it. But, before she could recall any such gate or gap, they were at the stile, and Bellew, leaping over, had set down the basket, and stretched out his hand to aid her over. But Anthea, tall, and lithe, active and vigorous with her outdoor life, and used to such things from her infancy, stood a moment hesitating. To be sure, the stile was rather high, yet she could have vaulted it nearly, if not quite, as easily as Bellew himself, had she been alone. But then, she was not alone, moreover, be it remembered, this was in Arcadia of a mid-summer night. Thus, she hesitated, only a moment, it is true, for, seeing the quizzical look in his eyes that always made her vaguely rebellious,—with a quick, light movement, she mounted the stile, and there paused to shake her head in laughing disdain of his out-stretched hand; then—there was the sound of rending cambric, she tripped, and, next moment, he had caught her in his arms. It was for but a brief instant that she lay, soft and yielding, in his embrace, yet she was conscious of how strong were the arms that held her so easily, ere they set her down.

"I beg your pardon!—how awkward I am!" she exclaimed, in hot mortification.

"No," said Bellew, shaking his head, "it was a nail, you know, a bent, and rusty nail,—here, under the top bar. Is your dress much torn?"

"Oh, that is nothing, thank you!"

So they went on again, but now they were silent once more, and very naturally, for Anthea was mightily angry,—with herself, the stile, Bellew, and everything concerned; while he was thinking of the sudden, warm clasp of her arms, of the alluring fragrance of her hair, and of the shy droop of her lashes as she lay in his embrace. Therefore, as he walked on beside her, saying nothing, within his secret soul he poured benedictions upon the head of that bent, and rusty nail.

And presently, having turned down a grassy lane and crossed a small but very noisy brook that chattered impertinently among the stones and chuckled at them slyly from the shadows, they eventually came upon a small, and very lonely little cottage bowered in roses and honeysuckle,—as are all the cottages hereabouts. But now Anthea paused, looking at Bellew with a dubious brow.

"I ought to warn you that Mrs. Dibbin is very old, and sometimes a little

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o see you when your hair

ll about you."

med Anthea,

r nephew is much luckier

e I never had an aunt of

me and 'tuck me up' at

r hair hanging all about

utiful cloak. So you see,

h recollections to go upon,

an imagine—"

do you think of the

thea enquired, changing

uptly.

so much that I am going

his word, and call upon

opportunity."

Priscilla tell you that he

g along regularly every

the same hour?"

he how the peaches are

aded Bellew.

ery brave soldier he is a

said Anthea, smiling,

im five years to screw up

to tell her that she's un-

ng for her age. And yet,

just that diffidence that

vable. And he is so sim-

le—in spite of all his war

I am moody, and cross,

of him is enough to put

gain."

er—spoken to Miss Pri-

ugh, of course, she knows

om the very first. I asked

he had never told her

ught him so regularly,—

peaches,—and he said, in

p way: 'Miss Anthea,—

mam,—a poor, battered,

y one arm,—no mam.'"

one could find just such

t outside Arcadia," said

er!"

e approaching a stile to-

ellew had directed his

e to time, as, for that

y enough, had Anthea;

emed that it never would

le to her, it seemed that

ached much too soon.

egan to rack her mind

mber some gate, or any

e that should obviate the

bbing it. But, before she

y such gate or gap, they

and Bellew, leaping over

asket, and stretched out

her over. But Anthea,

active and vigorous with

and used to such things

ncy, stood a moment

be sure, the stile was

she could have vaulted

quite, as easily as Bellew

been alone. But then,

one, moreover, be it re-

was in Arcadia of a mid-

Thus, she hesitated, only

is true, for, seeing the

in his eyes that always

ely rebellious,—with a

ement, she mounted the

aised to shake her head

ain of his out-stretched

ere was the sound of

she tripped, and, next

caught her in his arms.

rief instant that she lay,

g, in his embrace, yet

s of how strong were the

er so easily, ere they set

queer, and sometimes says very—surpris-

ing things."

"Excellent!" nodded Bellew, holding

the little gate open for her, "very right

and proper conduct in a witch, and I love

surprises above all things."

But Anthea still hesitated, while Bellew

stood with his hand upon the gate, waiting

for her to enter. Now he had left his hat

behind him, and, as the moon shone down

on his bare head, she could not but notice

how bright, and yellow was his hair,

despite the thick, black brows below.

"I think I—would rather you waited

outside,—if you don't mind, Mr. Bellew."

"You mean that I am to be denied the

joy of conversing with a real, live, old

witch, and having my fortune told?" he

sighed. "Well, if such is your will—so be

it," said he obediently, and handed her

the basket.

"I won't keep you waiting very long,—

and—thank you!" she smiled, and, hurrying

up the narrow path, she tapped at the

cottage door.

"Come in! come in!" cried an old,

quavering voice, albeit, very sharp, and

piercing. "That be my own soft dove of

a maid,—my proud, beautiful, white lady!

Come in! come in!—and bring him wi'

you,—him as is so big and strong,—him

as I've expected so long,—the tall, golden

man from over seas. Bid him come in,

Miss Anthea, that Goody Dibbin's old

eyes may look at him at last."

Heroupon, at a sign from Anthea,

Bellew turned in at the gate, and striding

up the path, entered the cottage.

Despite the season, a fire burned upon

the hearth, and crouched over this, in a

great elbow-chair, sat a very bent, and

aged woman. Her face was furrowed,

and seamed with numberless lines and

wrinkles, but her eyes were still bright, and

she wore no spectacles; likewise her white

hair was wonderfully thick, and abundant,

as could plainly be seen beneath the frill

of her cap, for, like the very small roof

of this very small cottage, she was ex-

tremely neat, and tidy. She had a great,

curving nose, and a great, curving chin,

and what with this and her bright, black

eyes, and stooping figure, she was very

much like what a witch should be,—

albeit a very superior kind of old witch.

She sat, for a while, staring up at

Bellew who stood tall, and bare-headed,

smiling down at her; and then, all at once,

she nodded her head three several, and

distinct times.

"Right!" she quavered, "right! right,—

it be all right!—the golden man as I've

watched this many an' many a day, wi'

the curly hair, and the sleepy eye, and

the Tiger-mark upon his arm,—right!

right!"

"What do you mean by 'Tiger-

mark?'" enquired Bellew.

"I mean, young master wi' your golden

curls,—I mean as, sitting here day in,

and day out, staring down into my fire,

I has my dreams,—leastways, I calls 'em

my dreams, though there's them as calls

it the 'second sight.' But pray sit down,

tall sir, on the stool there; and you, my

tender maid, my dark lady, come you

here—upon my right, and, if you wish,

I'll look into the ink, or read your pretty

hand, or tell you what I see down

there in the fire. But no,—first, show

what you have brought for Old Nannie

in the blessed basket,—the fine, strong

gently interrupting her, and patting the

old woman's shrivelled hand, "you're for-

getting the basket,—you haven't found all

we've brought you, yet."

"Aye, aye!" nodded old Nannie, "the

fine, strong basket,—let's see what more

be in the good, kind basket. Here's

bread, and sugar,—and—"

"A pound of your favorite tobacco!"

said Anthea, with a smiling nod.

"Oh the good weed! The blessed

weed!" cried the old woman, clutching the

package with trembling fingers. "Ah!

who can tell the comfort it has been to

me in the long, long days, and the long,

long nights,—the blessed weed! when I've

sat here a looking and a looking into the

fire. God bless you, my sweet maid, for

your kindly thought!" and, with a sudden

gesture, she caught Anthea's hand to her

lips, and then, just as suddenly turned

upon Bellew.

"And now, tall sir, can I do ought for

ye? Shall I look into the fire for ye, or

the ink, or read your hand?"

"Why yes," answered Bellew, stretch-

ing out his hand to her, "you shall tell me

two things, if you will; first, shall one

ever find his way into the 'Castle of

Heart's Desire,' and secondly;—When?"

"Oh, but I don't need to look into your

hand to tell you that, tall sir, nor yet in

the ink, or in the fire, for I've dreamed

it all in my dreams. And now, see you,

'tis a strong place, this Castle,—wi' thick

doors, and great locks, and bars. But I

have seen those doors broke' down,—

those great locks, and bars burst asunder,

—but—there is none can do this but him

as bears the Tiger-Mark. So much for

the first. And, for the second,—Happi-

ness shall come a riding to you on the full

moon,—but you must reach up—and

take it for yourself,—if you be tall

enough."

"And—even you are not tall enough

to do that, Mr. Bellew!" laughed Anthea,

as she rose to bid Old Nannie "Good-

night," while Bellew, unnoticed, slipped

certain coins upon a corner of the chimney-

piece. So, Old Nannie blessed them, and

theirs,—past, present, and future,

thoroughly and completely, with a fine

comprehensiveness that, only a genuinely

accomplished old witch might hope to

attain to, and, following them to the

door, paused there with one shrivelled,

claw-like hand uplifted towards the sky:

"At the full o' the moon, tall sir!" she

repeated, "at the full o' the moon! As

for you, my dark-eyed lady, I say, by

force you shall be wooed, and by force

ye shall be wed, aye! aye!—but there is

no man strong enough except he have the

Tiger-Mark upon him. Old Nannie

knows,—she's seen it in the ink, dreamed

it in the fire, and read it all in your pretty

hand. And now—thank ye for the tea,

my pretty, and God bless ye for the good

weed, and just so sure as you've been

good, and kind to old Nannie, so shall

Fortune be good and kind to you, Miss

Anthea."

"Poor old Nannie!" said Anthea, as

they went on down the grassy lane, "she

is so very grateful for so little. And she

is such a gentle old creature really, though

the country folk do call her a witch and

are afraid of her because they say she

has the 'evil eye,'—which is ridiculous,

of course! But nobody ever goes near

her, and she is dreadfully lonely, poor old

"Has she?" said Bellew, "ha!"

"Yes,—her mind is full of strange

twists, and fancies,—you see she is so

very old,—and she loves to tell me her

dreams, and read the future for me."

"Though, of course, you don't believe

it," said Bellew.

"Believe it!" Anthea repeated, and

walked some dozen paces, or so, before

she answered,—"no, of course not."

"Then—none of your fortune,—noth-

ing she told you has ever come true?"

Once more Anthea hesitated, this time

so long that Bellew turned from his moon-

gazing to look at her.

"I mean," he went on, "has none of it

ever come true,—about this Man with the

Tiger-Mark, for instance?"

"No,—oh no!" answered Anthea, rather

hastily, and laughed again. "Old Nannie

has seen him in her dreams—every-

where,—in India, and Africa, and China;

in hot countries, and cold countries—oh!

Nannie has seen him everywhere, but I

have seen him—nowhere, and, of course,

I never shall."

"Ah!" said Bellew, "and she reads him

## The Royal Bank of Canada



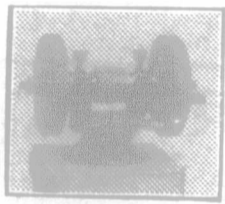
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HIGH BRED COLLIE PUPS—BORN HEELERS, sable and white. Males, \$5; females, \$3. J. E. Johnston, Whitby.

