

Seventh Annual Orchard and Garden Magazine Number

FARM AND DAIRY & RURAL HOME



DEVOTED TO
BETTER FARMING
AND CANADIAN
COUNTRY LIFE



Dairy and Cold Storage
see Column Page 15
Canadian Hides

Peterboro, Ont., Mar. 4, 1915



THE DORMANT SPRAY: ONE OF THE ESSENTIAL OPERATIONS IN PRODUCING CLEAN FRUIT.

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Ontario Farmers' Views on Public Issues

Government Expenditures to Help City Unemployed at High Wages not Favoured. Free Trade with Great Britain Advocated. Public Outlays on Trunk Highways not Approved. Resolutions Passed Last Week by The United Farmers of Ontario.

IMPORTANT resolutions dealing with public issues of the day, from the standpoint of the farmer, were passed last week at the first annual convention of The United Farmers' of Ontario, after they had first been fully discussed in open convention. All the resolutions were passed unanimously. They were as follows:

Free Trade with Great Britain

The following resolution is in harmony with the resolutions passed recently by the farmers' organizations in Western Canada and indicates the practical loyalty of the farmers of Canada, as a whole.

"Whereas, in this time of testing of the great Empire of which we form a part, Canada is pouring out its young manhood and millions of dollars in answer to the Empire's need,—

"Be it resolved, that in the opinion of the members of The United Farmers of Ontario every effort should be made to bind up the ties that unite us with the Mother Land, and therefore we would recommend that the time has come when we should have complete free trade with Great Britain."

Make the Manufacturers Pay Their Share

During the discussion it was contended that the recent increase in the tariff will enable protected manufacturers to charge more for the goods they sell farmers and others without the Government receiving any revenue from many lines of such goods. This is because they are made in Canada, and little, if any, of the raw material used in them is imported. It was felt that in such cases an excise tax should be placed on these manufacturers, as is done in England, which would ensure the Government receiving the full benefit of the increase in the customs tax. The following resolution was, therefore, passed:

"Whereas, farmers are being urged to increase production from the soil, and whereas the excise tax towards such increase should be the removal of artificial handicaps placed on agriculture,—

"Therefore, be it resolved, that in the opinion of this convention the recent increase in customs taxation on imported goods, which will increase the profits on protected manufacturers without adding to the national revenue should be accompanied by a corresponding excise tax on the output of domestic factories, equal to the actual protection involved, a policy which will add to the national revenue without further increasing the handicap on agriculture for the benefit of other industries."

Toronto-Hamilton Highway Condemned

Delegates claimed that it was unfair to tax the province to build an expensive highway from Toronto to Hamilton. It was claimed that the proposal to pay a minimum of 25¢ an hour, instead of decreasing unemployment in the cities, would tend to increase it by drawing away laborers in other callings such as agriculture to the cities in order that they might obtain work on this highway at the high wages paid. The following resolution was therefore passed:

"Whereas, the whole province is to be taxed for the purpose of building a concrete automobile roadway between Toronto and Hamilton;—

"Whereas, it is proposed that the minimum wage for labor on this highway, shall be 25¢, an hour;

"Whereas, this action will set a standard in wages with which farmers will have to approach if they are to increase the production of their farms,—

"Whereas, this will tend to further burden agriculture, which is sufficiently burdened already by the increase in provincial and federal taxation and at a time, too, when prices of all classes of farm produce and grains are tending towards a lower level;

"Therefore, be it resolved, that in our opinion no arbitrary standard of wages should be fixed in the building of said highway."

Government Work For Unemployed

The burden that is placed on farmers as a result of the tendency of both the Dominion and provincial governments to use public money to provide employment on public works for the unemployed, was discussed. It was contended that as the government is required to pay high wages the tendency is to make it increasingly difficult for farmers to obtain farm labor, and also to lay an additional burden on farmers through the increased taxes involved. The following resolution was therefore passed:

"Whereas, pressure is being put upon Dominion and provincial governments to increase the volume of employment in towns and cities even to the extent of prosecuting public works of doubtful utility;

"Whereas, said governments show a disposition to yield to such claims;—

"Whereas, the effect of such yielding must be to add to the drift of labor from the farm, where it is needed, to urban centres, where it is not needed;

"Therefore, be it resolved, that in the opinion of this convention an absolute termination should be put to hot-house forcing of urban centres to the end that labor may naturally flow back to the quarter where it is required and where if agriculture is given a square deal it naturally will flow."

The Depressed Horse Market

"Whereas, the Dominion Government has recently placed an embargo on the export to the United States of horses suitable for military purposes, and has prevented purchasers from the British and French military war departments from making purchases in Canada;—

"Whereas, the effect of this action is restricting home producers to one market, and is tending to depress a branch of agriculture sufficiently depressed already;

"Therefore, be it resolved, that this convention respectfully urge the Dominion Government to remove the restrictions enforced to the end that production be given its greatest possible stimulus."

Direct Taxation Endorsed

While approval was not expressed of expenditures which have forced the Ontario government to raise more revenue by taxation, the action of the

(Continued on page 9)



FARM AND DAIRY



We Welcome Practical Progressive Ideas

& RURAL HOME

The Recognized Exponent of Driving in Canada.

Trade Increases the wealth and glory of a country, but its real strength and stamina are to be looked for among the cultivators of the land — Lord Chatham.

Vol. XXXIV

FOR THE WEEK ENDING MARCH 4, 1915

No. 9

Have Apples Been too Extensively Planted*

A Survey of the Situation from Coast to Coast by D. Johnson, Dominion Fruit Commissioner

OVER three years ago I addressed the Ontario Fruit Growers' Association on the future of the apple industry in Canada. At that time I told them to go on planting more and more orchards, because the development of the country was such that there would be a constant and strong demand for many years to come.

I have travelled over all the fruit-producing districts of Canada during the past six months, and have been amazed at the huge plantings which exist. I knew before that Canada had some 25,000,000 fruit trees, but had never realized what these figures meant until I came in contact with the orchards, and it was pressed home to me that there was a day not far distant when Canada would be face to face with over-production.

In the famous Annapolis Valley of Nova Scotia not more than 50 per cent. of the apple trees are bearing, and those that are bearing are still young and far from yielding their maximum amount of fruit. In this valley apples are the main product of the land, and the good care that the growers are giving their trees assures us that Nova Scotia will yet produce twice as much and perhaps four times as much before many years. New Brunswick is also planting, and on the sloping bank of the St. John River are thousands of acres of young orchards that are not yet producing. Quebec is also forging to the front once more, and many acres of Fameuse and McIntosh Reds are there found producing an apple of superb quality and appearance.

Conditions in Ontario

With conditions in Ontario we are all more or less familiar. We know that in some districts, such as this, the plantings have greatly increased, while in others San Jose Scale has wiped the orchards out of existence. Nevertheless, the fact remains that one-half of our 10,000,000 apple trees are not yet bearing. It is only necessary to drive up and down the concessions north of Lake Ontario and Lake Erie and east of Lake Huron to be convinced that the orchards are just beginning to produce.

British Columbia was a great surprise to me. I had often heard of the orchards there, but when brought face

*An address by Fruit Commissioner Johnson to his own people down in Lambton Co., Ont.

to face with the revelation that obtaining in that province it was a condition I travelled hour by hour through solid orchards, kept in a state of perfection seldom seen in Ontario. It is true that they are producing only some 1,000 carloads of apples this season, yet it is only the beginning, as two-thirds of the trees are under five years of age and the other third practically only beginning to bear. The north-west States of Washington, Oregon and Idaho are in a like position, producing now some 15,000 cars. In view of these facts, I can only ask you, as I have asked myself time after time, "What of the future?"

Enough Trees Planted

I do not wish to throw cold water on the fruit-growing industry, but I do think it is time for us to take stock of the future and see where we stand. I am of the opinion that unless we can greatly increase consumption, there are enough fruit trees planted in Canada to supply its needs for many years to come. Let us take care of the trees we have, produce the finest grade we can, and I believe there is a fair return assured under normal conditions.

I know that some will not agree with me; that they will say I am discouraging orchard-booms and depressing the price of land. When out west this summer I inquired the price of a certain piece of orchard land and was told in a most discouraged tone that it would be hard to get much over \$1,000 per acre for it now, but that a few years ago it was sold at \$2,500 per



Mr. D. Johnson, Dominion Fruit Commissioner. In the article adjoining Mr. Johnson discusses present conditions in the fruit industry. After reviewing conditions from coast to coast, he believes that "go slow" is a good rule to govern growers in their future planting.

acre. In Lambton it would not have sold for more than \$100 per acre.

Lambton has been mercifully spared from the blighting effects of orchard land booms. I have met hundreds of people who have been induced to buy orchard lands, such as we have here, at a valuation ten times as great as we ask. Such booms can only have one effect, and that is one of serious loss and discouragement. I trust that such a catastrophe will never fall to the lot of our county, but that fair and full valuation will always be placed upon orchard lands in this district.

It may be said that we have many thousands of acres yet unplanted. My advice is to curtail planting until such time as the consumption of fruit increases to meet the plantings of the present day. If we are going to have two or three times as much fruit in the next ten or fifteen years as we have at the present time, it is going to take no prophet to tell the final outcome. This year we find thousands of barrels of apples wasting in our orchards. This, of course, was caused by the abnormal conditions, which have never existed before.

The argument is often advanced that 50 per cent. of the



Young Orchards Splendidly Tilled, Are Characteristic in British Columbia.

Are we facing overproduction of fruit in Canada? Statistics would seem to verify this claim of many growers. Of the splendidly tilled orchards of British Columbia, for instance, two-thirds are under five years of age and the greater proportion of the remainder are only beginning to bear. This orchard scene in the Okanagan Valley is characteristic of all of British Columbia's fruit areas. Heavy planting, too, has been the rule in Eastern Canada.

Cultural Methods in the Orchard*

HAROLD JONES, GRENVILLE CO., ONT.



Prospects for a Bumper Crop in an Essex Co., Ont. Orchard.

orchards now planted will never produce. This has been the case in the years which are past, but we trust it will not continue.

A more important question than that of production is now before us—that of marketing. Up to the present time very little has been done in this particular line. It is true that the late Mr. McNeill did perform a most valuable work for the fruit growers of Canada in preaching cooperation from one end of the Dominion to the other. The result of his mission has been the organization of large cooperative associations, scattered throughout the various provinces, which have long ago justified their existence. To-day market conditions are so unbalanced that much fruit is left unharvested, yet the cooperative associations are, in most cases, receiving a fair return for their fruit. To my mind, the first and most important step in marketing is the organization of the producers. Now the time has come for these associations to go a step farther, that is, to proclaim to the world the quality of their fruit, or, in other words, to advertise.

Government Advertising

It has often been suggested that this work should be performed by the Government, and last fall the Government expended some \$12,000 on this work, and the advertising campaign which has been carried on over the whole of Canada brought in over 25,000 letters of inquiry. Your county has already given several thousands of dollars for advertising Lambton fruit and fruit lands. I venture to say that if \$1,000 had been spent this year in advertising Lambton apples in the north-west provinces or in the large consuming centres of the east, with definite prices and the names of associations or shippers, who would supply at these prices, every barrel of apples produced in the county would have been marketed at a price of from \$9 to \$2.25 per barrel, f. o. b. shipping point.

Would it not be possible—in fact, I know last year it would have been possible—for associations to have shipped their apples direct to some large consuming centre, and, by spending a few hundred dollars in vigorous advertising, to have marketed their whole crop straight to the consumer, thereby giving our friends in the cities a chance to enjoy the fruits of our orchards at the lowest possible cost? If, for instance, associations had loaded their apples in crates, as is being done largely in the west at the present time, and had their own representatives in Quebec, Toronto, Ottawa, or Montreal, they could have sold carloads every day at \$2 per barrel. This would have returned to the grower a reasonable amount for his fruit.

IN the early days of orcharding in Ontario, the soil, rich in humus and undepleted of its natural resources, gave satisfactory crops of fruit with trees growing in sod. As time went on, with inter-cropping of hay and grain, the soil became depleted of its humus and readily available plant food, and it became more compact and less able to hold moisture, until the trees declined in vigor and productiveness.