SAW MILL, BUILDING FOR SALE, WITH heavy rock elm timbers 12 x 12 x 30, good rafters, sheeting, etc. Suitable for small mill, barn, straw shed. Located 1 1/2 miles from station and will be sold reasonably for quick sale. A 14-H. P. steam engine, also big saw mandrell with friction feed. M. G. Ransford, Clinton, Ont.

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Switz., 500 miles away, on December 12th, when William Marconi gave a demonstration.

In President Wilson's last official recommendations to Congress he told them that his fighting days are not yet over. He reaffirmed his faith in the principles of democracy and recommended a budget system, revision of tax laws, economy, Federal licensing of corporations, regulation of cold storage, encouragement of agriculture and the dye industries, a loan to Armenia and independence for the Philippines.

Home Rule in Ireland became law on Dec. 18th. During the preceding fortnight martial law was put in force in counties Cork, Kerry, Limerick and Tipperary. On Dec. 12th at least £3,000,000 damage was done in Cork city by incendiary fires said to be in reprisal for ambush attacks on the auxiliary police on the night of Dec. 11th. Subsequently the entire business section of Dublin was raided by the police following the shoot-

ing of District Inspector O'Sullivan of Dublin Castle.

Four new states have been admitted to the League of Nations—Bulgaria, Finland, Luxembourg and Costa Rica. During the past week the Assembly gave control of the city of Dantzic to Poland. On Dec. 13th it adopted a plan for setting up a permanent Court of International Justice, the plan to be signed and ratified by a majority of the nations before it can become effective. Provision is made for ratification by the United States. The Court is to be without compulsory jurisdiction, the four big powers—Britain, France, Italy and Japan—getting their way in this against the will of the other 36 nations represented. After an all-day debate the League decided that the nations are not yet ready to disarm.

"Olive Schreiner" (Mrs. S. C. Cronwright) the famous South African writer who wrote "Tale of an African Farm," "Woman and Labor," etc., died last week.

The monarchists have again lost in Germany. The "Compensation" Bill for the Hohenzollerns was rejected by the Prussian National Convention.

Former King Constantine of Greece, returned to Athens on Dec. 19th.

## Investigating Farm Problems in the Annapolis Valley.

Continued from page 2217.

highly-colored apple which follows the King in season; one that should stand shipping and is a compromise between cooking and desert in flavor and quality. The experimental work conducted along the line of combatting insect and fungus pests and the orchard management employed in developing the plantation are of the utmost interest and importance, but these matters will have to be dealt with in a future article. We have endeavored to introduce the Farm to our readers in the Maritime Provinces, and bring to the attention of farmers everywhere some of the problems that have a direct influence on agriculture, both East and West.

## Markets

Continued from page 2228.

### Toronto Produce.

#### Cereals.

Manitoba Wheat.—No. 1 northern, \$1.91 1/2; No. 2 northern, \$1.88 1/2; No. 3, northern, \$1.82 1/2; No. 4 wheat, \$1.69 1/2.

Manitoba Oats.—No. 2 C. W., 53 1/2c.; No. 3, C. W., 49 1/2c.; extra No. 1 feed, 49 1/2c.; No. 1 feed, 47 1/2c.; No. 2 feed, 44 1/2c.

Manitoba Barley.—No. 3 C. W., 97c.; No. 4 C. W., 82c.; feed, 67 1/2c.; rejected, 67 1/2c.

All above in store Fort William. Ontario Wheat.—F. o. b. shipping points, according to freights, \$1.85 to \$1.90; No. 2 spring, \$1.90 to \$1.85.

American Corn.—Prompt shipment, No. 2 yellow, track, Toronto, \$1.15.

Ontario Oats.—No. 3 white, 50c. to 53c., according to freights outside.

Barley.—Malting, 85c. to 90c., according to freights outside.

Ontario Flour.—Winter, in jute bags, prompt shipment, straight run bulk, seaboard, \$7.75, nominal.

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

Manitoba Flour.—Track, Toronto First patents, \$11.10; second patents, \$10.60, according to freights outside.

Markets nominal. Buckwheat.—No. 2, \$1 to \$1.05. Rye.—No. 2, nominal; No. 3, \$1.50 to \$1.55.

Millfeed.—Car lots, delivered, Toronto freights, bags included. Bran, per ton, \$38.25 to \$40.25; shorts, per ton, \$42.25; white middlings, \$47.25; feed flour, \$2.75 to \$3.

#### Farm Produce.

Prices at country points.—Eggs.—New-laid, cases returnable, 75c. to 80c.; held, 58c. to 60c.

Live Poultry.—Buying prices, delivered Toronto: Hens, over 5 lbs., live, 25c.; dressed, 28c. Hens under 5 lbs., live, 22c.; dressed, 27c. Hens under 4 lbs., live, 15c.; dressed, 20c. Spring chickens, live, 20c.; dressed, 27c. Roosters, live, 16c.; dressed, 20c. Ducklings, spring, 25c.; dressed, 32c. Turkeys, live, 42c.; dressed, 55c. Geese, live, 22c.; dressed, 30c.

Honey.—New crop, white clover,

strained, 60, 30 and 10-lb. tins, Toronto, 18c. to 19c.; 5-lb. Lith. pails, 19c. to 20c.; 2 1/2-lb. Lith. pails, 20c. to 21c.

#### Hay.

Loose.—Prices of loose hay on the St. Lawrence market were as follows: Hay, loose, No. 1, per ton new, \$35 to \$37; No. 2 mixed, \$32 to \$35.

Baled.—Dealers were offering for No. 1 Timothy baled, track, Toronto, \$31 to \$32 per ton.

#### Buffalo.

Cattle—Last week started off with another dull and lower trade, under a supply that totaled 140 cars, or 3,500 head, twenty-four loads of which came over from the week before and including around thirty-five cars of fresh Canadians. Nothing real choice in the shipping steer line was offered, best here, which were natives on the medium weight order, landing at \$12 and \$12.10, with a commoner kind ranging on down to \$9 and \$9.50. General market was regarded a quarter to a half lower than the week before. Very small proportion of the Canadians ran to the more desirable kinds. A small drove of fancy yearlings that came out of Canada sold at \$14.50, but was no criterion of the general trade. Few sales on real choice handy steers and heifers ranged up to \$10 and \$10.60, but it took a good killing class of butcher steers to sell from \$8.50 to \$9.50 and nice, tidy butchering heifers sold from \$7.50 to \$8.50. Fat cow trade was generally lower, excepting canners and cutters, which sold at about steady values. Best heavy cows ranged up to \$8, but only a few scattering sales were made above \$7 and canners landed mostly at \$3. Market was about steady on bulls, stocker and feeder trade was dull, slow and lower and an extremely bad trade was held on fresh cows and springers, latter kinds going off \$25 to \$40 per head from two weeks ago, and they were hard to sell at that. Offerings after Monday consisted of mostly medium and common cattle, for which there was little demand and the close of each day showed several loads going over unsold. Receipts for the week totaled 3,325 head, being against 4,300 head for the week previous and 5,425 head for the same week a year ago.

#### Montreal.

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

Dressed Hogs.—No great demand is reported for dressed hogs and prices are easy. Abattoir-dressed, fresh-killed stock was quoted at 16 1/4 to 16 1/2 cents per lb., and country-dressed stock at 20 to 21 cents per lb.

Potatoes.—The market for potatoes is dull, as is usually the case at this time of the year. Quebec reds and whites were quoted at \$1.60 to \$1.70 per bag of 90 lbs. in carlots, ex-track, while Green Mountains were 5 to 10 cents higher. In a wholesale way Quebecs were selling at \$1.90 to \$2 per bag of 80 lbs., ex-store with Green Mountains at a slightly higher range.

Poultry.—An excellent demand continued for poultry and prices were firm. Choice turkeys were 52 to 54 cents per lb.; good turkeys, 48 to 52c.; chickens, 33 to 40c.; fowls, 26 to 32c.; geese, 30c. to 33c. and ducks 36c. to 40c.

Eggs.—Supplies of eggs are light and prices were firm under a good demand. Strictly new-laid eggs were quoted at 90c. to \$1 per dozen; selected C. S. stock, 72c. No. 1 C. S. stock, 64c. to 66c. and No. 2 C. S. stock, 52 to 60c.

Butter.—Demand for butter continues moderately active and prices were unchanged, although there was a wide margin in quotations. Solids were quoted at 52c. to 54c. and blocks at 55c. to 56c. per lb.

Millfeed.—Prices of millfeeds continue steady. Bran was quoted at \$40.25, and shorts at \$42.35 per ton in carlots, ex-track, less 25c. per ton for spot cash. Pure barley meal was quoted at \$54 dairy feed \$45, and mixed grain mouille, \$42 per ton, including bags, delivered.

Rolled oats were quoted at \$3.80 per bag of 90 lbs. delivered and at \$3.70 in car lots, ex-track.

Baled Hay.—In view of the shortage of the crop it is said that farmers are hold-

ing up their hay for higher prices. The demand, however, is quiet and this action on the part of farmers has had no effect on the market. No. 2 timothy hay was quoted at \$31 to \$32 per ton, and No. 3 timothy at \$29 to \$30. Lower grades are being offered at \$25 to \$27 ex-track.

Hides and Skins.—No change was yet reported in the market for hides and skins. Steer hides were quoted at 10c. per lb.; cowhides 8c.; bullhides 5c.; calf skins 8c. to 10c.; kips, 8c.; lambskins were 50c. each and horsehides \$2 to \$3 each.

## Monday's Live Stock Markets.

Toronto, December 20. Cattle.—Receipts, 3,568. The market opened with few choice cattle on hand and a good demand for this quality. Choice butcher cattle sold at from 25 to 50 cents a hundred higher in spots; other grades of killers were in good demand at steady prices, with the result that receipts were cleaned up at noon. Feeder trade is dull, except for a few sales of small lots. These sold up to 11 1/2 cents. Quotations: Heavy beef steers, not quoted. Butcher steers, choice, \$10 to \$11.50; good, \$9 to \$10; medium, \$7 to \$9; common, \$5.50 to \$6.50. Butcher heifers, choice, \$9.50 to \$11; medium, \$6.75 to \$8.50; common, \$4 to \$6. Butcher cows, choice, \$7 to \$10; medium, \$5.50 to \$6.50; canners and and cutters, \$3.25 to \$5. Butcher bulls, good, \$7 to \$9; common, \$4 to \$6. Feeding steers, good, \$9.50 to \$11; fair, \$8 to \$9.50. Stockers, good, \$8 to \$9; fair, \$6.25 to \$9.50.

Calves.—Receipts, 84. Choice veal sold at from 15 to 16 1/2 cents. The demand for choice is good, but a little drabby for common. Quotations: Choice, \$14 to \$16.50; medium, \$11 to \$13; common, \$5 to \$10. Milch cows, choice, \$100 to \$140; springers, choice, \$110 to \$150.