Many of these orchards were stimulated into vigor again by breaking up the sod and adding fertilizers mostly in the form of barnyard manure and giving cultivation through the growing season. This system, although it doubled the crop in many instances, gave unsatisfactory results in some cases. It appeared to extend the growth of the tree too late in the season and retarded the ripening of the wood and the trees were unable to endure the low temperature of winter without injury. Root killing was also observed on soils uncovered with vegetation when there is very little or no snow covering.

To obtain the good results of thorough cultivation and eliminate, as far as possible, the unsatisfactory results mentioned, cultivation should cease at or near the close of the growing season of the tree and the land should be sown to some cover crop. The length of time that cultivation may be safely continued varies in different sections of the province, but a study of the growth of the tree and the temperature in winter are the two factors to be considered when deciding to cease cultivation.

The season of growth in most woody plants extends scarcely to midsummer; most, if not all, of our native trees cease growing very early in the season. This is no doubt the reason why they endure the winter so successfully. Trees that complete their growth early in the season and mature their wood and terminal bud well are said to be "determinate" in their growth, while those of the opposite habit, like some of the Japanese plums, are said to be "indeterminate." It is, of course, apparent why plants of indeterminate growth are not hardy, as a rule.

It has been observed that practically all of our hardy apple trees are quite "determinate" in

*Extract from an address at the recent annual convention of the Ontario Fruit Growers' Association.

their growth, forming their terminal bud early in June. It has also been observed that the vigorous growth of a tree can be prolonged past its normal period by excessive cultivation and fertilization.

The active normal growth of the tree is completed early in June. Then it settles down to ripen and mature the newly made tissue and store up plant food in its cells for the early forcing of leaf and flower the following spring.

In the colder sections of Ontario cultivation should cease at or about the time that normal growth is completed, say the early part of June, and the cover crop sown. For some time after this the trees receive the full benefit of the cultivation before the cover crop has made sufficient growth to take up and hold the excess moisture and liberated plant food.

The cover crop to use is best determined by the character and the richness of the soil, and the vigor of the trees in the orchard. If the trees are growing slowly and the land is in a good state of tilth, it is advisable to use a nitrogenous crop, such as red clover or vetch, with applications of fertilizer. If on the other hand the trees are making a luxuriant growth and the soil is a heavy loam, some non-nitrogenous crop should be used, such as oats, rye, buckwheat, and others.

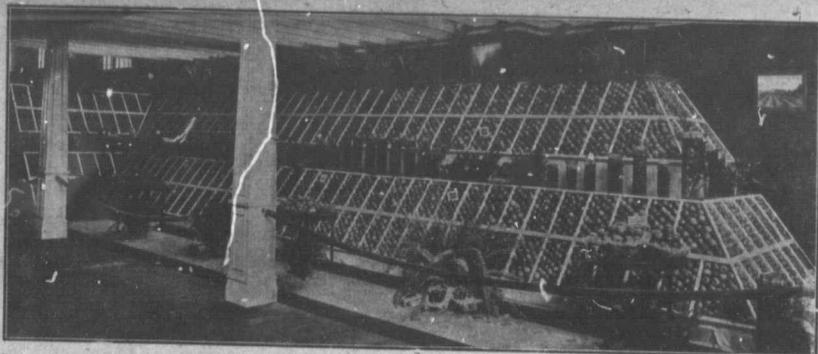
A good combination for most soils where the clovers do not make a good stand is six to 10 pounds Dwarf Essex rape and 20 pounds of common vetch to the acre. The rape should be cut in September, when the vetch will then grow to cover the ground for winter. A cover crop in connection with cultivation is valuable in many ways. It improves the physical condition of the soil, prevents hard or clay soils from cementing or puddling, and holds the rains or snow until they have a chance to soak into the land. It prevents, also, alternate freezing and thawing of the surface, adds humus that improves the chemical and mechanical condition of the soil and renders locked up plant food available.

Some unfavorable reports have come to my notice where cabbages or rape were used as a cover crop. In other cases the results have been very satisfactory, notably in my own orchard and at the Central Experimental Farm, Ottawa.



The Power Sprayer Cams as a Result of Orcharding on an Extensive Scale.

When the orchard consisted of a dozen or so apple trees to the side of the farm house even a hand sprayer was considered sufficient. To-day with the orchard in many cases covering the whole farm, and the market demanding clean fruit, the power sprayer is essential; only with it is it possible to cover an orchard in the few days that Nature allows. The tower, shown on this sprayer in use near St. Thomas, Ont., enables the operators to thoroughly cover large trees with the spray solution.



One of the Striking Exhibits of Fruit at the Canadian National Exhibition in Toronto Last September was the One Here Shown. Exhibit arranged by the Fruit Branch of the Ontario Department of Agriculture.

How the Grower May Increase Orchard Profits

It May be Done Most Expeditiously by Reducing Cost of Production

BY PROF. H. A. SURFACE, PENNSYLVANIA

GOOD fruit land is generally cheaper than rich or more level farm land that may be less desirable for fruit production. Proper fruit soil produces trees of good size, and fruits of best quality and in large quantity; thus reducing the relative cost of production. Proximity to market or shipping station, to reduce the cost of hauling, is an essential factor.

Where there is good air drainage or local elevations, spring frosts do not so often injure blossoms or tender buds or fruits, and thus there are more frequent and larger crops, resulting in relative cost reduction.

Well-drained soil means healthy, vigorous trees. Wet soil means poor trees, and worst of all, apple tree diseases, such as root rot, collar blight, and others. Instead of a good income from a fine crop on healthy trees money must go to replace dead ones, or there will be very serious loss that comes from leaving vacant places in the orchard. Wet orchards should be well drained; but the economy of dynamiting is yet to be proved in general, for we know where it has been very unsatisfactory.

Good varieties are quoted constantly in price above poor kinds. Compare to-day's quotations on Stayman Winesap, Rome Beauty or Baldwin, with those of Ben Davis, Smith Cider or Shockley.

Adapted varieties give finer fruits and larger yields than those not adapted to the region, and of course as these sell more easily and for higher prices, they help to reduce the relative cost. A very important economic consideration is that it pays all commercial growers of a community to put their efforts into growing perfectly only those varieties (often but one or two) that are decidedly best there.

Healthy, young trees from reliable nurseries mean ready, vigorous growth without stunting by transplanting, and large early crops, if properly handled. Trees not true to variety ordered may mean years of loss.

Plant at sufficient distance, and on the square system. The writer now plants all permanent apple trees forty feet apart and all others at twenty. This permits profits from inter-cropping, cultivating each direction, and the development of large trees with full crops.

Low-headed trees cheapen the cost of production by reducing the work of pruning, spraying,

thinning and picking; and prevent heavy loss by wind falls, as well as mulch their own soil.

Reduce the necessity for expensive commercial fertilizers by growing legume cover crops. The writer uses chiefly crimson clover and buckwheat and harvests the latter. One orchard gave 84



A Sprayer to Fit Every Need.

Such seems to be the motto of manufacturers of spray pumps and spray supplies. The small barrel pump enables the farmer with a small orchard on the side, to do effective spraying with a machine that represents an investment in proportion to the importance of the orchard side line. One thing is sure—if we have an acre of orchard we can't afford not to spray.

bushels of buckwheat this year. In another the crimson clover was sown with cow horn turnips, and we had a good stand of the former, with over one hundred dollars' worth of excellent turnips, without detriment to the young trees.

Nitrogen, the expensive element in commercial fertilizers, is not needed where the legumes are grown in an orchard. We need only muriate of potash and acid phosphate, and need but little of these where orchards are comparatively young and occasionally cultivated.

Pruning can be done at any time of the year, if not too severe; and necessary severe pruning can be done at any time during the dormant

season. Thus it is a "filler" job that can be done with economy when more important work is not pressing.

For cover crops we grow our own seed between the cultivated tree rows in the young orchards, and in any orchard that will not produce fruit that year.

A uniform head of symmetrical trees helps to maintain the income by ensuring fruit where otherwise there would be vacant spaces.

Plant varieties to ripen in succession, and thus keep the pickers engaged.

We spray as many times as are necessary, but no more. This is four (or at most, five) times in the year for pomes, and three times for drupes.

Owing to our low-headed trees the thinning is done easily and quickly, mostly from the ground, and chiefly by women and girls, thus greatly reducing the cost.

There is much less financial loss from fallen fruits from trees with very low spreading tops, because less droppings and less bruising.

Low trees permit economy in time and methods of picking.

Cooperative or wholesale buying of supplies and selling produce helps much in reducing the cost.

Our friends may expect us to recommend the elimination of spraying for the scale by the introduction of scale parasites (of which much recently has been printed), but we can not yet be sure that in all orchards they will do their work as thoroughly as they have in our own and in hundreds of others we have carefully inspected in Pennsylvania. It is surely worthy of careful consideration. We have discovered and published regarding certain entomological conditions, and have been criticised by a few who have been too narrow to understand or believe them, and of course by certain agents of scale-spraying materials. We have seen enough to give firm faith in the adequate reduction of the San Jose Scale by minute internal hymenopterous parasites. If any unprejudiced person will come to Harrisburg, Penn., and go with me to see a score or more of orchards that have been cleaned of San Jose Scale by the parasites, and then not agree that these natural agencies have been efficient in suppressing the scale I am willing to pay the expenses of the trip. Hence, our recommendation to "Reduce the cost of production by the application of modern methods."

*Extracted from an address delivered before the members of the Niagara Peninsula Fruit Growers' Association.

Dwarf Trees in a Commercial Orchard

A. A. DERRICK, YALE-CARIBOO DISTRICT, B.C.

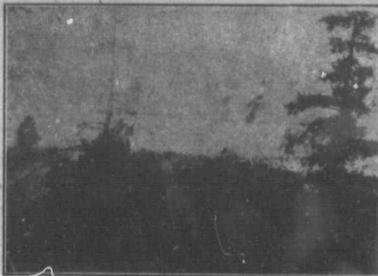
IN January, 1905, I met Mr. J. M. Robinson in Winnipeg. Mr. Robinson was manager of the Summerland Development Co., of Summerland, B. C., and, as he put it, he was down in Manitoba that winter selling the "cream" of the property. Of course the cream of a proposition, such as Sir Thomas Shaughnessy, et al., were backing up, should be good buying, after the manner of "Shut-your-eyes-and-open-your-mouth" venture, as I was engaged in business in Winnipeg at the time, I decided to buy a lot from the Summerland Development Co., and let them plant and care for it a few years, until I was ready to get "Back-to-the-land." I did so, and did not visit my future fruit farm for two years.

Of course I knew what had been planted on my lot. Peaches were all the rage then, and they were stuck in everywhere between the stan-

dard trees as fillers is the tendency to fruit sooner than in the regular way. They are also much smaller than peach or other tree fillers and do not crowd the space too much. They require the same general treatment as standard apple trees, whereas a peach filler should receive quite different treatment, especially where irrigation is necessary. I have five dwarf Spy trees, but I do not find much gained by using this variety on dwarf stock. My varieties are principally Yellow Transparent, Duchess, Gravenstein, and Jonathan.

Profits From Dwarf Trees

The year 1914 was the ninth for the standards and the seventh for the dwarfs, but so far my receipts from the dwarfs far exceed those from the standards, and the expense of handling is much less. This year I picked eight boxes of apples per tree from my Jonathans and very rarely have I used a ladder in picking. The trees were a picture in them-



A Dwarf Apple Orchard in British Columbia.

A. A. Derrick, in planting his little farm to apples, followed some original ideas—he used dwarf apple trees as fillers. The row in the illustration directly behind Mr. Derrick is of dwarf trees. In the rows alongside alternate trees are on standard stock.

elves, and a source of satisfaction at all times.

Were I planting another orchard and did not want to utilize the land between trees for small fruits or vegetables, I know of no other filler from which one could reap such satisfaction as dwarf apple trees.



Dwarf Apple Trees Bear Early.