Sheep.—Receipts, 2,122. Lambs are selling about steady, with last week's close at 12 1/2 cents to 13 cents. Sheep and heavy yearlings are a slow sale. Quotations: Lambs, \$12.50 to \$13.

Hogs.—Receipts, 1,281. Hog prices are about steady with Thursday at 15 1/2 to 16 cents, fed and watered. Quotations, fed and watered basis: Selects, \$15.75 to \$16; lights, \$13.75 to \$14; heavies, \$14.75 to \$15; sows, \$11.75 to \$13.

Buffalo, December 20. Cattle.—Receipts, 2,500. Good steers were a quarter to a half lower. Tops, \$11.25; others steady.

Hogs.—Receipts, 19,000. Medium and heavy, \$9.75; yorkers, ten pigs, \$10.50.

Sheep.—Receipts, 20,000. Top lambs, \$10.75; best ewes, \$4 to \$4.50; Canadians, \$8.50 to \$9.

Calves.—Receipts, 2,000. Tops, \$15.50. Advices from Washington are that a 30 per cent. tariff will be placed on cattle, and from \$1 to \$2 per head on sheep and lambs this week.

Montreal, December 20.—Cattle.—Receipts, 1,626. Trading was fairly active. Prices were about steady on good cattle and about 25 cents up on common grades. The best cattle offered came from Winnipeg, and were sold for \$10.75. Nearly all the steers offered were either light in weight or common in quality. The bulk of the steers and medium heifers were sold at prices ranging from \$7 to \$8.50; common and medium cows and light heifers from \$6 to \$7.50. Butcher steers, choice to good, \$9 to \$11; medium \$8 to \$9; common, \$7 to \$8.25. Butcher heifers, choice, \$9 to \$11; medium \$7.50 to \$9; common, \$6 to \$7.50. Butcher cows, choice, \$8 to \$8.75; medium, \$5 to \$7.50. Canners, \$3 to \$3.25. Cutters, \$3.50 to \$4.75. Butcher bulls, good, \$6 to \$7.25; common, \$4.75 to \$6.

Calves.—Receipts, 356. Grass calves were steady. There were not enough veal calves offered to make a market. The tone was weaker. Quotations: Good, veal, \$12 to \$13; medium, \$9 to \$12; grass, \$4.50 to \$5.50.

Sheep.—Receipts, 2,339. Lambs were quoted at \$12.50 to \$13 and an odd lot a little higher. Sheep were about 50 cents off. Quotations: Ewes, \$4 to \$5.50. Lambs, good, \$12.50 to \$13; common \$10.50 to \$12.

Hogs.—Receipts, 1,179. Owing to light volume of receipts and keen demand for local trade, prices were up to \$17.50 off cars. Quotations off car weights: selects, \$17 to \$17.50; sows, \$13 to \$13.50.

higher prices. The quiet and this farmers has had no No. 2 timothy 1 to \$32 per ton, 29 to \$30. Lower at \$25 to \$27

change was yet for hides and quoted at 10c.; bullhides 5c.; skins, 8c.; lambskins \$2 to \$3

Stock

20. Cattle.—Market opened with and a good Choice butcher 50 cents a hundred grades of killers at steady prices, receipts were cleaned up, except small lots. These Quotations: quoted. Butcher \$11.50; good, \$9.50; common, \$5.50; choice, \$9.50 to \$8.50; common, \$7 to \$6.50; canners and Butcher bulls, \$4 to \$6. Feed- to \$11; fair, \$8; good, \$8 to \$9;

4. Choice veal 6 1/2 cents. The good, but a little Quotations: Choice, \$11 to \$13; com- ch cows, choice, choice, \$110 to

22. Lambs are with last week's 13 cents. Sheep are a slow sale. 50 to \$13.

1. Hog prices are Thursday at 15 1/2 d. Quotations, Selects, \$15.75 to \$14; heavies, 75 to \$13.

000. Medium rkers, ten pigs,

000. Top lambs, \$4.50; Canadians,

00. Tops, \$15.50. ton are that a placed on cattle, ad on sheep and

20.—Cattle.— was fairly active. y on good cattle common grades. came from Win- \$10.75. Nearly e either light in quality. The medium heifers ing from \$7 to dium cows and \$6 to \$7.50. o good, \$9 to common, \$7 to choice, \$9 to \$9; common, \$6 s, choice, \$8 to \$7.50. Canners, \$3.50 to \$4.75. \$7.25; common,

Grass calves ere not enough ake a market. Quotations: medium, \$9 to

Lambs were and an odd lot ere about 50 Ewes, \$4 to \$12.50 to \$13;

Owing to light en demand for p to \$17.50 off weights: selects, o \$13.50.

GOMBAULT'S CAUSTIC BALSAM

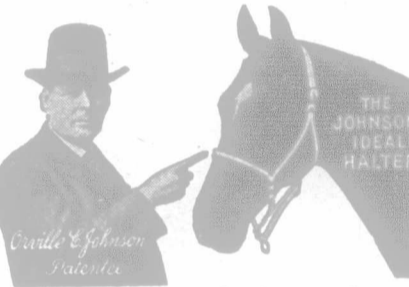
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TRAPPING

Muskrat and Beaver.

BY ROBT. G. HODGSON.

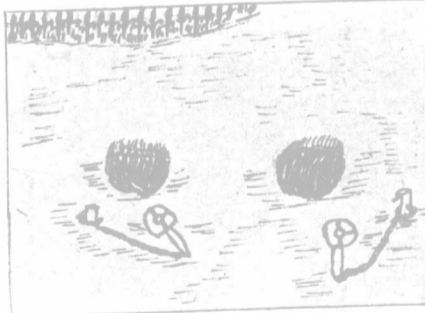
The muskrat, although previous to last year, while the lowest-priced of any of the fur-bearers was the "war-baby" of the fur industry, in that the number taken, in the aggregate amounted to a great deal more than that of any other fur buyer. Last year, however, brought the muskrat into its own, in price at least, and it is to be hoped to continue. The fur of the muskrat is really one of the most beautiful of any Canadian furs, and is enjoying an unequalled demand as a fur, Hudson seal, for ladies' garments. In addition to this fur, which is one made up, it is used a great deal in its natural state.

The muskrat is an aquatic animal and is found on lakes, marshes, ponds and small streams. I have noticed that, as a rule, the lake rats are larger than the ones secured on streams, but the latter are superior in quality of fur. They never leave water for any length of time. They work and travel chiefly at night, although it is nothing strange to see them during the day.

On account of the muskrat being such a prolific animal millions of dollars of them are taken each season, and there will be as large or larger numbers for many years to come. The majority of the muskrats caught are taken by amateurs, on account of their being found in such large numbers in rural communities and their being so easily taken.

Their houses are of two kinds: Those of bulrushes and other aquatic plants made in the form of a large dome. These houses are very warm and comfortable, and certainly lack nothing that is unique in construction, for they have a very wonderful interior that would greatly surprise the ordinary person were he to see inside. There are two compartments, an upper and a lower, one being built at water level to serve as they enter and the other, the upper, serves as a living room which is divided for several different families. The other type of rat generally called "bank-rats" and considered by misinformed people to be a distinct species, make their homes in the banks of streams in much the same way as a skunk his burrow.

BAIT AND SCENT.—Muskrats are herbivorous, living on vegetables, roots and grasses. As natural bait the most attractive to them are apples, carrots, mangels, beets, cabbage, etc. However, I could never have much success with these natural baits for the simple reason that food of the kind the muskrat wants is very plentiful; and in addition small animals such as squirrels, etc., are sure to disturb the sets when so baited.



Two Cabbage Heads Staked in Shallow Water with Traps Around.

On the other hand, a good scent is of inestimable value in taking rats. This is especially the case during the spring months, which is their breeding season, when they are easily attracted by scents that lure from a sexual standpoint. Muskrat musk, a secretion secured on the muskrat during the spring is highly attractive to them.

TRAPS.—It is not difficult to trap muskrat; it is, however, difficult to hold them. Their legs are peculiarly constructed and if the rats are not to get away by gnawing off the foot or pulling out, the trap made especially for them must be used. The traps in question are the No. 1 Giant, 91 Vicker, 91 Jump, 91 Newhouse. These traps all have the double or extra high, wide jaw and grip the animal so high and firm it is almost an impossibility for them to escape. The Victor trap, the widest used, low price

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Eight choice young bulls, 30 females, cows and heifers. All of good size, type and breeding. Herd headed by The Duke; dam gave 13,500 lbs. milk, 474 lbs. butter-fat. He is one of the greatest living combinations of beef, milk and Shorthorn character. All priced to sell. Write, call or phone. Thomas Graham, Port Perry, R.R. 3, Ontario

Dual-Purpose Shorthorns

Am offering young stock from imp. and Canadian stock. Also some Dorset Horned Sheep. Priced right as I need room. VALMER BARTLETT, Canfield, Ontario

Lochabar Stock Farm

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R. R. No. 4 Parkhill, Ont.

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Grand River Dual-Purpose Shorthorns 10 YOUNG BULLS

Good dark reds and roans bred from big, strong cows, and sired by the great Prince Lavender whose dam gave 16,596 lbs. milk in R.O.P.—Write me your wants. HERD NUMBERS 50 HEAD

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Reyburn Milking Shorthorns

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

R. R. WHEATON THORNDALE, ONTARIO Long-distance 'phone and telegraph.

MILKING SHORTHORNS

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

Hillview Dual-Purpose Shorthorns

Two bulls for sale from high-testing R.O.P. dams and sired by a heavy, thick-set bull with officially tested milking ancestry. D. Z. GIBSON, Caledonia, Ont.

Dual-Purpose Shorthorns

Bulls from 5 to 12 months old for sale; also several cows. Inspection of herd solicited. WELDWOOD FARM, Farmer's Advocate LONDON, ONTARIO

Campbell's Scotch Shorthorns—Our herd of Scotch females is at present headed by a Claret-bred grandson of Gairford Perfection. We are offering a number of young cows and heifers bred to him. The families are Rosemarys, Marr Missies, Campbell Minas, Nonpareils, Clarets, etc. We also have a few young bulls. K. CAMPBELL & SONS, Palmerston, Ont.

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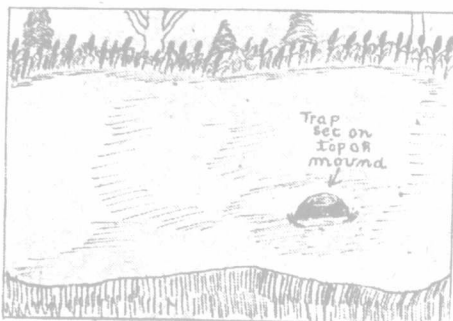
'Advocate' Advt. Pay.

trap on the market is the one used by most amateurs, so this will likely be the choice of the average.

There is also quite a knack in taking the muskrat by any leg you wish. A trap set in four inches of water will generally make a hind leg catch; while if the trap is set in two inches of water it will generally make a fore-foot catch. If the trap is placed a little to the right of the bait or otherwise the object it is attracted to, you get a right-leg catch, etc.

**METHODS.**—Muskrats have slides on which they delight to play, and a trap set at the foot of one of these slides usually means a good set. The slide can be noticed by a depression worn in the steep bank of a stream, and the grass will be worn completely or nearly off. Should the water at the bottom of slide be too deep to set the trap to catch the animal, build up a place of stones, mud, etc., on which to set the trap.

It is always advisable, when making sets for these animals, to use extension chains, procurable at any store, to make the animal drown more quickly.



Muskrats Delight to Get on Mounds in Streams.

A favorite set with professionals is to dip a bullrush stock into a bottle of scent or some muskrat musk and locate it along the steep bank of a stream. Have the scented end projecting out over the water some and directly under this set your trap. The idea of the bullrush stem is that the inside of it is pitted and it retains the scent itself but sends out the odor better than anything else I know.

They have feeding grounds, which can be detected by grass appearing to be floating in shallow water. In this feeding-bed stake a head of cabbage and around it set several traps. The water in these beds is usually very shallow, but in case it is deep it is of no use.

Muskrats have regular paths or trails through the grass, this being particularly true in marshes. Also, they are very fond of following small, winding streams. In these trails or paths set your trap blind at the narrowest part.

They often go up the tiles that lead from houses to streams and the housewife is surprised to find a large, mouse-like animal in the cellar, as all tiles are good a trap should be set at the mouth of each one you can find.

Where the law allows you to take muskrats at their houses, secure some stop-thief or kill-um traps No. 2. Set these at the mouth of the burrow. These traps are especially adapted for this kind of work, as they go over the mouth of the burrow and choke the animal the second they are caught.

**BEAVER.**—The beaver has been greatly reduced in numbers in the last decade, and where once they were the most common and most-sought-after of fur-bearers, being found in more plentiful numbers all over America than muskrats are now.

In appearance they resemble the muskrat and are larger, and the fur is finer, more beautiful and consequently more valuable. The fur is used in the finest of fur garments for men and women, particularly for mitts, caps and coats.

Like muskrats they build houses of weeds, rushes and sticks, which when constructed are thoroughly plastered with mud to make them warmer. These houses are ingeniously constructed and are sufficiently large to allow a man to crawl into. Beavers were the first engineers and are to-day the foremost engineers in the animal world. They build dams, often many feet in length, and these dams are constructed so strongly that they withstand the severest of floods.

Beaver live on roots, barks and grasses. Their chief foods, however, are the barks of willow, aspen, cottonwood and other soft trees; and the large root of the water-lily. Natural foods do not amount to much as baits; a good decoy or scent is much more effective.

The No. 3 trap is the standard size in Newhouse, Victor and Jump patterns; the No. 2½ Newhouse is best, however, on account of it having teeth.

Beaver are very suspicious, and whenever possible use a boat and hip rubber boots when trapping them. A common method is to make a pocket in the side of a steep bank and in front of this pocket set your trap, placing upright, each side of the trap a dead stick. If you use fresh sticks the beaver will likely eat them; and the dead sticks guide the animal into the trap. In the pocket place several sticks, the ends of which have been dipped in scent, and your set is complete.

They have regular places where they leave the water to go in search of food. These places can be noticed by the signs left on the banks. A trap should be set at each such place in a few inches of water. No bait or scent is required at such sets.

Make a leak in their dam and set a trap in this leak. The animals will quickly notice this and immediately go to work to repair it, when they are sure to be caught.

The extension chains already mentioned and the sliding-wire should always be used in making sets for them.

When streams are frozen, cut a hole in the ice near where beaver travel, and set your trap on the bottom, under ice. This set should be baited by placing, leaning above the trap, a piece of one of the woods mentioned. When they pass along to feed they will notice the fresh bait and are sure to be caught.

In most parts of Canada a special license is necessary to trap them, so be sure and be on the right side of the law.

## Unconquerable Souls.

The soldier who sent his people the uniform he had worn in battle and wrote from the hospital, "You will see that there are nine bullet-holes in it; but I was lucky—only five of them hit me," has a rival in the ranks of the workingmen, whose story follows:

"I jumped off a moving truck and was thrown in front of another car which broke some ribs and fractured my skull. I was laid up nearly two months that time, and I hadn't been working very long when I got my hand caught between some pipe and smashed it up pretty bad, and while laying around waiting for it to get well I took on some white mule several times, which caused infection to set in, and I finally lost two fingers in the deal. Three months shot to h—, I got along fine for a while when one day we had to cut some bolts off with hammer and chisel, and the chisel wasn't very good on the head, being battered up and not kept dressed off properly, and a piece of steel flew in my eye. I took another month off on half pay, all because I didn't wear a pair of goggles. Now the cause of this layoff was a nail in a brace on a scaffold which caught my coat and threw me off my balance, and I fell about twenty feet and, of course, it was the sudden stop which broke my leg and jarred all of my 'innards' loose. I am getting along fine now and expect to be back on the job in a few days. I am lucky to be alive."

In considering the above we are of the opinion that three of the injuries which this man received could have been avoided which means 75 per cent., and a reduction of 75 per cent. of the accidents to the human race is by no means impossible. A little consideration on the part of every employee will do it, and think of the suffering it will eliminate and the hardship to the family if the man is married.

A "Safety First Policy" is the best insurance a man can get, and the cost is only a moment of thought. —The Midwest Review.

## Questions and Answers.

Miscellaneous.

### Telephone Poles.

Is there danger from lightning if the telephone company puts their wires and poles a few feet from the building? How near to a building can a telephone company lawfully put their poles and wires?

H. B.

Ans.—There should not be much danger. The telephone poles are grounded with wire to protect the system against lightning. We do not know that there is any lawful distance which the company must keep their poles from the buildings.



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### RED ARROW FARMS

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### Summary of First Canadian Egg-Laying Contest.

The following is an outline prepared by the Poultry Division C. E. F., Ottawa, of the prize winners in the first Canadian Egg-laying Contest which closed on Oct. 31, and was held at the Central Experimental Farm:

"The cash prizes won by the competing pens in the first Canadian Egg-laying Contest are awarded according to the standing at the end of the contest. The monthly prizes given to the best pen and the best hen throughout the year, also the two prizes donated by Mr. H. L. Warren, of St. Lambert, Que., for the pen and the bird having the largest number of eggs on the last day of February are not included in the list.

"Owing to the Regulations which did not permit pens that lost more than two birds from natural causes to continue in the Contest, a number were disqualified and thirty-four pens finished with an average per bird of 140.5 eggs. Of these, 17 pens were Rocks with an average of 145.5 eggs per bird; 15 were White Leghorns with an average of 127 eggs per bird; one pen was a White Wyandotte which averaged 165 eggs and one pen of Rhode Island Reds averaging 158 eggs.

"A number of promising pens were not allowed to finish owing to the regulation referred to above. Others were crippled by the death of several birds through accident, but were allowed to finish the competition. Among those that were doing good work and likely to come out well when disqualified might be mentioned pens 20, 24, 35 and 38. Among those that were handicapped through loss of birds but allowed to finish, though did not get into the prize list, might be mentioned 43 which was several birds short for a considerable time. Pen 2 also finished with seven birds.

"The ten prizes for the largest number of marketable eggs were won as follows:

- 1, Vale Poultry Farm, Montreal, Que., \$70;
- 2, L. R. Guild, Rockwood, Ont., \$60;
- 3, J. E. Rhoades, Ottawa, Ont., \$50;
- 4, W. M. Alcorn, Hammond, B. C., \$40;
- 5, F. J. French, Newmarket, Ont., \$35;
- 6, O'Brien Poultry Farm, Barryvale, Ont., \$30;
- 7, W. J. Johnston, Meaford, Ont., \$25;
- 8, E. C. Powell, Ottawa, Ont., \$20;
- 9, J. R. McMullen, Truro, N. S., \$15;
- 10, Vale Poultry Farm, Montreal, Que., \$10.

"The prize of \$25 for the largest number of birds qualifying for the Advanced Record of Performance—225 eggs, was won by pen 2, J. E. Rhoades, Ottawa, Ont. two birds qualifying. The prize of \$25 for the largest number of birds qualifying for Record of Performance—150 eggs, was won by pen 6, Laurel Poultry Farm, Rougemont, Que., seven birds. To the bird with the best yearly record, Bird No. 1 in pen 11, 272 eggs, won by F. J. Coldham, Kingston, Ont., \$25. To the pen having the largest revenue over cost of feed for the year pen No. 28, Vale Poultry Farm, Montreal, Que., White Leghorns, won the prize of \$25."

### Questions and Answers. Veterinary.

#### Fistula.

Mare has had fistula since last winter. It has been treated without results. It heals up for a time then breaks out and runs matter again, etc. Should the patient be working? M. McP.

Ans.—Many cases of fistula are very hard to treat. You don't state where this one is situated, but we presume it is on the withers. In most cases one or more little pipes or sinuses are formed, leading from the skin to the more or less deep-seated structures. When these descend between the shoulder blade and the ribs treatment becomes very troublesome and in some cases practically impossible. Each sinus must be opened up to the very bottom to allow escape of pus. If any foreign matter or diseased bone be present it must be removed and the wound then dressed 3 times daily until thoroughly healed with an antiseptic as a 5 per cent. solution of carbolic acid or one of the coal tar antiseptics. V.

Henry Arkell a breeder and importer of Oxfords, writes as follows: "For over forty years I have been advertising in 'The Farmer's Advocate', and have always found it to give good results. This year I have sold over 200 head of rams and ewes. I have seen worse years since I have been in the business."

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### Shorthorns

For Sale—One three-year-old herd sire imp. in dam; one good yearling bull, imp. in dam. his breeding and individuality is extra; one yearling bull, imp. sire and dam; two choice red 10-months bull calves. Also offer for sale number of good dual-purpose cows, 2-year-olds and heifer calves, and one yearling bulls from extra milking dams. R. M. MITCHELL, R. R. 1, Freeman, Ont.

### SPRUCE GLEN SHORTHORNS

Seven choice well-bred, thick, deep, mellow, young bulls, from 14 to 22 months; also heifers in calf to Nonpareil Ramsden = 101081 =, a show bull, and a good one. JAMES McPHERSON & SONS DUNDALK, ONTARIO

### Plaster Hill Herd Shorthorns

CANADA'S OLDEST DUAL-PURPOSE HERD ESTABLISHED 1859  
Herd sires: Green Leaf Record 96115. Sire and dam imported of best English breeding. Commodore 130056, bred by late S. A. Moore. His two nearest dams average 12,112 lbs. Seven young bulls from R.O.P. cows. Tubercular free herd. ROSS MARTINDALE, R. R. 3, Caledonia, Ont.

### TWO BULLS

eleven and twelve months old, a Rosemary and a Wimple, a red and a roan, priced to sell. Also Lincoln Ewes. Could be bred before shipping. J. T. GIBSON Denfield, Ont.