In the orchard of A. A. Derrick, Yale-Cariboo Dist., B.C., dwarf apple fillers yielded eight boxes of Jonathans to the tree seven years from setting. That their quality was O.K. the editor of Farm and Dairy, who had an opportunity to sample them, can testify.

dard apple trees as fillers. It was from them we were to get our quick returns. I had just come west from the O.A.C. at Guelph, and had some ideas of my own about planting an orchard. I had also been reading Bailey's "Fruit Garden" and Waugh's "Dwarf Fruit Trees."

Dwarf Trees Planted

When I visited my fruit farm two years later, I did not like the peach filler system, so I bought one hundred and ten half dwarf apple trees, that is, trees grafted on Doncin or English dwarf stock. An old O.A.C. friend was taking up residence in Summerland then, and he planted and took care of the trees for me. They were planted between the rows of standard trees and 15 feet apart. So far as I know, mine were the only dwarf apple trees planted at that time in the Okanagan Valley, as fillers.

Two years later, when I came to Summerland to stay, I was very much pleased with my dwarf apple fillers. They were all growing well except five McIntosh Reds, which had died. I do not know whether this variety does not take well to dwarf stock or not, but the other varieties selected are now not only thrifty, but the dwarf stock apparently produces a finer fruit than standards of the same variety.

Of course, one of the main objects in planting

-A Season's Test of Soluble Sulphur

J. G. MITCHELL, GREY CO., ONT.

SOME seven years ago I was induced to experiment with what at that time was considered a new spray, lime-sulphur. As soon as I heard of this spray, I felt confident that it should soon do away with the troublesome Bordeaux mixture. The professors at Guelph said that it was not safe to use as a summer spray, and practically forbade its use, but the splendid results obtained with lime-sulphur over the old spray were so pronounced that the following season it was strongly recommended by growers and professors, and became the standard as a fungicide.

However, growers have been asking and hoping that some more convenient way of using the sulphur spray would be devised and we now have this in the latest form called "Soluble Sulphur." In my opinion it is just as much superior to the old Bordeaux spray.

In the way of convenience there is no comparison. I always used to dread the loading and unloading of the heavy 600 pound barrels of lime-sulphur, and the men would nearly go on strike when asked to handle it. Two years ago I got the spraying done for about half what it cost the previous year. I used two barrels of the lime-sulphur solution and soluble sulphur for the rest of the spraying. As soon as we used the first hundred pounds of soluble sulphur, I could see there was no use asking the men to go back to the old spray. We had absolutely no trouble with nozzles clogging and never had a stoppage from the time we commenced using soluble sulphur.

Of course I insisted on

the spray tank being cleaned out every night, all the water being strained, and a screen kept over the feed pipe to the pump. We filled the spray tank about half full of water, then put in our soluble sulphur, eight to 10 pounds to 40 gallons. This was well agitated by the time the tank was filled. We put this spray on just as the buds were bursting, in fact on some trees the blossoms were nearly open. In the summer spray we used from one, to two pounds to 40 gallons of water, putting the soluble sulphur in when the spray tank was half full of water, and adding arsenate of lead last, two and a half pounds to forty gallons. Doing it in this way there is absolutely no trouble. Where aphids appeared in our orchards we used nearly two pounds of soluble sulphur to 40 gallons for summer spray, and only about one pound in orchards where there was no aphid. Scab and fungi were controlled perfectly in all our orchards. I do not consider it necessary to use the mixture stronger than one and a half pounds to 40 gallons, except for aphid.

Our McIntosh Red apples were absolutely clean and beautifully colored; 99 apples out of every 100 went into number one boxes. The Greenings were just as nice, having a lovely bright glossy appearance. If these varieties come out in this way there is no need to worry about others. We also had good results in fighting aphid, having practically no loss from this pest, while in 1913, when we used lime-sulphur, our loss was well up to two thousand dollars.

It is now a recognized AI spray material.



The Trappists are Good Orchard Men.

In Farm and Dairy's Poultry Annual was an illustration of the colony poultry houses of the Oka Agricultural College, in Trappo, Que. Here we have illustrated another activity of the Trappist monks—as skilled orchard men operating a power sprayer.

The United Farmers of Ontario

First Annual Convention Held Last Week in Toronto—Over 2,000 Members Reported and 44 Branches Organized—Many Districts Awaiting Organizers.

THE farmers of Ontario are organizing rapidly to obtain a more equitable adjustment of social and economic conditions. This fact was revealed last week at the first annual convention of The United Farmers of Ontario, held in Toronto.

The movement is destined to have a far-reaching influence. It was launched last spring at a largely attended meeting of farmers held in Toronto. The real work of organization did not commence until last fall. In the short interval that has elapsed 14 branches of The United Farmers of Ontario have been organized, and 15 Farmers' Clubs, 13 Granges and two Farmers' Associations have been affiliated with the central organization. This makes a total of 44 local branches, with a membership of over 2,000 that are already affiliated with the central or provincial organization. In addition over 50 districts in Ontario have applied for speakers. These will be visited as fast as organizers can be provided. Within the next year the membership should exceed 5,000 to 6,000 farmers, located in all parts of Ontario. No one acquainted with the movement ventures to predict what the final outcome will be. It seems assured, however, that it is destined to rival with in the next few years the great farmers' movement in western Canada. That is the ideal that the officers of the organization have before them.

The Farmers' Company

But the foregoing is by no means all. Reports presented showed that during the past year the United Farmers' Cooperative Co., Ltd., which had been organized by The United Farmers of Ontario, had conducted a large business and that it was helping to bind the branch organizations into a strong compact whole. A full report of the annual meeting of the company is published on page 8 of this issue.

Spirit of the Convention

The spirit of the convention was expressed by Secretary J. J. Morrison, when he said: "The farmers of Ontario are ready to do their duty. We realize at last that every industry is organized except ours. Other industries have been beating us out because through their organization they have sifted out their best men, many of them originally from the farm, who are promoting their interests, in many instances, at our expense. We realize this now and are ready to work to uphold our own interests. Our organization at first may be imperfect but we intend to perfect it and to effect a great improvement in conditions at the earliest possible date."

One of the striking statements made was expressed by Mr. Gordon Waldron, editor of The Weekly Sun, who pointed out that the farmers of Ontario are steadily losing their influence in national and provincial affairs because of the rapid increase in rural depopulation. In 1873 there were 10 farmers in Ontario to every 3% of the urban population. In 1889 there were 11 farmers to every 6 city dwellers. In 1911 there were only 10 farmers to 13 denizens of the city. Thus the farmers of Ontario are in the minority, and their numbers are rapidly growing less,

Keen Interest Manifested—Important Resolutions Passed—Members Show a Determined Spirit to Succeed.

while the cities continue to grow in influence and power.

The subjects discussed covered a wide range. As one speaker put it, "The Farmers' Institute has done a good work in increasing production, but it has gone only about half far enough. There is a wide range of subjects that we are not permitted to discuss at Farmers' Institute meetings, but which we are now finding are of vital importance to farmers. We are free to discuss these subjects here and we must be prepared to do so free from party spirit and with a determination to see that we become strong enough to insure both political parties paying attention to our desires." This seemed to be the point of view of the between 200 and 300 delegates who were in attendance. Subjects political in character were discussed but they were not

number of important resolutions relating to these and allied subjects were passed. These are published in full on page two of this issue. Much pleasure was felt over the presence at the convention of Mr. J. B. Musselman, secretary of the Saskatchewan Grain Growers' Association, who spoke on several occasions, and of Mr. J. S. Woodsworth, of Winnipeg, the secretary of the Canadian Welfare League.

President's Address

President E. C. Drury of Barrie, made a striking and effective presidential address. "We are told to produce more," said Mr. Drury. "Personally, I cannot see how we can accomplish this. Lack of labor and lack of capital stand in the way. What can the nation do? Just this: Let it not give artificial aid but remove artificial restrictions. The farmers stand ready to produce more, but we must be set free. There is no other industry in this country that could exist for six months under the restrictions agriculture has faced for thirty years. What we need is not to be told our business, but to be given just a little economic justice. The remedy is simply to disburden us."

Farmers. Mr. Drury said, are unable to pay the wages set upon farm labor. He urged more definite and practical cooperation with the cutting out of the useless middleman. The useful middleman, such as the local storekeeper, had a very necessary part to play, as he did not come in the "useless" class. "I look forward to the day," said Mr. Drury, "when we will have in every city distributing points to distribute direct and at no more than cost our farm-products to the ultimate consumers."

Mr. Drury made a great hit when he suggested that the government might profitably institute a campaign of education for the benefit of the editors of the big city dailies, who he thought would profit could they be placed on farms for a few weeks and given a practical first hand acquaintance with farming conditions.

Speaking of the recent increase in the tariff, Mr. Drury said that he did not believe it was likely to improve agricultural conditions. The existing conditions which have brought about the great decline in rural depopulation have grown up during the last 30 years under the present high tariff, which has been maintained hitherto by both political parties. "For my part," said Mr. Drury, "I cannot see how a further dose of the same medicine is going to improve matters. Instead, it seems, to show a lack of knowledge of the fundamental causes of existing conditions on the part of the government."

While making it clear that farmers are workmen themselves and therefore are in a position to sympathize with working men in the cities, Mr. Drury denounced all such attempts on the part of city municipalities and the government to create work for the unemployed as building concrete highways from Toronto to Hamilton and conducting unnecessary public work and paying the working men a minimum of 30c an hour. He said that such action would



Directors of the United Farmers' Cooperative Co., Ltd.

Most of the directors of the United Farmers' Cooperative Co., Ltd., as photographed last week in Toronto, especially for Farm and Dairy, are here shown. In the front row, from left to right, are shown E. C. Drury Barrie; W. O. Good, Paris; J. J. Morrison, Arthur, Ont. (the secretary); Anson Groh, Preston (president and general manager); George Carlaw, Warkworth. Second row: S. A. Beck, South Cayuga; J. E. Anderson, Mountain View; O. E. Bennett (with glasses), Toronto (the treasurer); Lawrence Schmitt, Park Road; Col. J. S. Fraser, Barford; Arthur Vance (the young man), Forest, Ont. This company handled over \$35,000 worth of business during January alone. A report of its operations is published on page 8 of this issue.

handled in a party spirit. Both political parties were praised and condemned for various acts. Thus the gathering slowed its independence of thought.

Character of the Gathering

The delegates were from all parts of Ontario, from Glengarry County in the east, to Essex County in the south-west, and the Temiskaming and New Ontario districts in the north. Bruce county was particularly well represented. Delegates appeared to be present from most of the counties of the province. Most of them represented local farmers' clubs and subordinate granges and used their note books freely in order that they might return with full reports for the members of their local organizations.

Subjects Discussed

The delegates centred mainly around tariff matters as they relate to the farmer, the Made-in-Canada campaign, improving the methods of organization, the tax burden carried by farmers, and the proposal to tax land values. A

(Continued on page 12)

Steel Truss Barns



FREE Building Service to Farmers
Write for information

THE METAL SHINGLE & SIDING CO., Ltd., PRESTON

Port Rowan, Ontario.
I am well pleased with my barn, and do not think that it could be improved upon. It is durable, neat and roomy, and you have there all that anybody could ask. I consider that I have the best barn in Norfolk Co., bottom and top.

R. MILLER.

Ontario Farmers Prove Good Business Men

The Annual Meeting of The United Farmers' Cooperative Company Limited—A Large Business has Been Done—Encouraging Reports Presented—Extension of the Business Advocated.

MARKED success has attended the efforts during the past year of The United Farmers' Cooperative Company Limited. This is the company which bids fair ere long to become to the farmers of Ontario what the great Grain Growers' Grain Company, of Winnipeg, has been to the grain growers of Western Canada.

A year ago when it was decided to organize the farmers of Ontario into an organization to be known as The United Farmers of Ontario, it was also decided to form a company to be known as The United Farmers' Cooperative Company Limited. This company was to assist the various farmers' clubs, subordinate granges and other farmers' organizations affiliated with the United Farmers of Ontario in the purchase of their supplies. It was hoped in this way to eliminate some of the profits of the middlemen, and to enable the farmers of Ontario to save thousands of dollars a year through cooperative effort.