**English Milking Shorthorns**—I am now offering a number of choice heifers from good milking dams and sired by Gipsy King. The half dozen young bulls we have now on hand are also of this breeding and good prospects for real sires. The dams of these bulls are all good milkers. DAVID A. PUGH, Claremont, Ont.

**Morrison Shorthorns and Tamworths**—FOR SALE—Seven dandy bulls from 10 to 13 months old, of Scotch breeding, and choice females of the deep-milking strain. Also choice Tamworths of both sexes from prize-winning and champion stock. CHARLES CURRIE, Morrison, Ont.

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**Families**—Nonpareil, Lancaster, Brawith Bud, Jilt, Kinellar Rosebud.

Four Young Bulls for Sale—all winners. Toronto, 1920, at reasonable prices.

W. P. FRASER, Meadowvale, Ont.

### Shorthorns

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

CHAS. GRAHAM, Port Perry, Ontario

J. BAKER, Maple Leaf Farm, Hampton, Ontario  
SHORTHORNS and SHROPSHIRE

Young stock of both sexes for sale.

## TO BUY SEED GRAIN

This Bank is desirous of being of assistance to progressive farmers.

Should an advance be necessary to buy seed grain—call and see our local Manager. He will be glad to discuss with you any matters in relation to the financing of your products.

# IMPERIAL BANK

OF CANADA

212 Branches in Dominion of Canada.

## Glenburn Farms Shorthorns

**IMPROVE YOUR HERD.** Farmers who are contemplating buying a good herd sire are invited to inspect our offerings from this splendid herd of Imported and Canadian bred Scotch Shorthorns.

We have for sale cows in calf and with calf at foot, choice heifers and young bulls. Prices reasonable. Herd headed by Rex Augustus—128232—, a grand bull of pure Augusta strain.

GLENBURN FARMS - (45 minutes from Toronto by rail or motor) - UNIONVILLE, ONT.  
H. H. POWERS, Manager. COL. F. H. DEACON, Proprietor.

### Scotch—Scotch-Topped Shorthorn Females

Sire in service—Sittyton Sultan Dale 108651 -466391 -.  
Got by Avondale and dam by the great White Hall Sultan.

I have at present a number of bred heifers and also a very limited number of young bulls which I am pricing easy, quality considered. Some of the heifers are Scotch-topped, while the others are of straight Scotch breeding. Write me also for breeding cows. I have 15 now with calves at foot.

A. J. HOWDEN, (Myrtle, C. P. R.—G. T. R.; Oshawa, C. N. R.) COLUMBUS, ONT.

## Fairholme Scotch Shorthorns

Our herd is headed by a three-year-old grand-son of the great "Avondale." We are offering his sons, and also have one son of Gainford Marquis (imp.), one son of Edgocote Broadhooks (imp.), and one by Secret Light. These calves are all ready for service and are show individuals. Can also spare a few bred heifers of Scotch breeding.

Visitors welcome at all times. PERCY DeKAY (Elmira, C.P.R. and G.T.R.) Elmira, Ont.  
St. Jacob's, G.T.R.

Eighty-three years without change we have been breeding

### SCOTCH SHORTHORNS

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

ROBERT MILLER :: STOUFFVILLE, ONTARIO

## 15 Scotch Shorthorn Bulls

We are offering 15 choicely bred bulls, from 8 to 20 months old. Some of these are imported. We also have a large offering of imported and home-bred females representing the most popular lines of breeding. 125 head in the herd. An importation of 30 head arriving home Dec. 15. It will be to your advantage to get our prices and see our herd before purchasing.

J. A. & H. M. PETTIT - FREEMAN, ONT.  
Burlington Jct. half mile from farm. Telegraph and Telephone, Burlington.

## Braeburn Scotch Shorthorn Females

HERD HEADED BY NERO OF CLUNY (IMP.) AND GOLDEN PRINCE (IMP.)

We now have a number of young bulls got by each of the above sires. They are mostly reds and roans, bred from Scotch or Scotch-topped dams, and includes some of the best calves we have ever bred. We also have more females than we care to winter—would sell a few cows or a number of Scotch heifers in calf to one or the other of the above sires.

CHARLES McINTYRE, Brantford 7 miles. Scotland, Ontario  
L. E. N. electric cars every hour.

**Welland River Shorthorn Offering**—We have at present only two young bulls in the stable, but would price within the next few weeks a half dozen or more young cows or heifers to our present herd sire, Sunnyside Model. This is a Cruickshank Lovely-bred son of Right Sort (imp.). The families are Kiblean Beauty, Missies, Rosemarys, Seaweed, Rosebud, Ballenchin Daisy, etc. Fifty head to select from.  
Farm one mile from Welland. W. H. CROWTHER, Fonthill, Ont.

**Fairview Pure Scotch Shorthorns**—Our herd is headed by "Royalist" who sired the \$3,100 top-priced bull in the Dryden-Miller Feb. sale and we now have several more of his sons which are ready for service. Our females are all Scotch and comprise the following families: Augustas, Lavenders, Mary Anne of Lancasters, Miss Ramsdens, Duchess of Gloucester, Village Girls, Minas, Missies, etc. We are also offering females and a few choice Clydesdale show mares.  
ROBERT DUFF & SON (C.P.R.—G.T.R.) Myrtle, Ont.

**Irvinedale Scotch Shorthorn Heifers**—For the present we are all sold out of bulls of service-able age, but we have the largest and strongest offering of Scotch-bred heifers and young cows we have ever had on the farm. Call and let us show you our breeding herd of cows, headed by Marquis Supreme, that great son of Gainford Marquis (imp.).  
JNO. WATT & SON, Elora, Ontario.

**Pleasant Valley Farms** SCOTCH SHORTHORNS OF MERIT  
Herd headed by Imp. Newton Grand Champion and New Year's Gift—two of the greatest bulls of the breed. Our females comprise the best families obtainable. Young bulls of herd heading type. Also farmers' bulls and females bred to above herd sires. Inspection invited.  
GEO. AMOS & SONS, Moffat, Ont.

**Shorthorns**—Meadow Lawn Farms offer splendid young bulls sired by our own good herd bull Escana Ringleader by Right Sort (imp.). These bulls carry the best blood of the breed and are superior individuals. Inspection invited.  
F. W. EWING :: R. R. 1 :: ELORA, ONT.

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

## Tenth International Egg-Laying Contest.

The tenth International Egg-laying Contest is now being conducted at the Exhibition Grounds, Victoria, B. C., under the auspices of the Poultry Division, British Columbia Department of Agriculture. The present contest is for an eleven-months period and runs from October 2, 1920 to September 21, 1921. The following notes have been forwarded to us:

"Twenty-six pens arrived previous to date of commencement, and the remainder of the pens arrived on the 22nd or soon afterwards. At every contest so far there has been several birds arrive in a backward state. This year a pen arrived with sappy plumage, and it is doubtful if they will be laying before Christmas. Whilst the Department loses eggs only, owners of immature birds contesting do not give themselves or birds a square deal. The birds must be backward, as it is not likely that the owners would sign a statement that the birds are of mature age, and then send birds much younger than declared age.

"The birds were divided up as soon as received, and have taken to surroundings very rapidly. The fact that two strange birds were housed in strange quarters seems to have made the birds get "chummy" in record time. The contest birds will be confined to the house during the winter months, and the yards have been limed, dug, and sown to rape and chicken lettuce. Two trapnets are being used in each pen until it is found out whether eggs of proper color are laid by the two breeds after which the traps will be opened up.

"Green feed is being fed daily, there being a plentiful supply of chickweed and rape available. Scalded wheat is fed three mornings weekly in place of wet mash. A Barred Rock pullet arrived weighing seven pounds, empty crop.

"Mr. George Adams, who competed in all past nine contests, did not send a pen of birds this year. Several old competitors are back again, however, after five or six years' absence. The majority of competing birds this year have been bred from trapnetted stock, and given better climatic conditions, a much higher record is presaged. The spare birds are housed in two houses—one shed roof open front, and the other a Wood's house. The birds in the latter house are Class 1 birds, and the heavyweights are in shed roof house.

"Experience has taught that an open front house facing south in the vicinity of Victoria and district is liable to driving rains blowing in, as prevailing winds are from south-west. To check this the houses accommodating the spare birds have been faced southeast. Yards are also running in same direction. There are eight trapnets in each house, and the birds are fed similar rations to contest birds. Each house is 9 feet wide by 15 feet deep. Of the first eggs marketed, five dozen were graded No. 1, or standard, and four dozen No. 2, or pullet eggs."

There are two birds to a pen and twenty pens each of lightweight and heavyweight varieties. Of the former all are White Leghorns except one pen of Anconas. Among the heavyweight varieties thirteen pens are of White Wyandottes, three are Single Comb R. I. Reds, and one each of Rose Comb R. I. Reds, Buff Orpingtons, Barred Rocks, and Buff Wyandottes.

## Gossip.

E. C. Gilbert, of St. Thomas, is consigning a young cow that freshened on November 27 to the St. Thomas sale. She is sired by Shadelawn Canary 13th, a grandson of May Echo Sylvia. There are also three heifers coming two years old, that will be bred to Woodland Korndyke Colantha, a brother of a 35.01. four-year-old cow. B. Carr is consigning a cow which he purchased at Cahill's sale. She has great capacity, having milked up to 80 lbs. a day. Her sire is a half-brother to Homestead Susie Colantha, the \$7,500 cow that made 35 lbs. butter in seven days. There is also a very promising two-year-old that will be fresh at sale time, and a young cow due to freshen in January, bred to a son of Molly Mercedes that made over 20,000 lbs. of milk in a year.

## Winners in Grain at the International.

The grain exhibit at the International attracts a good deal of attention and draws entries from various parts of Canada and the United States. In order to make the competition as fair as possible in oats, the territory is divided into regions, No. 1 being the Western Provinces and Western States, Region 2 takes in Ontario, Michigan and surrounding States. The Canadian exhibitors captured the lion's share of the awards and took home with them the championship in both wheat and oats. That Ontario can produce good corn is evidenced by the fact that in the flint variety Ontario was first, second, third, sixth and seventh, in competition with exhibitors from Michigan, Iowa, Ohio, Wisconsin, Colorado, etc. The following are some of the winners.

Flint Corn.—1, A. S. Campbell & Son, Blenheim, Ont.; 2, R. J. Johnston, Chatham, Ont.; 3, Stewart Campbell, Blenheim; 4, P. E. Davis, Massachusetts; 5, Edwin L. Lewis, Massachusetts; 6, A. S. Maynard, Chatham; 7, Albert Gilbert, Norfolk, Ont.; 8, Jeno Krogh, South Dakota; 9, J. W. Beckman, Minnesota; 10, A. W. Jewett, Jr., Mich.; Wheat: 1, J. C. Mitchell, Dalinda, Sask.; 2, E. E. Young, Oak Lake, Man.; 3, R. E. Goman, Oak Lake; 4, Arthur W. Osborne, Montana; 5, Seager Wheeler, Rosthern, Sask.; 6, F. C. Sumner, Montana; 7, Duke of Sutherland, Brooks, Alta.; 8, W. J. Hartman, Montana; 9, A. Garron, Brooks; 10, T. H. Smith, Oak Lake, Man. Oats (Region 1): 1, John W. Lucas, Cayley, Alta.; 2, Duke of Sutherland, Brooks, Alta.; 3, R. D. Kirkham, Saltcoats, Sask.; 4, E. E. Young, Oak Lake; 5, F. H. Smith, Oak Lake; 6, John Huffine, Montana; 7, H. E. Fields, Regina, Sask.; 8, A. R. Moore, Qu'Appelle, Sask.; 9, J. B. Eshome, Brooks, Alta.; 10, Kallal Bros., Tofield, Alta. Oats (Region 2): 1, B. R. Cohoe, South Woodlee, Ont.; 2, Louis M. Hanson, Wisconsin; 3, A. E. Browning, Oxdrift, Ont.; 4, I. S. Norum, Minnesota; 5, Otto Wolf, Wisconsin; 6, J. L. Krause, Wisconsin; 7, J. W. Beckman, Minnesota; 8, Andrew Schmidt, Mildmay, Ont.; 9, E. H. Thompson, Wisconsin; 10, F. J. Fay, Wisconsin.

## Tobacco Report of 1920.

BY H. A. FREEMAN, TOBACCO INSPECTOR.  
The Ontario tobacco crop has been harvested without damage by frosts. The fall has been exceptionally fine for curing, and at the present time the crop is well advanced in curing, the early crops being practically finished. The leaf of the White Burley and fine-cured tobacco seems to be very thin throughout the tobacco belt, and the crop, including all varieties, is below last year's standard in yield and quality. However, there are many very fine crops of tobacco in the country. The section from Kingsville Harrow Road and south to Lake Erie in Essex County between these points, the Simcoe district, and the section around Northwood and Kent Centre deserve special mention. There is much good tobacco in practically every locality however.

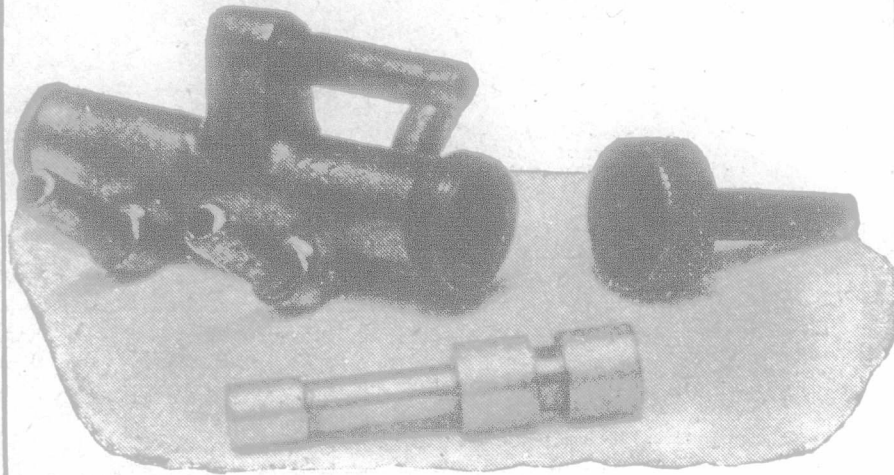
The following figures give the acreage and estimated production for 1920:

FLUE-CURED OR BRIGHT TOBACCO.		
Locality	Acres	Estimated Production lbs.
Essex County		
Township		
Mersea.....	1,700	1,240,000
Gosfield South.....	1,100	860,000
Colchester South.....	200	150,000
Norfolk County		
Township		
Charlotteville.....	4	3,600
North Walsingham.....	5	5,500
	3,009	2,259,100

The total production for the 1920 Fine-cured or Bright tobacco crop for all counties and townships shows 2,259,100 pounds (two million two hundred fifty-nine thousand and one hundred pounds).



## The De Laval Milker Gives More Service



The above illustration is made from a photograph (not retouched) showing a De Laval Udder Pulsator and piston which have been used for four years in connection with the De Laval Milker at the Roseland Dairy, Caldwell, N. J.

The diameter of the piston in relation to the diameter of the cylinder in the Udder Pulsator, even after four years of wear, still passes the exacting factory tests and requirements.

When in operation, the piston travels 45 times per minute; that is, 45 times per minute each way, making 90 movements a minute, or 5400 times per hour. On the basis of four hours per day, 365 days in the year, the piston travelled the remarkable total of 31 million times in the four years—without showing any appreciable wear and without lubrication.

The Monel metal piston, the bronze cylinder and simple construction of only one moving part, without springs, weights, or complicated mechanism of any kind, make possible such unusually long service.

The action of the De Laval Milker pleases the cow. Its long service pleases the owner.

Write to nearest De Laval office for Milker Catalog, mentioning number of cows milked

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## BRAMPTON JERSEYS

Our Jerseys won. Yes, both in our hands and for our customers. They won in the show ring. They and their descendants are winning in yearly tests. We have the best lot of bulls for sale we ever owned. We have fifty females, all ages, for sale.

CANADA'S GREATEST JERSEY HERD

### B. H. BULL & SON BRAMPTON, ONT.

The Woodview Farm **Jerseys** London, Ontario JNO. PRINGLE, Prop.

CANADA'S MOST BEAUTIFUL JERSEY HERD Herd headed by Imported Champion Rower, winner of first prize with five of his daughters on the Island of Jersey, 1914, second in 1916, and again first in 1917. We are now offering for sale some very choice bull calves, ready for service, sired by imported bulls and from Record of Performance imported prize-winning cows. Also some cows and heifers. Prices right. We work our show cows and show our work cows.

#### TEN THOUSAND DOLLAR JERSEY BULL

They have sold that high all right, but we are not asking that money for ours. We now have ten youngsters, half of which are of serviceable age and all from good record R.O.P. dams, including one from our Canadian Champion, 3-year-old. They run from \$125 up. We guarantee the price and guarantee the bull. Write us also for females. PAPPLE BROS., Brantford, Ont., R.R. No. 1 (Cainsville G.T.R., T. H. & B. Stop 27, Brantford-Hamilton Radial).

### All Bulls of Serviceable Age Sold

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

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

### MORRISON'S R.O.P. AYRSHIRES

We are at present offering a number of bred two-year-old heifers bred from R. O. P. sires and dams. We also have several choice young bulls of the same sort—good individuals and ready for service.

JOHN MORRISON, Mt. Elgin, Ont.

### SPRINGBANK AYRSHIRE HERD SIRE

We have a few young bulls from R.O.P. dams and sired by Humeshaugh Invincible Peter, our show herd sire. We would also sell this sire guaranteed right in every way. Our herd holds more championship records for production than any other herd in Canada. We would be pleased to send the list. We can also spare a few females—cows and heifers.

A. S. TURNER & SON (3 miles south of Hamilton) Ryckmans Corners, Ont.

### BURNSIDE FARM AYRSHIRES

We have at present a number of imported and Canadian-bred young bulls that are from good record dams and ready for service. We can also supply females of all ages, including a large number of good imported heifers. Many of these are well forward in calf to Old Country service.

R. R. NESS & SON, Howick, Que.

### Co-Operation in the United States.

A survey undertaken in 1914 by the Office of Markets and Rural Organization of the United States Department of Agriculture, resulted in a list of 5,424 farmer's co-operative marketing organizations in the United States. Of these there were 1,637 grain elevator and warehouse companies, 1,708 creameries and cheese factories, 871 fruit and produce companies, 213 cotton organizations, 275 co-operative stores, 43 tobacco associations, 96 live stock associations, and 581 miscellaneous. The following discussion of co-operation in representative states is from Bulletin 547 of the U. S. Department of Agriculture:

In order to give a clear representation of the status of organization in the various parts of the United States, brief statements showing the results of the survey in different States are included. By selecting States representative of the different sections of the country, the varying conditions surrounding the organization of the farmers are shown. Several of the States of the North Central group have been included because in this section co-operation among farmers is more general than in any other part of the country. States have been selected also to show the extent of agricultural organization among the fruit growers of the West, the farmers of the South, of the tobacco belt, the truck-growing regions, and the older farming regions of the North Atlantic States.

#### MINNESOTA.

Minnesota leads the States in the number of co-operative organizations of farmers. Of the 5,424 organizations in the United States which are included in this survey, 980, or 18 per cent. of the total, are located in Minnesota. The prominence of Minnesota's place in the matter of marketing organizations among the farmers is largely due to its importance as a dairy State. Co-operative creameries and cheese factories make up about 63 per cent. of Minnesota's total, while the elevator companies comprise about 25 per cent. The remaining 12 per cent. include live stock shipping associations, fruit and produce associations, and a few miscellaneous organizations.

The creameries and cheese factories of Minnesota show the possibilities of such farmers' organizations. Over 600 of the 850 creameries of the State are owned by the farmers. Table II shows that most of these creameries are co-operative in character. Nearly all of the farmers' associations in Minnesota which report the stock-company plan of organization are farmers' elevators; the other classes adhere much more closely to co-operative principles in the method of conducting their business.

An estimate of the volume of business transacted by the farmers' marketing organizations of Minnesota can be made by using the figures reported by a large proportion of the associations as a basis. The total annual volume exceeds \$50,000,000. The 980 organizations reporting have about 90,000 members, which gives an indication of the extent of organization among farmers for manufacturing and marketing purposes in this State.

#### IOWA.

As Iowa is represented by 505 farmers' marketing organizations, it is second to Minnesota in number reporting. Conditions in Iowa and Minnesota are very similar, and the farmers' organizations have followed the same lines in both States. The two leading forms of organization in Iowa are elevators and creameries, as these two classes make up over 85 per cent. of the total reporting. Iowa falls behind Minnesota in total number of organizations largely because of its smaller number of creamery and cheese-factory associations, Iowa reporting 204 and Minnesota 624 organizations of this character.

#### WISCONSIN.

Wisconsin ranks third in the number of organizations reporting. Conditions in this State differ somewhat from those in Minnesota and Iowa. The latter are important grain-raising States and have a number of farmers' elevators, while in Wisconsin, where grain is not grown on such an extensive scale, there are comparatively few farmers' elevators. Wisconsin is an important dairy State; therefore, 75 per cent. of the companies reporting are creameries or cheese factories. In Minnesota and Iowa nearly all of the

dairy organizations are creameries, while in Wisconsin there are a large number of cheese factories as well. The other forms of organization found in Wisconsin are of the same nature as those found in Minnesota and Iowa.

#### KANSAS.

Kansas is another member of the group of States where farmers' organizations are the most numerous. It is an important grain State; consequently over 60 per cent. of the associations reporting from this State are farmers' elevator companies. Kansas may be contrasted with Wisconsin in the matter of farmers' associations; the former has a large number of grain elevators and only a few creamery or cheese-factory organizations, while the situation is reversed in the latter State.