On Wednesday night of last week the first annual meeting of the company was held. It took place the evening before the annual convention of The United Farmers of Ontario. The room was filled with shareholders of the company, who were in attendance from practically all parts of Ontario, including New Ontario. These shareholders were anxious to find what the company had been doing during the past year. At the close they appeared to be thoroughly satisfied with the reports presented.

Financial Statements

The reports presented showed that for several months after the company was organized last March, the officers were kept busy obtaining their charter, adopting their by-laws, preparing price lists and otherwise arranging for the business to be done by the company. The real business of the company did not commence until fall. In September, sales amounted to \$827, in October to \$6,256, November, \$8,214; December, \$17,070; and January to \$24,761. February's sales will show a large increase over those of January. Thus it was shown that the sales of the company had doubled almost every month.

Owing to the long period during the first part of the year, when it was impossible for the company to do business, the company was unable to show clear profits on the year's operations. During the month of December, however, it came within \$20 of meeting its expenditures. In January it showed profits of \$181 on the month's operations. For the five months from September to January inclusive the loss on current expenses amounted to only \$215. As the volume of business increased the expense of doing business had decreased from over three per cent. in October to less than one per cent. in January, notwithstanding the fact that considerable of the expense was chargeable to organization work.

President's Report

The meeting was presided over by the president of the company, Mr. W. C. Good, B.A., of Paris, Ont. As devoted a busy farmer, Mr. Good has although much of his time, during the past few months particularly, to the affairs of the company. In his presidential address, Mr. Good pointed out that the company had had great difficulties to contend with. One of these was the difficulty of obtaining trained men for positions of responsibility. Men were required who were not only skilled in the special work which they had to undertake, but who also understood the true principles of cooperation and who were ready to give unselfish, zealous service.

As a means of strengthening the work of the company, Mr. Good suggested the conduct of a campaign of cooperative education through the agricultural press, the issuing of an official organ or bulletin intended to give information and inspire the local branches and the stimulation of their interest, investigation and discussion through the local branches.

Mr. Good pointed out that the local associations have two difficulties to contend with, first the question of arranging methods of financing, and second the question of warehouses. He thought that the central company should endeavor as far as possible to assist the local branches in overcoming these difficulties. In conclusion, he pointed out that the chief benefit derived from the cooperative movement was in the development of character which enabled men to work together harmoniously and unselfishly for their joint interests.

Directors' Report

The report of the Board of Directors was presented by Mr. Anson Groh, of Preston, the vice-president. The report stated that the business of the supply department was in a very satisfactory condition, and promised that before long a large part of the indebtedness incurred in connection with the work of organization would be wiped out. In part, the report read as follows: "We are confident that with our perfected organization we shall have added business in other lines such as rubber, tin, sheet metal goods, fencing, fertilizers implements, vehicles, seeds, etc. Therefore, if we do nothing more than confine our attention to those lines for which we have already made arrangements, our prospects are most gratifying, and if a follow up the work we have commenced and in addition give some attention to the sale of farm produce, our usefulness should greatly increase."

"Up-to-date we have not been able to give sufficient attention to the selling end of our business. Either more capital will have to be subscribed (Concluded on page 24).

SYDNEY BASIC SLAG

To get the best results out of your land you must use Fertilizer. Practically every farmer now realizes this. The question then is what is the best Fertilizer to use. Hundreds of the leading farmers in Ontario have used Sydney Basic Slag during the last two years and have got as good results as from Fertilizers costing from \$10 to \$15 per ton more money. If we have no agent in your district we will send you a ton direct from the factory for \$20, delivered free at any Station in Ontario, cash with order.

Descriptive literature on application to

The Cross Fertilizer Co., Ltd.

SYDNEY, NOVA SCOTIA.

AGENTS WANTED IN UNREPRESENTED DISTRICTS

INCREASE YOUR PROFITS BY SPRAYING

USE ONLY THE BEST SPRAYS

SOLUBLE SULPHUR

The Scientific Powdered Spray. Convenient and Economical. Safe and efficient. No leaky Barrels—No waste—No freezing. Keeps indefinitely—Sticks like Paint.

DON'T PAY FREIGHT ON WATER

See our special Bulletin on Soluble Sulphur. Let us show you what thousands of Ontario's best Fruit Growers say of Soluble.

LIME SULPHUR

The clear and reliable Solution—Highest in Baume test—Uniform—The Pioneer Brand—Old and Reliable.

ARSENATE OF LEAD

The kind that mixes easiest. Highest Analysis in Arsenic—Kills best and quickest. It sticks and does not burn foliage. Guaranteed.

SPRAY PUMPS

The kind that have power. **BEAN PUMPS** are famous for capacity—Pressure Durability—Efficiency and low cost of maintenance.

THE DUPLEX leads all Power Outfits in these necessary requirements.

MAGIC No. 9—Largest Hand Pump.

LITTLE GIANT—Most Powerful Barrel Pump.

Ask for Catalogue

Sprays That Have Quality—Niagara Brand

Niagara Brand Spray Company, Limited

BURLINGTON

ONTARIO

Ontario Farmers' Views on Public Issues
(Continued from page 2)

government in raising a portion of the revenue by a direct tax was endorsed, because it will enable the public to see how the money is raised and how much which would be the case were indirect taxation levied. The following resolution was therefore passed:

"Resolved, that we, the organized farmers of Ontario, view with pleasure the courage of our provincial treasurer in recommending a direct tax to meet our provincial requirements;

"While much has been said against direct taxation, it has, nevertheless, much more to commend it than many of the indirect systems of taxation which have been employed to produce a revenue; and we, as the organized farmers of Ontario, desire to be placed on record as being heartily in favor of any direct equitable form of direct taxation.

"We believe, further, that as an emergency measure, a more generous contribution to our provincial revenue might be had from a graduated income tax."

Railway Bonuses Denounced

"Resolved, that in the collective judgment of this body representing in annual convention assembled, The United Farmers of Ontario, that the policy so largely pursued in the past half century of private governmental assistance to private interests to assist in the construction of railways, is pernicious, and against the best interests of the people as a whole;

"And, further, that we urge upon our governments, both Dominion and Provincial, that no further aid of any kind be granted to private individuals, corporations or companies, in the construction of railroads.

"Resolved, further, that copies of this resolution be sent to Sir Robert Borden, the Hon. Frank Cochrane, Minister of Railways, and Hon. Mr. Hearst, Premier of Ontario."

Let Cottonseed Meal In Free

"Inasmuch as the importation of cotton seed meal is subject to the restrictions of the dumping clause of the Canadian customs tariff, as though such meal were manufactured in Canada, although such meal is not and cannot be manufactured in Canada. Therefore be it resolved, that it be ascertained if the interpretation of the customs regulations restricting this importation is correct;

"Further, be it resolved that if such interpretation is correct that steps be taken to alter the regulations.

"Further, inasmuch as a tax is being imposed upon cotton seed meal, when such meal can but stimulate the production of live stock at this needed time, therefore, be it resolved that the attention of the government be called to the matter and that the government be respectfully asked to leave cotton seed meal free of duty."

Changes in Train Service, Canadian Pacific Railway

Effective March 8th, 1915

Train 605 leaving Havelock 8.30 a.m., arriving Peterborough 9.17 a.m., and train No. 606, leaving Peterborough 6.30 p.m., arriving Havelock 7.15 p.m., will be withdrawn.

On and after effective date, above trains will run only between Peterborough and Port McNicholl.

Particulars from Canadian Pacific Ticket Agents, or write M. G. Murphy, District Passenger Agent, Toronto.

Don't think you can buy cheap food with good flavor. If you buy bran at \$2 less because of meanness, you lose \$4 or \$6.—J. H. Crisdale.

BARNs THAT SCATTER LIGHTNING

Yes, we mean just that. If you want to know about a reliable

Baru Roofing

that is fire, lightning, rust and storm proof—write us. We'll give you some hard facts that ought to turn you against wood and convert you to metal. Give us a chance—write us.

THE METALLIC ROOFING CO., LIMITED

MAUFACTURERS
TORONTO and WINNIPEG

Johnny-on-the-Spot

"Johnny-on-the-Spot," on skids or on truck, will take care of all your churning, separating, cream, pulping, churning, washing, etc.

Stop wasting your time and energy in useless machinery. Let "Johnny-on-the-Spot" do it—copy of the famous Gilson "Cross Like Binky" line—high quality engines at a low price. WRITE FOR CATALOGUE AND FULL PARTICULARS. ALL SIZES

Gilson Manufacturing Co.
Limited
2310 York St., Guelph, Ontario



This Competition Will Close March 31st, 1915

In response to many requests from Farmers all over Canada, it has been decided to postpone the closing date of the competition to March 31st, 1915 - this date is ABSOLUTELY FINAL.



\$500.00
in Prizes

All residents of towns and cities absolutely barred. The prizes are offered for an article giving the best reasons or arguments

"WHY AN AUTOMOBILE IS PROFITABLE TO A FARMER."

There are absolutely no strings attached to this contest but we want to know the views of people on farms who would like to have an automobile or who have one.

The judges will be: Mr. John Weld, proprietor Farmers' Advocate, London, Ont.

Mr. George Bertram, Vice-President Canadian Farm, Toronto.

F. Albany Rowland, Advertising Specialist, Toronto.

Mail your essay as soon as possible, but not later than

March 31st, 1915

McLAUGHLIN CARS

are built in Canada, by a Canadian Company, with over forty-five years' experience in successful vehicle manufacturing.

Each Car is equipped with the famous McLaughlin Buick VALVE-IN-HEAD MOTOR, noted for its Silence, Economy and Power.

The literature describes these cars in detail and will be gladly sent on request.

THIS NAME PLATE IS YOUR GUARANTEE

1915



CARS

McLaughlin Carriage Co., Limited, Competition Dept. Oshawa, Ont.



Model C25 Touring Car, 25 H.P. cylinder motor, 186-inch wheel base. \$1,750. L.O.A. Oshawa. "Passed and approved by the Canadian people."

McLaughlin Carriage Co., Ltd. 1915.
Competition Dept., Oshawa, Ont.
I wish to enter my name as contestant for your prize competition.
Name
Address
Province
Occupation
Peterboro Farm and Dairy, March 4th.

YOU Have Many Uses For This Machine!

We are frank in telling you that a SPRAMOTOR, rightly used, will earn its cost the first season and pay you a handsome profit besides.

Our SPRAMOTOR is a very adaptable machine—one that will benefit you in many ways. It saves exhausted trees and row crops with equal certainty, destroys weeds, kills rot, blight, canker, lice, beetles and all parasites.

It throws paint or whitewash on to buildings twenty times as quickly as by hand and does a better job. Used with disinfectant it protects horses and cattle from biting, tormenting flies and lice.

Spramotor

It is not a SPRAMOTOR unless we make it!

reduces the percentage of loss in fruit over 80% as shown by Government tests in 19 different orchards. Used on potatoes, a SPRAMOTOR has increased a yield of almost nothing to 400 bushels an acre.

The SPRAMOTOR stands unequalled in the world as one of our effective spraying machines. It has won over 100 Gold medals and First Awards against all comers. Twenty distinct patented improvements on the SPRAMOTOR that no other machine can have. Price runs from \$8 up to \$350—dozens of styles and sizes. Let us send you FREE our valuable illustrated treatise on Crop Diseases. Postcard brings it quickly.

Made in Canada—No Duty to Pay
HEARD SPRAMOTOR CO.
3223 King St., LONDON, CAN.

Progressive Jones says:

"Be Sure to Use Well-Mixed Fertilizers"

ONE day a man said to me, "Jones, why don't you tell the farmers to be sure and use well-mixed fertilizers?"

Well, I thought I had done so, but perhaps I didn't do it often enough. You see, friends, it's important to use well-mixed fertilizers. Otherwise, your fertilizers will be strong in some places and weak in others, and crops fertilized with it will show uneven growth. Now, I've been at The Ontario Fertilizers Limited's factory and have seen

Harab DAVIES' FERTILIZERS

being mixed. I have never seen a more thorough job. Every pound of the fertilizer is in exactly the right proportions. And the fertilizer is finely ground and in good dry conditions. It is in the very best possible shape for use on the field.

Remember, friends, that cheap fertilizers are poor investments. You need the very best you can get. And if there are any better fertilizers than Harab Fertilizers, I don't know their names.

The year of 1915 will be a year of high prices for farm produce on account of the European war. Make up your mind to make your land yield bigger crops than ever before. That means fertilizer.

Saves for bumper crops,

Progressive Jones

The Ontario Fertilizers Limited, West Toronto, Canada

Seed Sowing in the Vegetable Garden

By E. Kemp Toogood

A PART from enriching the soil, the chief aim of cultural preparation is to produce a fine, firm seed-bed. This is absolutely essential for success. Beyond a fine firm level seed-bed, a sufficiently dry soil to admit of implements being used without clogging is necessary. Sowing in a pasty soil means failure.

The depth of sowing of seeds is regulated by the necessity of covering them with just enough soil to keep them moist, while preventing free access of the oxygen of the atmosphere, so that the thickness of covering depends on the size of the seeds and the porosity of the soil. Too deep sowing is very injurious. The finer and moister the soil, the shallower may the sowing be; and the larger the seeds, the more deeply should they be covered.

All hardy and half-hardy plant seeds germinate freely in a temperature of from 60 to 80 degrees, while those of the half-hardy species require a temperature of from 65 to 80 degrees. While early crops are always specially desirable, too early sowing is responsible for many losses, for seeds cannot germinate until the ground is in good condition and the weather is sufficiently warm. If sown too early, the seed either rots or produces only puny, weakly seedlings.

Moisture of Germination

A continuous supply of moisture is requisite for germination. If the soil is loose or lumpy, water cannot rise to the seeds by capillary attraction, and they may not be in close contact with the soil, so that the seed-bed should be in fine tilth and well compacted. Hence the necessity of firming down the soil over seeds either with a roller or by walking over the rows after sowing. As this firming down

of the soil enables water to rise freely from the sub-soil, it is important to restore to the loose surface-mulch by tillage directly after the seedlings have appeared, for the longer the surface remains compacted, so much the more will the soil moisture evaporate. A few quick-growing seeds, such as radish, cabbage, and turnip, may be sown with those of the slower germinating kinds to mark the rows, and admit of earlier tillage between the lines, economizing soil-moisture.

Slowly-germinating seeds, like snap and celery, must be sown thickly to ensure the seedlings having sufficient lifting power to break the crust of soil which forms on the surface while they are in the ground. By comparison with the expenses of rent, labor, etc., the cost of seed is very trifling, and that thick sowing of all crops is desirable to eliminate risk of failure, and to allow of greater selection in thinning out, when only the best plants should be left.

Fertilizer and Germination

It is important that seeds coming into contact with concentrated artificial fertilizers applied in quantity, especially so with nitrate of soda and muriate of potash, though sowings are not affected by their casting of ordinary quantities of chemical manures. The use of an artificial fertilizer in the drill is decidedly risky.

Sowing in lines by means of a drill saves time and labor, greatly reduces the cost of after-tillage because admitting of the use of wheeled implements, and ensuring a better preparation of the land, since a drill cannot be worked in lumpy, ill-prepared soil.

Seed-beds and seeds sown in frames and pits require lightly shading during the heat of bright sun, especially during late spring and in summer.

Shall the Producer Retail His Fruit?

Prof. J. W. Crow Answers in the Negative

IS THERE a possibility of producers' organizations going into retailing of their fruit? I don't believe such a scheme of distribution to be either desirable or practicable. Production and selling are two different businesses. They call for a different type of men. To see fruit for which the producer receives less than \$1 a barrel sold at \$3 to \$3 looks like a big jump. Let us remember that this is customary in regard to the selling prices on any product. The expense of distributing farm products at least lies in the retailing. The profits of the push cart business are small and the expense is large. The increase in price that the consumer pays is usually a legitimate charge. I doubt if it could be any less. The only people who can market good supplies at a lower price, and make money, are the large department stores, and they do it by virtue of a great turn over.

There are over 1,400 fruit stores in Toronto. How many could be eliminated by a better system of business? How many average fruit stores would it require to do as much business as Eatons? There are too many men in the retail business. It is an easy business to get into and the retailers are crowding it to the limit and at little profit to themselves. We must eliminate more of these unnecessary retail dealers who must have a large margin of profit in order to live.

This is a problem for the consumer. We who are producers have no occasion to worry about the poor consumer in the city. When the people are in need, as is the case this year, the situation is somewhat changed. Some day, however, our civic governments will take up the question of marketing and realize that it is a public question. Then prices will decrease and consumption increase.

The grower follows his apples through his cooperative organization to the wholesale market. This is our business. It is on this side that we can effect a saving in the cost of putting the apples on the market.

The rest is on the consumer's side of the fence. We cannot influence that, except by letting consumers know that certain apples in certain quantities will be available the next week, and that certain apples should enter into consumption at that time. For instance, we could advise the consumers that winter apples, such as the Spy, should not be consumed in the fall. By keeping consumers informed in this manner we would increase consumption.

Here is a hint from the world of business. On extensively advertised products the grocers make little profit. This illustrates the possibilities of advertising our crops. I don't believe that we can reach the consumer by lowering the price on our apples. It takes a drop to the farmer a long time to reach the consumer. Supply, demand and value of the product determine its price. We can increase the retail demand by advertising. Otherwise let us leave retailing alone.

So far as rural municipalities are concerned the farmers themselves must see to it that a policy of wise economy is maintained. There is grave danger that the credit of these municipalities will be exploited for the reckless extension of electric railways and automobile roads. This movement has already begun, and if we are not very watchful, we which have exploited almost every source of Canadian credit in the past will endeavor to exploit the credit of the rural municipalities, as yet relatively unimpaired.—W. C. Good, Brant Co., Ont.





Sell Your Milk--Ship Your Cream

GARDINER'S CALF MEAL will produce you bigger and better calves at less cost than any other food for him to obtain a farm help and thereby enlarge his production, as he was being advised to do. "Our chief hope," said Mr. Drury, "is in meetings of this kind where we can come together and discuss our problems, come to some conclusions and promote effective remedies."

GARDINER BROS., [We Pay the Freight] Dept. E., SARNIA, ONT.

This Free Book Will Save You Money

It will start you on the right road to profitable poultry raising. Show you how to obtain the experience of successful poultry raisers. How to build your own brooders at small cost. The best Hoyer. The kind of feed to use for growth and winter eggs, and "Reasons Why" the guaranteed

Prairie State Incubators

hatch the greatest number of strong, healthy "chicks that live." It tells you where you can dispose of all the poultry, eggs and butter that you can produce, at the highest cash prices. Write for the Book today.

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CHURN FOR SALE

Six hundred pounds **SUCCESS** combined Churn for Sale. Fair condition. Price, \$50.00.

Toronto Creamery Co., Ltd. TORONTO, ONT.

Advertise in these Reliable Pro tested columns 14¢ per row week

FOR SALE AND WANT ADVERTISING THREE CENTS A WORD, CASH WITH ORDER

STEADY MARRIED MAN with two sons seeks situation in city or on mixed or dairy farm. Three years' highest reference from present employer. Apply Parry, E. B. No. 8, Peterboro, Ont.

The United Farmers of Ontario

(Continued from page 7)

only tend to draw working men away from the country to the cities and thereby aggravate rather than solve the problem of unemployment, while at the same time increasing the burden on the farmer and making it more difficult for him to obtain a farm help and thereby enlarge his production, as he was being advised to do. "Our chief hope," said Mr. Drury, "is in meetings of this kind where we can come together and discuss our problems, come to some conclusions and promote effective remedies."

City Distributing Centre

In answer to a question as to what the central organization was doing towards establishing a city storage plant to which farmers could consign their produce for sale, Mr. Morrison replied that nothing had been done beyond finding that it would be possible to rent a cold storage plant if required. He said that the United Farmers' Cooperative Company would be able to deal with the matter during the coming year.

Mr. W. D. Smith, of Orono, said that Toronto should be urged to establish a municipal market where goods could be consigned for sale, and where householders could purchase, and if necessary store goods in cold storage at a reasonable charge until required.

Mr. R. H. Halbert of Melancthon, who announced himself as being a Conservative, and who later was elected president of the organization, made a stirring appeal to the delegates to stand together irrespective of party politics. "Talk about patriotism," said Mr. Halbert, "it is not patriotism to let combines and mergers, the railways and protected manufacturers and the people and the governments have given \$50.00 to the railways in bonuses for every dollar they have given to agriculture. The time has come when we should realize our condition and march to the front door of parliament and obtain the legislation that our industry requires."

Retaliation by Railways

Details of cooperative purchasing of cottensed meal at a saving of six dollars per ton to the users, were given by Mr. Cohoe of Norwich. Mr. Cohoe stated that when the Dominion Railway Commission granted his firm a rebate of two cents per hundredweight which the railways had unlawfully collected on imports of cottensed meal, the companies immediately retaliated by increasing the freight rates on this article by two cents per hundredweight. When his farmers' club had been instrumental in importing some cottensed meal from the southern states the local dealer had induced the government to send it an official to inspect it in the hope that it might be condemned on the ground of quality when the high tariff wall had not kept it out.

Secretary's Report

The financial statement of the association was presented by the secretary-treasurer, J. J. Morrison. He showed receipts from membership fees of \$52.75, with no disbursements, leaving a balance on hand of \$52.75. The assets included the cash on hand and fees due from branch associations estimated at \$425.00 or a total of \$487.75, with no liabilities.

Officers Elected

The following officers were elected: Hon. Pres., E. C. Drury, Crown Hill; Pres., R. H. Halbert, Melancthon; 1st Vice-Pres., A. J. Reynolds, Sarnia; 2nd Vice-Pres., E. C. Tucker, Harold; Sec.-Treas., J. J. Morrison, Arthur; Directors: W. H. Hunter, Varney; Gordon Salisbury, Campbellford; E. A. Varney, Aultsville; R. H. Johnstone, Ormeau; F.

Gardner, Samia; Auditors: T. H. Adams, Essex; J. F. Breen, Melancthon.

Taxes on the Farmer

An impressive address on the subject, "War Time Revenues and the Farmers' Relation," was given by Mr. A. W. Roebuck, of Toronto. Mr. Roebuck showed from municipal and governmental figures that municipal, provincial and Dominion taxes on the individual in Canada amount to \$37 a year, or in the case of a farmer's family, consisting of five people, to \$186 a year. Many of these taxes are paid without the realizing how they are paid. For instance, every time a farmer enters a store and purchases a protected article, he may be paying anywhere from a few cents to several dollars in taxes either to the Government or to the protected manufacturer, these taxes having been added to the cost of the article by the importer or manufacturer.

The average Canadian tariff is now about 42 per cent. The value of the articles manufactured in Canada in 1913 was \$1,105,000,000. On most, if not all, of these articles the protected manufacturers in Canada were able to charge the public more because of the protective tariff. If they were enabled to advance their price by only 25 per cent, the additional burden on the family amounted to \$185 a year. This money all goes to the manufacturer. This made a total of \$365 per family in taxes paid by the average farmer's family in a year. Mr. Roebuck condemned both political parties for giving refusal to deal with the situation fairly, and praised the farmers of western Canada for the outspoken stand they have taken on tariff questions. In conclusion, he contended that the only way to deal with the tariff would tend to lift a great burden off farmers, because the most valuable land is all located in our urban centres.

Land Values Discussed

Following Mr. Roebuck's address, an interesting discussion took place on the question of taxing land values. Mr. J. W. Bengough, of Toronto, advocated the taxation of land values, which he stated were the greatest where population is the thickest and lowest in country districts where population is scarce. The other side of the case was presented by Mr. Gordon Waldron, editor of the Weekly Sun, Toronto, who contended that the taxation of land values was impractical, that it was being pushed by a few extremists. These men, he said, would get the farmers' organization into difficulties and discredit with the public were they to induce it to endorse the principle of the taxation of land values.