#### CALIFORNIA.

Conditions surrounding the organization of farmers in California are decidedly different from those in the North Central States. California is one of the leading fruit-growing States, and as the fruit grower has found it profitable to organize for the marketing of his products, it is not strange that over 60 per cent. of the organizations which reported from this State belong to the fruit and produce class. The others consist of creameries and cheese factories, stores, olive and nut associations, and various miscellaneous farmers' marketing enterprises.

Co-operation in this State is noted especially for the central organizations made up of local units which are formed among the citrus, walnut, almond, raisin, and apple growers. The elevators and creameries of the North Central States for the most part have been content with the method of allowing each local concern to look after the marketing of its own products independent of neighboring associations of the same character. The fruit growers of California have found it advantageous to unite their local associations into central selling bodies. It must not be inferred that this is the only State where such central organizations are found, for there are a number of examples of such centralization throughout the United States, but the success of this form of endeavor has been particularly notable in California.

#### THE NORTH PACIFIC STATES.

The four Pacific Northwestern States—Oregon, Washington, Idaho, and Montana—may be grouped together in considering farmers' marketing activities. Conditions are similar in the four States with reference to organization and some of the lines of activity extend to all of the States in the group. Of the 329 organizations which reported from these four States, about 35 per cent. are fruit and produce associations, 30 per cent. are grain elevators or warehouses, 15 per cent. are creameries or cheese factories, 7 per cent. are stores, and 13 per cent. are classed as miscellaneous associations.

The central selling organizations found in these States among the apple growers are the most notable. For the last five years various movements have been set on foot to make the fruit growers' associations in these States more effective. These movements have resulted in the rise and fall of numerous central selling of other associations, and a continual changing of affiliations and policies on the part of local associations. In this region are a number of very successful canneries which have been established to take care of fruit and vegetable products which cannot be marketed to advantage in the fresh state. Not all of the canneries established have been successful, for a large number of failures were reported.

#### TEXAS.

The State of Texas may be considered by itself because of the conditions here represented. Over 50 per cent. of the organizations reporting from this State are cotton associations, and about 20 per cent. are fruit and produce associations. In the remaining number are a few creameries, a few grain elevators, and some miscellaneous organizations.

#### FLORIDA.

Florida, like California, is interesting because it is represented largely by organizations for the marketing of perishable products, such as citrus fruits. About 80 per cent. of the organizations reporting from this State belong to the fruit and produce class, which indicates the importance of this form of organization in the State. The other associations in



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Wed. and Thurs., Jan. 12-13, 1921

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### Blairgowrie SHROPSHIRE

A few choice shearling ewes from imported ewes, and safely bred to my imported flock ram. These shearlings are well grown and satisfaction guaranteed.

**JOHN MILLER, JR., Ashburn, Ontario**

### Choice Oxfords and Shorthorns

We offer choice, big ram lambs of show quality and ideal covering; also ewes any age. Write for prices before buying. Herd sire, Master Marquis = 123326 =, full brother to grand champion female at Toronto. Bulls and cows for sale.

**GEO. D. FLETCHER, Erin, R. R. No. 1, L.-D. phone. Erin C. P. R.**

**Oxford Ewes**—Choice bred ewes, bred to lamb in March. Also an extra fine bunch of ewe lambs. Write to-day for prices.

**John M. Ross - Embro, Ont.**

**Chester Whites**—Young boars, fit for service, also fall pigs, both sexes; all good type and bred from our Imp. boar. Tauwa Callaway Edd 19821. Priced to sell.

**GEO. E. NORRY, R.R. No. 1, Tilbury, Ont.**

### INVERGURIE TAMWORTHS

Sows bred for March farrow. Choice boars of all ages.

**Leslie Hadden, Box 264, Sunderland, Ontario**

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Both sex, Bacon type and from large litters Write—

**R. HONEY & SONS, - Dartford, Ontario**

**Springbank Yorkshires**—Young boars fit for service, sows bred, pigs ready to wean; both sexes; all ages; with choice breeding.

**Wm Stevenson & Son, Science Hill, Ontario**

the State belong principally to the miscellaneous class.

**NORTH CAROLINA, SOUTH CAROLINA AND GEORGIA.**

The States of North Carolina, South Carolina and Georgia have been placed in one group, since they are representative of that section of the United States. Of the total number of organizations which reported from these three States, about 41 per cent. handle cotton in the capacity of warehousemen, this form of organization being especially common in Georgia; about 12 per cent. handle fruit and produce; about 12 per cent. are stores; over 25 per cent. fall in the miscellaneous class; and the remainder consists of a few creameries and tobacco associations, and one live stock association.

**KENTUCKY.**

From the standpoint of organization of producers for marketing purposes, the State of Kentucky is interesting because of its tobacco growers' associations. Almost one-half of the tobacco associations from which reports have been received are located in this State. Kentucky reported 66 organizations, and of this number 21 are tobacco associations, 15 are fruit and produce associations, 17 are listed as miscellaneous, 6 are stores, 6 creameries or cheese factories, and 1 a grain elevator company.

**VIRGINIA, MARYLAND AND DELAWARE.**

The States of Virginia, Maryland and Delaware reported a total of 82 marketing associations. Of this number, 39 are miscellaneous organizations, 22 are fruit and produce associations, 12 are creamery or cheese factory associations, 5 handle tobacco, and 1 handles live stock. These States are in a truck and fruit-growing section, and this fact accounts for the organizations which handle fruit and produce. Three are some good examples of central marketing organizations among the truck growers in this section of the United States.

**NEW YORK.**

One hundred and twenty-four organizations in the State of New York reported. About 60 per cent. of this number are creamery and cheese-factory associations, about 25 per cent. handle fruit and produce, and the rest is made up of a few co-operative stores and miscellaneous organizations.

**THE NEW ENGLAND STATES.**

The New England group of States reported a total of 157 marketing organizations. Of this number 61 are creameries, 49 are miscellaneous, 27 handle fruit and produce, 19 are stores, and 1 is a grain elevator.

### Questions and Answers. Miscellaneous.

#### Gasoline Engine Heats When Running.

I installed a gasoline engine a few months ago, but it gets very hot after running a few minutes. It is a six-horsepower engine and is used to pump water and saw wood. What is the cause of the heating?

J. D. S.

Ans.—The trouble may be due to carbon, a clogged exhaust, not firing at the right time, or there may be some faulty construction. The matter should be taken up with the firm from whom the engine was purchased. One should not have this trouble with a new engine, especially after it had become properly lubricated.

#### Miscellaneous.

1. Where could I send a sample of water to have it tested?
  2. Where can I secure a book on the care of bees?
  3. What would you suggest as a good ration for milk cows, so as to be saving on the hay?
- J. H. M.
- Ans.—1. A sample might be sent to the Ontario Agricultural College, Guelph, or to the Chemistry Department of the Experimental Farm, Ottawa.

2. A splendid book on beekeeping may be secured through this office, at \$3.

3. If a person has plenty of silage and good straw the cows will not need very much hay. The grain ration could consist of a mixture of one part bran, three parts oats, with about ten per cent. of oil cake. This could be fed at the rate of a pound for every four pounds of milk produced.



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When buying a driving robe, it pays to get the best. There is only one "Best," and that is the genuine

### Saskatchewan Buffalo Robe

This closely resembles the real Buffalo fur. Lined with Astrachan Curl Cloth and interlined with rubber, it withstands all weather extremes, and is

**WIND, WATER AND MOTH PROOF**

Will not crack when thrown over a heated automobile radiator. Every "Saskatchewan" Robe bears the registered trade mark, the Buffalo. Sold by best merchants in almost every village, town and city in Canada.

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For expelling worms, for overcoming unthriftiness and loss of productiveness in live stock, **INTERNATIONAL STOCK TONIC** is positive in its action. Wherever used, indigestion disappears, coats take on a sleek and glossy appearance and live stock attain the top-notch of red-blooded vitality and good health. This famous tonic and conditioner will enable you to carry your stock through the winter without the usual lowering of tone and vitality and consequent general ill-health. Use it liberally, it represents maximum health insurance. Dealers from coast to coast sell it in 40c., 75c., \$1.35 and \$1.75 packages; and 25 lb. pails at \$3.75—order from yours or write **INTERNATIONAL STOCK FOOD CO., LIMITED, TORONTO '24**

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

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Won all Championships, save one, Toronto and London, 1919, and Toronto and Ottawa, 1920. Boars ready for service. Pigs ready to wean. Sired by our 1,005-lb. Champion boar.

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Specially priced: A few young choice boars ready for service and a number of bred sows. Also sows ready to breed, as well as young litters. Can supply pairs not related.

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### VINEYARD YORKSHIRES

I am offering a choice lot of young sows ready to breed and a number of choice you boars ready for service, reasonably priced, to make room. Can supply pairs not akin. Your inspection and inquiry solicited. **Arthur Welstead, St. Catharines, Ont.**

**The Tamworth of To-day**—The Tamworth hog of to-day, if he is the correct type of Tamworth, is the greatest hog on earth. They carry the size and market early. Let me send you a bred sow, or two young sows and a young boar which are not akin. My prices are right, and they will be sent on approval. Write to-day.

**JOHN W. TODD, Corinth, Ontario**

**Newcastle Tamworths and Shorthorns**—For Sale: 50 choice boars and sows from 6 weeks to 6 months old; 2 sows carrying their second litters; ancestors noted prizewinners at many of the leading Ontario exhibitions for years. Several young bulls from 6 to 10 months old, and a few females. Write me to-day. Prices right.

Long-distance phone.

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

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Choice young stock for sale, all ages. English, Canadian and American strains. Can supply pairs not akin.

**G. L. SMITH, Credit Grange Farm.**

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

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

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

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

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

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

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

### READ

### THIS

Hotel Griswold, Detroit, Mich. September, 1920.  
To THE EDITOR.—As a subscriber and a close reader of your daily, and noting the title you are having with profusion of many varieties, let me give you an experience in the purchase of clothing. To a London firm on July 3rd I sent a draft for six pounds sterling, for which I paid my bank \$24.50. I sent my measure for clothes in detail as my local tailor would have them, describing about the pattern as best I could, and left the business to them, realising that for that money I could not lose much at the most. Every clothing expert to whom I have submitted the goods placed the cost at \$55 to \$65. Wife declares I will never wear the suit out, its quality is so good; and for a fit there can be no criticism. The London tailors are CURZON BROS. LTD., and anyone can get their samples and prices on application, and prove what I have stated for themselves.  
HENRY VINCENT

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

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Steel  
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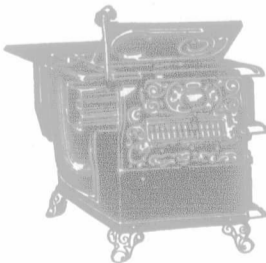
THE life of any Range is no longer than its weakest part, but special attention has been given to the construction of the vital parts of the Corona.