In reply to Mr. Waldron, Mr. H. B. Cowan, Editor-in-Chief of Farm and Dairy, Toronto, pointed out that the three great farmers' organizations in western Canada, after years of experience, had unanimously endorsed the principle of taxing all and rescheduling to its value. All the rural municipalities in British Columbia, Alberta, and Saskatchewan and most of the cities raise all their revenue from taxes on land values. This system has given such general satisfaction that the farmers of the west are now urging that custom taxes should be lowered and replaced by an additional tax on land values.

By means of a blackboard Mr. Cowan showed how land values are created by the community, and not by the individual, and therefore properly belong to the community. He showed that every time farmers shipped their produce to Toronto or buy articles manufactured in Toronto they are creating land values in Toronto and

(Concluded on page 16)

The Ontario Government Says



In Ontario Government Bulletin No. 26, entitled "Dairying on the Farm," this advice is given:

"In choosing a separator it is advisable to select one that is simple in construction, strong, durable, with reasonable care, and having all parts, which come in contact with the milk, easily washed."

The writer of this Bulletin might readily have had the



cream separator in mind for he chose three of the points on which the Standard is unobtainable. The simplicity of the Standard is a mechanical triumph. Its durability is insured by the use of the highest grade materials, exact manufacturing methods, rigid inspections running true as the factory, splash oil systems, etc. Its bowl and disc contain no crevices or places that are hard to clean. Washing them "as clean as a ten-cup" is no trick at all.

But there are other reasons for selecting the Standard—reasons of economy, of larger profits. But we cannot go into details. Our latest cream separator booklet does that in a way that cannot fail to open a dairymaster's eyes and lead for a copy.

The Renfrew Machinery Co. Limited
Agencies Almost Everywhere **RENFREW, ONT.**

"Made-in-Canada" and a Credit to Canada.

McDonald's TESTED SEEDS

Are all of the highest quality, hundred of varieties especially suited for Canada, all described in our handsome

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just off the press. McDonald seeds mean sure crops. Send name and address to

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Mailed Free to any address by the Author.

100 Post Cards Given Free
if you send 25c for 25 high class SEAVY CARTER cases.

In cases, grasshopper, eggs, rabbits, front, hind, and tail, and other diseases, and how to prevent them. A complete and up-to-date book on the most profitable and sure crop. The book is the most valuable you can have. It is the only one of its kind. It is the only one that is so complete and so up-to-date. It is the only one that is so cheap. It is the only one that is so easy to read. It is the only one that is so interesting. It is the only one that is so useful. It is the only one that is so valuable. It is the only one that is so cheap. It is the only one that is so easy to read. It is the only one that is so interesting. It is the only one that is so useful. It is the only one that is so valuable.

Post Card Co., Beelo, Que.

TISDELLE'S SEED CORN
High germination test. White Cap, Yellow Dent. Grown on our own Farm. Write
TISDELLE BROS., TILBURY, ESSEX CO., ONT.

RIDER AGENTS WANTED
everywhere to ride and exhibit a sample copy Hydrop Bicycle, with all latest improvements.

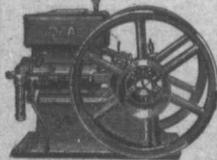
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1 1/2 to 20 H.P.
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Grain Grinders, Water Saws, Steel Saw Frames, Pumps, Tanks, Etc.

GOOLD, SHAPLEY & MUIR CO., LTD.
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The Community Beautiful

The ratepayers of Calhoun Co., Mich. have a suggestion, the adoption of which would also bring in a nice little revenue to the government. Several thousand of them have signed a petition asking that \$1,000 be appropriated each year for the planting and care of fruit trees along the highways where state reward roads have been laid. This petition has been endorsed by the Central Fruit Growers' Association, the Horticultural Society, and the Battle Creek Chamber of Commerce.

There are now 112 miles of these roads in Michigan. The repair gangs that are at work keeping the roads in condition could also care for the trees and fruit along the highways without extra expense to the county. The planting of these trees would not only protect the sides of the road from erosion, but would in the summer time be a protecting shade, add a touch of beauty and a sense of living companionship.

Save Your Wood Ashes

By A. R. Whitson

Don't waste wood ashes. Apply them, as produced, to acid soils. Wood ashes contain a large proportion of lime which makes them of value in correcting acid soils. Oftentimes land intended for clover or alfalfa can be better prepared for the crop by a top dressing of fresh wood ashes, either hard or soft wood being equally satisfactory. Such a treatment will be of especial value on marly and sandy soils.

If not allowed to leech out wood ashes are also rich in potash and so form a home source for a much needed element. Practically all of our potash supply has been imported into this country from certain of the countries of Europe now at war which fact has caused considerable concern with many here who purchase in large quantities.

Whether or not it will pay to use ashes for agricultural purposes depends upon the distance they have to be hauled. When buying ashes the purchaser should satisfy himself that the material is neither adulterated nor full of coal residue.

Easy Method for Asparagus Growing

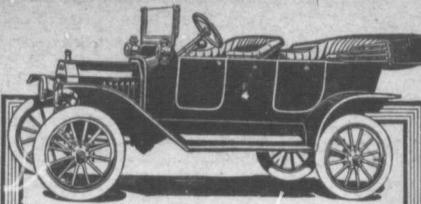
Samuel Armstrong, Peterboro Co., Ont.

Asparagus is the earliest and one of the most delicious vegetables that we have, and it should be grown much more extensively than it is. The trouble in growing asparagus in the ways ordinarily recommended is to keep down the grass. Until recently all I have ever read in farm papers and seed catalogues on the subject was to plant in rows and give clean cultivation. This method is all right for the market gardener, but the farmer must have an easier way.

For about 25 years we grew asparagus with but fair success, until two years ago, when we covered the bed with a heavy coat of coarse manure in order to smother out all grass. The result was that last spring and summer we had a crop of the finest kind and had nothing to do, only go out and pull it.

A plan suggested in one seed catalogue, I think it was Simmers, meets my experience and ideas exactly. It says: "Set plants 12 to 16 inches apart each way, cultivate first season, then in the fall or early spring cover about four inches deep with coarse manure, and continue to do this each year."

As we cannot tell how long an asparagus bed will live, a small plot say 15 feet square, set apart and treated in this way will keep a family in more than they can use during their whole lifetime.



"MADE IN CANADA"

Ford Touring Car Price \$590

Prices of other Ford cars are:
Two-passenger Runabout \$540,
Two-passenger Coupelet \$850,
Five-passenger Sedan \$1150. All cars fully equipped, including electric headlights. Prices F. O. B. Ford, Ont. Buyers of all Ford cars will share in our profits if we sell 30,000 cars between August 1, 1914 and August 1, 1915. Write Ford Factory, Ford, Ontario, for catalogue F.



Deering Manure Spreaders



"WHEN I bought my first manure spreader, I was thinking more of my horses than I was of my land. I bought a 'light weight' machine. It went all right empty, or with a half load, but it warped and jammed so after a few full loads that soon the horses couldn't move it. A spreader must have some weight if it is to do good work and last any length of time. The spreader I own now is what some might call a heavy machine. The beauty of it is that it neither warps nor jams and it works as easy when fully loaded as it does when nearly empty. As my neighbor said when he bought one like mine, 'I could spread soft coal with it.' I find it is much better for the horse, better for the land, and better for my pocketbook."

This farmer owns a Deering manure spreader built for efficient work, and field-tested in every feature. The weight is put into places where weight counts. It helps to make the machine stiff and strong. It prevents jamming, twisting, warping and sagging.

See the Deering local agent who handles these machines and let him show what the features on Deering spreaders are put there for. Or, write us for information and we will give you our agent's name.

International Harvester Company of Canada, Ltd

Hamilton, Ont. London, Ont. Montreal, Que.
Ottawa, Ont. Quebec, P. Q. St. Catharines, Ont.

These machines are built at Hamilton, Ont.

The United Farmers of Ontario

(Continued from page 19)

a comparatively few landowners are seizing for their own benefit all the wealth thus created. During the past four years land values in Toronto alone have increased \$3,000,000, or by an average of \$40,000,000 a year. This money did not drop out of heaven, but was taken out of the farmers of the country and the consumers in the cities through the enormous rents charged by city landowners. Mr. Cowan was asked what would prevent landowners from adding a tax on land values to the cost of goods just as they do their rent. He replied that they would be prevented from doing this by the fact that in all cities there is a large amount of vacant land, there being some 2,000 acres in Toronto alone. A tax on land values would force this land into use, and by encouraging the erection of buildings would tend to decrease instead of increasing rents. Those present saw that the subject was a big one, and were impressed by his hearty endorsement given it by Mr. J. S. Woods, worth, of Winnipeg, who spoke on behalf of the western farmers. It was felt, however, that it was a matter that required further consideration, and therefore no resolution dealing with it was passed.

The Duty on Fencing

Mr. H. J. Pettypiece, of Forest, who publishes a local paper, showed the way in which the new tariff is going to affect the farmer. He stated that the day before the tariff increase was announced he had an advertisement on hand from a fence company quoting certain prices for fencing. The day the new tariff was announced he received a telegram cancelling that advertisement. Shortly after he received a new advertisement, in which he noticed that the price of the fencing had been increased 5c and 6c a rod for every grade. He pointed out that this increase did not go to the government, but to the protected manufacturer.

Mr. Wm. Bacon, of Orillia, spoke on "Our Trade With the Motherland." He urged the practice of real patriotism by more extensive buying of British-made articles.

Strengthening the Organization. Mr. B. C. Tucker, Harold, Ont., secretary of the Minto Farmers' Club, spoke on the subject, "What Can the Central Do to Help the Local Associations?" He urged that the central association should give the local associations something definite to do, and advocated the publication by the central organization of a bulletin which would keep the locals in touch with the central. His club has had a representative in the city of Toronto who has assisted them in selling their live stock. He thought that the central association should promote this work for the benefit of all the locals. This suggestion led to considerable discussion, and will probably result

in the matter being dealt with ultimately by the central organization.

Cooperation in England

Mr. Geo. Keen of Bradford, gave an address on "Successful Cooperation in Great Britain" which he illustrated with lantern slides. This address was a revelation of the extent to which cooperation has succeeded in Great Britain. The sales of the Cooperative Wholesale Society of Great Britain last year amounted to \$650,179,475, and the profits to \$71,302,000. The capital of the society was \$250,568,865, or more than the combined capital of all the chartered banks in Canada. The great organization was started by a few miners, who got together under great difficulties about the middle of the last century, and arranged to buy together in a voluntary way.

Movement in the West

Mr. J. B. Musselman, the secretary of the Saskatchewan Grain Growers' Association, described the great success that has attended the farmers' movement in Saskatchewan. The total population of Saskatchewan is less than the population of the city of Toronto; nevertheless the farmers have 1,000 local organizations and more to be organized. This year they held a four days' convention at which there were 1,800 delegates. The Saskatchewan Cooperative Elevator Company controls 215 elevators, and last year handled 90,000,000 bushels of grain and made a profit of \$298,000. All the stock is owned by farmers. They have a municipal hall insurance commission, which last year carried \$25,000,000 in insurance and made a profit of \$250,000. The premiums are paid by a tax on land values.

"Can't Competers"

Mr. Musselman made a hit when he described the protected manufacturers as "Can't Competers." He said that while the farmers of Canada had to sell their produce in the markets of the world, our manufacturers show that they cannot compete with the manufacturers of other countries, and therefore that they must be protected, which means that the farmer must help them by paying higher prices for the goods they manufacture. "They talk about the inefficiency of the farmer," said Mr. Musselman, "yet the farmer seems to be about the only class in the community that is able to compete with the rest of the world." Mr. Musselman endorsed the principle of taxing land values, and in this connection showed that in western Canada a few men had been able to accumulate over \$200,000,000 in wealth in a few years through increasing land values which they had done practically nothing to create.

Mr. J. S. Woodsworth, of Winnipeg, made one of the best speeches of the convention. One delegate having expressed the fear that harm

might result if political questions were discussed, Mr. Woodsworth remarked that the farmers of western Canada had got far past that stage. He considered the politicians instead of being the masters were the servants of the farmers. He contended there is no such thing as an "independent farmer," as social and economic conditions govern the welfare of every farmer, and unless farmers are willing to relinquish their so-called independence, they're going to be crushed under the industrial revolution which has now struck the farmers as it has every other class in the community. Farmers are mixed up directly and indirectly in the banking, railway, marketing, and manufacturing problems of the country, and unless they work with their fellow-farmers to advance their united interests they will suffer the consequences. In western Canada the farmers have taken a strong stand against the combines and mergers that are bleeding the country.

Secretary J. J. Morrison made the closing speech. He showed that the success of the movement is going to depend on the loyalty of the individual farmers in the local association and on the loyalty of these associations to the central organization. He said that he had found from his visits to all parts of the province that the farmers are ready and anxious to organize. The organization has now created and is ready for the affiliation of the local associations. The future, he said, was full of promise, and he expected that the coming year would show great progress.

Different delegates spoken to by the editor of Farm and Dairy stated that they were delighted with the convention, and intimated that they were returning home determined to push the movement towards a still greater success.

O.A.G. No. 72 OATS FOR SALE
Grown on field that won First Prize from
Edinb. Agricultural Institute. Good clean
seed, firm to handle. Price \$1.10 per bus. f.o.b.
Woodville. Cash free.
GEORGE W. KAGUE, WOODVILLE, P.O., Ont.

KETH THE FARMER'S SEEDSMAN

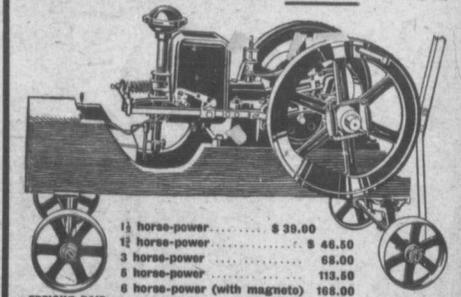
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NOTE these prices for Quality Seeds

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"Diamond" is extra No. 1 for purity.	"Oroscent" No. 2 5.00
"Droosent" is No. 1 for purity.	"Oroscent B" No. 2 4.75
"Oroscent B" No. 2 4.75	Ontario grown (Gov. Stand.) No. 1 \$5.75
"Sun" No. 2 11.50	"We have a small quantity of EXTRA No. 1 at
MALMOTH Gov. Stand. No. 1 11.00	"Sun" No. 1 11.50
"Sun" No. 1 11.50	"Sun" No. 2 13.75
"ALSTYKE CLOVER" No. 1 14.00	"Orosent" No. 2 12.50
"Laka" No. 3 10.00	"Orosent" No. 3 10.00
ALFALFA CLOVER Ontario grown No. 1 17.00	Dakota grown No. 1 14.00
Russia grown No. 1 15.50	per lb.
Ontario Variegated No. 1 35	Lymans' Grimm No. 1 40
Grimm No. 1 40	SWEET CLOVER No. 1 25
White Blossom (hulled) No. 1 25	White Blossom (unhulled) No. 1 25
Yellow Blossom No. 1 25	

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1 horse-power \$ 46.50
3 horse-power 68.00
5 horse-power 113.50
8 horse-power (with magnet) 168.00

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Dear Sir,
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Dept. 103-E, 1137 King Street West, TORONTO
80-page General Merchandise Catalogue FREE on request.

Dairy Farming on Sand

One of Our Folks who is making good on a farm of thin, sandy loam, recently wrote Farm and Dairy telling of his success with dairy cattle. His letter is published on page 5, Dec. 31st. Mr. Rutherford's success under adverse conditions may well act as an inspiration to the many of us who are more favorably situated but, perhaps, not doing so well.

Mr. Rutherford was glad to pass on his experience for the encouragement it may give to others. He himself was not unrequited. Immediately we extended his subscription six months. Had this letter been accompanied by a photograph of his herd or buildings, Mr. Rutherford's subscription would have been extended for a full year.

The same privilege is extended to all of Our Folks. Acceptable letters of 300 words or more describing successful farm practice, or dealing with any topic of agricultural interest, entitle the subscriber to a six months' renewal of his subscription. Our women folk can secure the same reward by writing for our Household Department or Home Club. Several have already availed themselves of this offer. We would be glad to hear from you.

FARM AND DAIRY

AND RURAL HOME
PUBLISHED EVERY THURSDAY

SUBSCRIPTION PRICE, \$1.00 a year. Great Britain, \$1.25 a year. For all countries, except Canada and Great Britain, add 50¢ for postage.

ADVERTISING RATES: 25 cents a line for 100 words and one insertion. One page 8 inches, one column 12 inches. Copy received up to Saturday preceding the following week's issue.

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CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed 18,000. The actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 20,000 to 19,000 copies. No subscriptions are accepted at less than the full subscription rates.

Sweep detailed statements of circulation of the paper, showing its distribution by counties and provinces, will be mailed free on request.

OUR GUARANTEE

We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and because to protect our readers, we turn away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with you as one of our paid advance subscribers, we will make good the amount of your loss, provided such transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that we find the facts to be as stated. It is a condition of this contract that in writing to advertisers you state: "I saw your advertisement in Farm and Dairy."

Agents shall not ply their trade at the expense of our subscribers, who are our friends, through the medium of these columns; but we shall not attempt to adjust trifling disputes between subscribers and honorable business men who advertise, nor pay the debts of honest bankrupts.

The Rural Publishing Company, Limited
PETERBORO, ONT.

Read not to contradict and to confer, nor to give and take for granted, but to weigh and consider.—Bacon.

Dealers at Fault

RETAIL grocer, speaking in Toronto recently, infers that Ontario fruit growers are not giving the middlemen a fair deal. Among other things, he complains of fruit shipped too green, berry boxes only partially full, and occasionally the top layer of a barrel or box not a fair representation of the contents. A glaring comparison is drawn between the methods adopted by Canadian and United States producers, and the comparison is not altogether complimentary to the Canadian grower.

So much for the middleman's side of the question. As turn about is only fair play, Farm and Dairy begs leave to advance some complaints from the producer's standpoint. Perhaps our greatest complaint concerns the absolute ignorance of many fruit vendors, of the goods they are handling. It is said with truth that the average consumer knows only two varieties of apples, Spys and Snows. The average retailer is not much wiser. Many splendid varieties of apples are grown that the consumer would appreciate and ask for did he know about them, but because of the prevailing ignorance of both consumers and middlemen it is difficult to market these varieties to advantage. We have talked with middlemen who did not know the difference between a Wagner and a Ben Davis, while they actually stand at the opposite end of the scale so far as quality is concerned.

Another serious mistake often made by middlemen, and which tends to make splendid varieties unpopular, is selling out of season. Many varieties are exposed for sale in the fruit stalls, as much as three or four months before they have reached their best. Other varieties are sold after they are past their best. The consumer is thus

led to brand as undesirable, varieties that at another season would please him.

Probably the difficulties that we have mentioned will never be completely settled until producers take matters into their own hands and educate consumers as to the varieties to be used and when to use them. This object might be compassed by running display advertisements in the city newspapers mentioning varieties desirable at that date. Such an advertising campaign could be conducted only by a strong producers' organization such as is not yet in existence in Canada. In the meantime let our friends the middlemen forget that there is "cause for kicking" on both sides of the fence.

Reduced Planting Advisable

NOT one-half of the apple trees planted in Nova Scotia are yet in bearing. In British Columbia two-thirds of all fruit trees planted are over five years old, and of the remainder only about one-third have reached a profitable bearing age. Heavy planting has been characteristic of the fruit growing sections of Ontario. Even Quebec and New Brunswick have been adding to their area under trees. With these facts before us, it is not difficult to forecast a greatly enhanced production within the next few years.

What of the market? Last year fruit growers experienced difficulty in disposing of their apple crop at any price. This difficulty cannot all be attributed to war time conditions. The year before, with the apple crop a partial failure, the market was dull. Taking a broader perspective of the market situation we find that in the last four-score years the apple industry has been subject to what may be called "cycles of production." Periods of high prices have been followed by heavy planting, and these in turn were followed by years of stagnant markets, with still another revival when the development of the country had provided a market for the surplus production. If history is to repeat itself we are now ready for a period of low prices to follow the heavy plantings of the last few years.

The situation is not one over which the grower need be unduly pessimistic. At the same time, further plantings on a commercial scale would be unwise. Those who have orchards would be well advised to give them the best of care, study efficiency of production, economy in marketing, and thus endeavor to make the apple more of a staple-food product than it now is. One class only do we know of who can afford to make plantings—a small orchard is an asset on any farm, and those who have not an assortment of tree fruits for table use cannot invest money better than in trees for setting this spring.

Let Manufacturers Contribute

SO far, Canadian protected manufacturers seem to be the only ones who are not asked to contribute materially to additional taxation burdens. The placing of a small customs duty on some of their raw material, which was formerly on the free list, is more than made up to them by the increased protection afforded their finished products. When they manufacture for export ninety-nine per cent. of the new duty on raw materials is refunded to them. Far from losing by the new Dominion taxes, manufacturers actually stand to gain.

Is it quite right to deny to our manufacturers the right to assist the Empire at this time? None have been louder in their professions of loyalty. As a means of allowing this class of the community to contribute to the added burden of the country, Farm and Dairy would suggest that an excise tax be levied on all goods manufactured in Canada affected by the new tariff, equal in amount to the increase in the customs

tariff on imports. The effect of the increase in the tariff will be to shut off imports and reduce revenue. Hence, under the present arrangement, for every dollar that goes into the public till, four to ten dollars will be collected by the protected manufacturer on the increased price of his goods. Under the scheme that we are suggesting—an import and excise tax combined—the whole amount, or five to eleven dollars, would be collected for the Government to meet current expenses. Consumers, when paying the increased price demanded for goods, would then have the satisfaction of knowing that they were contributing to the Government and not to private corporations. The manufacturers, in supporting such a scheme as Farm and Dairy is suggesting, would prove that theirs is no mere lip loyalty. And think what it would mean to the country, an increased revenue of perhaps \$100,000,000 or more instead of the \$30,000,000 on which Minister of Finance White is calculating.

Fewer Cows—More Milk

THE Breeders' Gazette tells of a dairyman with thirty cows who sold five of the least productive and gave their feed as an addition to the remaining twenty-five. The result was a decided gain in total amount of milk. The results were so encouraging that the man went further, selling five more cows and giving up the remaining twenty. Again his total milk yield increased.

We believe it was Mr. J. H. Grisdale, Superintendent of Dominion Experimental Farms who claimed recently that the average milk production of the country could be doubled by better feeding. To prove his contention, Mr. Grisdale had herds of ordinary breeding bought for some of the Experimental farms, where, under liberal feeding, they more than doubled their production.

A cream separator agent was trying to place a hand separator with a dairyman who milked ten cows. Ready money was not available, but the farmer was persuaded to sell one of the cows to secure the cash necessary and give the feed that he had originally fed to ten to the remaining nine. He found that he was getting as much milk from the nine as he had got from the ten, and he had a cream separator as well.

Some error on the feeding matters commits the sin of commission, there are at least one hundred dairymen whose failing lies along the line of omission. We wonder how many there are among Our Folks who might profit by reducing their herds in numbers, and feeding more liberally to those remaining.

Wayside Jottings

It is well enough to grow crops. If when we come to sell the stuff, however, we allow it to felloe to trim us, where is the advantage in producing more?

In New Brunswick farmers are selling their potatoes at thirty-five cents a barrel. In Montreal the consumers are paying their grocers one dollar and eighty cents a barrel. In other words, the Montreal consumer is paying five times what the New Brunswick producer receives. Can such a spread in price be justified?