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1. FIRST the large CAST IRON FLUE at the back of the Range. This insures perfect draft and no danger of the flue clogging. Also, it will not rust out at the bottom like ranges equipped with sheet steel flues.
2. OBSERVE the large fire box extension, which gives a 28 inch fire box for burning wood.
3. We also show the "front draft" used on all our ranges built with right hand reservoirs. The damper drops open readily, as shown in illustration, and this makes it so that the ashes and clinkers can be removed from the grates from the front with an ordinary poker without stooping.
4. The patented front check damper is seen to advantage. It can be adjusted readily as desired and remains exactly as it is placed.
5. This cut shows how the front top section can be raised to any desired height, even though there is no closet on the range.

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Rear and End View

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H. A. MACDONELL  
Director of Colonization

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### A Real Election in B. C.

EDITOR "THE FARMER'S ADVOCATE":

Having just witnessed an election campaign in the wonderfully grand, but still new Province of British Columbia, I wonder if impressions of a provincial election viewed from the outside might not be of interest to my farmer friends in my own Province. While I dare not boast that Ontario has, by any means, become fully emancipated from the taint of heredity partyism, the extremely bold call made by both the Government candidates and their opponents to the electors in B. C. to rally to the party standard savors strongly of my earliest recollections of election-days in Ontario.

I did not quite understand it all then, any more than too many of the electors understood why they should stand firmly by their hereditary colors—but I can still plainly see the husky "Tory" school boy challenging his "Grit" opponent, or vice-versa, "to knock the chip off". This was the signal for beginning the tussle which would prove which party had really a just claim to virtue. For youth then, even more than now, was a pretty good copy of its elders.

While those days had virtues that might have well been preserved, I like to believe that their political aspect is fast fading. In any case, it gave me a sudden backward jolt to find party feeling so rampant in this Province. For, barring the few Labor candidates and fewer Independents, partyism was the first and last and only rally cry of both the Liberals and the Conservatives here. Great circus-sign boards blazed with "Vote straight for the Liberal Six" and similar conservative notices greeted one at every turn. The leading Government supporter urged that "vote for the man" would breed only discord in the Legislature, while I do not recall that vote for the principle was seriously mentioned. Each party seemed to be quite too busy exploiting the failures of its opponents and trying to convince the electors that it possessed all the virtues that there wasn't time to consider the important issues except as incidental to party victory. To give you an instance, one speaker prefaced her speech with "I'm the wife of a Liberal, I've given four Liberals to the country, and I have a brother a Liberal in an Ontario city." Doubtless the Conservative speakers made equally vain boasts, but I did not chance to pick up anything quite so marked in sentiment.

But the funniest of all the funny things that happened was after the election, when the Liberals met to celebrate their victory in the ball-room of the palatial Vancouver Hotel. The present and re-elected Premier known in this Province as "Honest John" was on the platform in time to await the coming of "Mary Ellen" (Mrs. Ralph Smith), who had polled an overwhelming majority of Liberal votes—the greatest majority ever polled by any candidate in this Province. And—must I tell it—"John greeted "Mary Ellen" with an embrace and a—a—a kiss.

I feel sure that Ontario's farmer Premier has better manners than that! And say, if Mrs. Smith were not a widow, British Columbia might still have a change of premiers.

British Columbia. N. L. McKNIGHT.

### Indians as Plowmen.

While Indians as a rule are not credited with being expert farmers, there are a good many of them who take great pride in their plowing, and not only do they compete in the Provincial Plowing Match, but they have formed a branch of the Ontario Plowmen's Association and hold an annual plowing match. These men are capable of doing exceptionally good work, and have been successful in winning the prizes and trophies in keen competition. A plowing match was held on the Six Nations Reserve in November last, and the following are the names of the winners: High-cut plow, First, Sweepstakes and Cup: J. Capton; 2, E. Green; 3, F. Martin; 4, J. Green. High-cut plow, open to those who have never won in this class: 1, W. Vansickle; 2, P. John; 3, R. Jamieson; 4, P. Smith. Jointer class: 1, M. Vansickle; 2, N. General; 3, H. Anderson; 4, D. Burnham. Those who have never previously won in the jointer class: 1, G. Garlow; 2, E. Miller; 3, H. Styres; 4, G. Green. Sixteen-year-old boys with jointer plows: 1, T. Porter; 2, B. Davis; 3, I. Green.

Best finish: P. John. Best crown: W. Vansickle. Best-groomed team: E. Miller. The officers of the Six Nations Branch of the Ontario Plowmen's Association are: President, W. H. Jamieson; First Vice-President, G. S. Johnson; Second Vice-Pres., T. General; Treasurer, H. Styres; Secretary, G. Garlow.

### The Dog on the Sheep Ranch.

BY DAVID H. TALMADGE:

Up in the hills of western Oregon there are many sheep and many dogs, for any sheepman will tell you that the raising of sheep without the assistance of dogs would be a difficult thing to do. Also any sheepman will tell you that there are dogs which kill sheep, as there are men who kill deer and other creatures, for the joy of killing.

Then, if you ask him, he will give you his opinion of so-called wise folk who would legislate the dog out of the world, and his opinion will be forcibly expressed and easy of comprehension. It may be a bit lurid, for his patience with the nerve-strained people of the cities who would annihilate the dog family because some unfortunate member of it buried a bone in a flower-bed and thereby ruined a plant or two, is pretty well exhausted.

"I wouldn't mind if when these injured people write their letters to the papers damning the dogs," he says, "they would hold themselves down to their own grievances. But they don't. Likely they think the indictment would be insufficient. So they cry out that dogs kill sheep—millions of 'em—worth millions of dollars—every year, and this being expressed in dollars takes hold of the American comprehension. But no sheep-raiser ever writes letters of this kind. Personally, I have written several of another kind and flatter myself that I squelched one or two dog-haters pretty effectively in doing it. By the way, look out for the dog-hater. I'd advise you not to trust him any further than you can see him, except perhaps in money matters. He is usually a dollar-worshipper—can't get much out of life beyond that which costs so much per."

And then he will tell you a dog story or two, if you ask him (at least this particular sheepman told me one). The sun was just sinking behind the coast mountains. We stood in shadow, the sheepman, a tawny, loose-jointed Australian, sheep-dog, and myself, and Mount Jefferson loomed behind us white and pure as mercury.

The sheepman said, "Buddy," softly, and the dog cuddled to him and kissed his hand.

"Look at his eyes," said the sheepman. "Human and maybe a bit more, what?"

I nodded honestly. "He does things with sheep I can't do—knows things about 'em I don't know. Listen:

"We had a flock of five or six hundred in the upper pasture last fall. It is a couple of miles from the house. The rains came one night, and I found next day that the river had carried off about twenty feet of fence. I found also that if the dog had depended on us for intelligence those sheep would have been gone.

"When I got up there next day Buddy was watching the break—had been on the job pretty much all night. We never lock him up. He has the run of the ranch at all times. I was a bit worried when he failed to show up at the barn that morning. There are a good many human beings ranging these hills with guns at that time of year, and—well, there he was and there were the sheep. Some dog!"

Pride and affection mingled in the man's voice. One need not be very deep to understand the reason.

I passed by a number of ranches going down the trail to the valley that night, and at each was a dog. They were not all like Buddy, perhaps, but they were of the same general type, and each was taking a visible interest in the affairs of the ranch. And I knew that my sheepman was right.—From Our Dumb Animals.

Owing to the schools being closed, the School Department has been omitted from this week's issue.

John. Best crown: W. groomed team: E. rs of the Six Nations ntario Plovmen's As- dent, W. H. Jamieson; nt, G. S. Johnson; T. General; Treasurer, ry, G. Garlow.

**on the Sheep nch.**

H. TALMADGE:  
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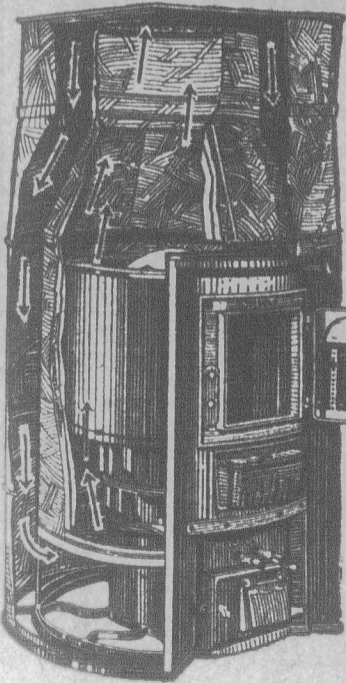
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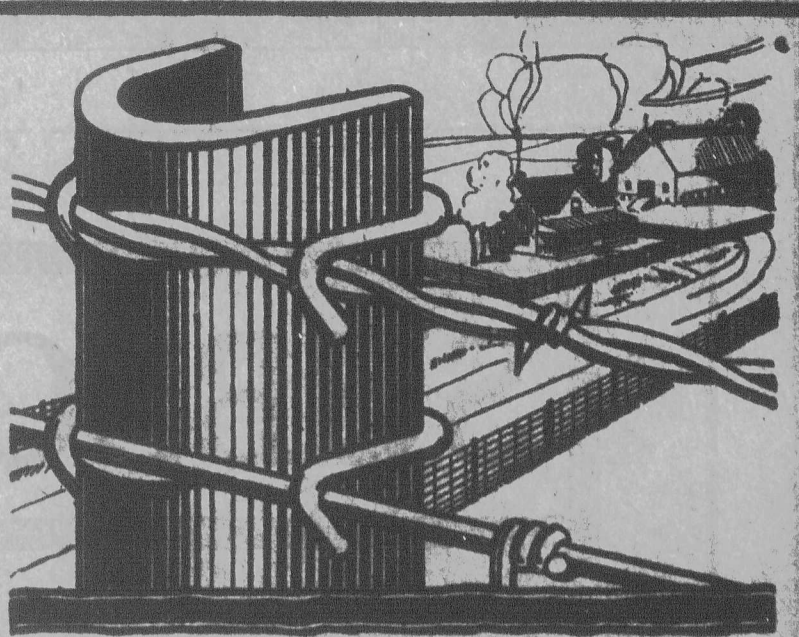
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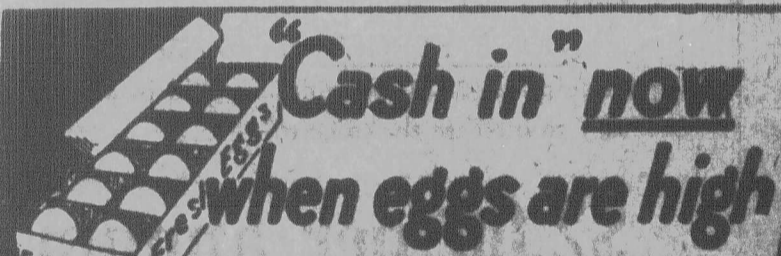
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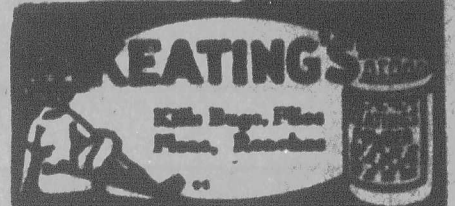
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