There is a world of difference between living and making a living. Many make a splendid living but never really live. They get their viewpoint distorted. They come to regard the making of a living as the first object of living. Those who get the most true joy out of life are those who regard the accumulation of material necessities as of importance only in so far as it enables them to enjoy life.

Dominion Grange and Farmers' Interests

A Successful Annual Meeting Held in Toronto Last Week—Officers Elected.

FOR 40 years the Dominion Grange has advocated measures which it believed to be in the best interests of the farmers of Ontario and of Canada. During that period it has seen many other farmers' organizations pass out of existence. It has continued, however, to outlive all vicissitudes. On Wednesday of last week the 40th annual meeting of the Grange was held in the Carle-Rite Hotel, Toronto. It was well attended by members of its own organization at the morning session. At the afternoon session there was still larger attendance, a considerable number of members of the United Farmers of Ontario being on hand.

Owing to the fact that the Grange has in a large measure identified itself with the United Farmers of Ontario, the proceedings at its annual meeting this year were not as important as otherwise would have been the case. Most of the important discussions and reports were held over to be settled at the convention of the United Farmers of Ontario, which was to be held on the two following days.

The following officers were elected: Master, W. E. Wardell, R. No. 1, Middlemarch; Overseer, R. H. Halbert, Melancton; Sec.-Treas., J. J. Morrison, Arden; Lecturer, Wm. Oles, Whithy; Chaplain, Chas. Saywell, St. Thomas; Steward, C. R. Reid, Varney; Assistant Steward, Neil Calder, Holstein; Gatekeeper, J. A. Carswell, Palmerston; Gates, Mrs. Poud, Alymer; Pomona, Miss Fitcher, Middlemarch; Flora, Miss Thompson, Palmerston; Stewards, Miss H. Robinson, St. Thomas. Executive Committee: Messrs. W. C. Good, Wm. J. C. Dickson, Moorefield; E. C. Drury, Barrie; Robt. Ruthven, Clarkburg; John Pritchard, Gorrie, with the Master and Secretary. Auditors: T. H. Adams, Essex; Wm. McCrae, Guelph.

Financial Statement
The treasurer's statement showed total receipts for the year of \$910.86 and expenditures of \$708.04, leaving a balance of \$202.82. Out of this some of the convention expenses had to be defrayed.

Master's Address
The address of the Master, W. C. Good, B.A., of Paris, Ont., was published almost in full in last week's issue of Farm and Dairy. It dealt with economic and social conditions that are working against farmers as a class and showed why farmers will be unable to respond to the call for increased production to the extent that they otherwise might. It was a splendid address, and greatly appreciated.

Secretary's Report
Secretary J. J. Morrison reported that no exception had been taken by any member of the Order to the union of forces which had taken place during the year between the Dominion Grange and the United Farmers of Ontario. He advocated the continuance of the Grange as a separate organization, but affiliated with the United Farmers of Ontario. In due time the organizations may completely unite.

In the Grange the fees of men are \$1. of women 50c and of juniors 20c. Half of all members' fees are sent by the subordinate granges to the Dominion Grange. The same procedure is followed in the United Farmers of Ontario, except that the United Farmers have not as yet included women in their membership. In order that the identity of the Grange may be fully maintained, it was decided that subordinate granges should forward all their fees direct to the

secretary of the Dominion Grange, who would turn over whatever proportion was necessary for affiliation purposes to the United Farmers of Ontario. The Grange will retain for its own use all fees received from its women and children members. The women and children members of the conventions of the Grange and the United Farmers of Ontario will be held the same week and the United Farmers of Ontario will pay the all way expenses of the delegates from the subordinate granges who are affiliated with it.

An Old Member
A letter from John Ramsay, of Campbellville, enclosing his membership fee of \$1 was read. Mr. Ramsay is 90 years of age, and although he has not been able to attend the meetings for years he has regularly contributed his membership fee. Shortly before writing the letter he had returned home from the hospital, where he had had his leg amputated at the knee. A resolution was passed expressing appreciation of Mr. Ramsay's faithfulness to the order and sympathy with him in the loss of his leg. Another incident of the loyalty of members of this order was given when Secretary Morrison reported that Howick Grange 68 has paid its dues regularly every year since 1875, although for some years there have been only four members in this grange.

Ontario People's Salt Company
In 1888 the Dominion Grange was instrumental in starting the Ontario People's Salt Company, a co-operative. Two of the original members of this board, Mr. Dawson Kennedy, of Peterboro, and Mr. John Tolmie, of Kincaid, attended the meeting. They carried the company, and were respectively the president and secretary of the company. They are the only surviving members of the original board. This company has had to face very strenuous opposition during its existence, but has survived it and most years has been able to show a profit. It was stated that the price of salt to-day would be \$3 to \$2.35 a cbl. were it not for this company. Farmers were urged to give it every possible support. An idea of what it has accomplished may be gained from the fact that in 1884 there were 34 salt wells in Ontario, whereas to-day there are only three or four.

Mr. J. B. Musselman, secretary of the Saskatchewan Grain Growers' Association, spoke at the afternoon session, bringing a message of encouragement from the farmers of western Canada. He denounced the "Made in Canada" campaign on the ground that such a patriotic campaign of that character should be made broad enough to include the Empire. Only a selfish purpose would strive to lead us not to buy goods from the Mother Land at its time. This practically concluded the convention.

Summing up the place of the farmer in the Canadian dairy industry, we may say that in the past he has been a hewer of wood and a drawer of milk to the factory for mighty little returns, but times are changing, and the dairy farmer is changing with them. At present, and in the future, he will demand a greater share of the price paid for dairy goods by the consumer. If he does not get it, there will be something doing all the time until he does get it. Wise farmers have more money as a result of better trade and spend more, which will increase trade and manufacture, and result in such a forward stride in the welfare of Canada as she has never known. To keep farmers in the position of menials is a suicidal policy.—Prof. H. H. Dean, O. A. C., Guelph.



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is the time when you feel the need of a silo most and

NOW is the time to order an IDEAL GREEN FEED SILO

THESE winter days when high-priced hay seems to disappear so fast there is no use kicking because you didn't put up a silo and fill it last season. YOU must realize that silage would save you a lot on the cost of your feed just now, and that with a silage ration you would be getting a much larger milk flow.

BUT the chances are if you wait till next summer again before ordering a silo, that with lots of green summer feed and your rush of farm work, you may put it off again. DON'T make that mistake the second time.

See our agent in your locality. If you don't know his name write our nearest office. Let us send you our new silo book; free upon request.

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THE SEED CORN WITH VITALITY is the kind you have always wanted and is the kind you will eventually buy.

LET THE POOR CROP OF YOUR NEIGHBOR and your own in the past be a guide for buying your seed corn for your 1915 crop.

DON'T TAKE A CHANCE and buy from a man who does not know the history of his own seed or who is careless about his reputation. WALKER SONS have never sold one bushel of low testing, weak germinating seed corn. DOES THAT MEAN ANYTHING TO YOU?

NEXT FALL WHEN IT IS TOO LATE and your silo is only half full order for seed. You will remember this advertisement and we will get your order for you.

WE WANT YOU and YOU WANT US FOR 1915 for one or more of the following varieties. The first four are Dent varieties and are the only Dent varieties that have been given a standard by the Ontario Corn Growers' Association.

- 1—WISCONSIN No. 7—White Dent.
- 2—WISCONSIN No. 2—Yellow Dent.
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- 4—GOLDEN GLOW—Yellow Dent.
- 5—LONGFELLOW—Flint.

SHIPPED ON THE COB in boxes 70 lbs. net. Price \$3.00 per bushel F.O.B. Walkerville, Ont. Money order together with shipping instructions must accompany order.

Note in this issue our writings of the Corn Show—Sweetwater's Prize, 1st on W.C. Yellow Dent, 1st on Ontario, 1st on Golden Glow and other Awards. This is the class of corn we grow.

WALKER SONS WALKERVILLE, ONT.

OUR FARM HOMES



PATIENCE and determination will win for us nine battles out of ten.—W. S. Royston.

Jim Botts Escapes Reprobation

J. de Q. DONEHOOD

(New England Homestead)

BROTHER Colder took Jim's case up and labored with him faithful for more than a month after the meetin' was over, but nary a bit of headway did he get to make; for that feller had seen it into his head that he'd done committed the unpardonable sin, and so there wasn't no hope for him, neither in this world nor in that which is to come. And, oh, Lordy, the way he took on over it was somethin' pitiful to see.

Now this made everybody who really knewed anything about Jim good and tired, sorry as they felt for the feller. He was a younger brother of Dink Botts, which name was a strong character and powerful ugly when he was riled, all along of the high opinion he had of himself, thataway. But Jim leasid just a little too much to the other side, being milder than dripped curds, and the doggeddest, bashfullest critter that ever skulked around seemin' to apologize to the public for bein' alive and not a-layin' in the cold and silent tomb. Of course, then, when he got religion, or rather, when he got to worryin' about his soul at that there meetin' it took him in the neck and accusin'-of-himself way. And the fact is that if he really was the kind of a sinner he called himself, there wouldn't be no more chance for the rest of us at the Day of Judgment than there is for a bolted steer in the skeeter season. For he never had shown enough sprunk to do anything that anybody ast him not to do, lettin' alone breakin' in, if he knewed it, the laws of the Almighty.

So, when the preacher had kept on all this time, a-growin' and a-travellin' with him in the spirit, a-laborin' to pull him through—a-tryin' him with the promises, and the fruits of repentance, and everything, and when Jim would only shake his head mournful-like and still say "low that was as certain of bein' lost as a yaller dog is of fleas, then all of a sudden a bright idea come to Brother Colder, and he says, says he:

"My dear brother, I've done got you at last. We'll settle this here matter in two minutes. The way to prove your acceptance with the Lord is this: What'd you give up for His sake, if He ast you to do it? If you're willin' to give up all your idols, you're willin' to make no doubts about it; you're in a state of grace and there ain't nothin' that can phase you."

Jim kind of chirked up at this a weenty bit, and he says, hopeless-like, "Thank you kindly, Brother

Colder, but I don't really think that nothin' can pull me through. Yet, if it comes down to givin' things up and forsakin' idols, I don't think there's anything I wouldn't do for the Lord's sake."

"Very good, Brother Botts," says the preacher; "come, let me prove you. Could you, or could you not, give up every cent of property you have, and make up your mind to go through life as pore and miserable as Job, if you was called to do it?"

"I shore could," Jim speaks up, a-brightenin' like everything. "I'd do it and jump at the chance, if I only



Two Four-Year-Olds at Bethanbreck Orchards, Halton Co., Ont. On the Right is an Alexander, Two Years Set, Bearing Thirteen Apples.

knewed it would save my sinful soul." "Splendid," Brother Colder goes on, a-smilin' now, "we're comin' fine. And couldn't you, too, give up every earthly ambition and honor—the post office, for instance, that I've heard you mentioned for, and bein' a deacon in the church in time to come, and everything of that kind?"

"That wouldn't worry me a bit," Jim, he 'lows, lookin' happier still. "I'd be more than willin'."

"And could you ever give up health and strength," the preacher ast next, "and be a pore cripple, or an invalid, without repinin'?" The feller thought a minute deep and earnest, then his face shone, and he says, says he, "Yes, I could stand even that, if I knewed it would save me."

Brother Colder he heamed then, and he said, said he, "My dear young brother, there ain't no manner of doubt in your case, and I can prove it to you out of the Good Book, from kiver to kiver. You're in a state of salvation, you are, by the sign of the idols you've given up—mighty nigh the whole bunch, for I've done named every last idolatry, 'ceptin' 'em. And knowin' you as I do, I'm—sure that

it'd be easier than any of them for you to renounce."

Jim braced up at them words as he'd never done before, and he looked mighty nigh happy. The preacher had hit the spot with him at last; and he begun to feel that, after all, there might be a sneakin' chance for him, so he answered hopeful-like:

"Oh, I can't never thank you enough, Brother Colder. You've given me the first light I've seen for many a day. But that other idol—what is it?"

"Why, it's women, of course," the preacher he answers. "There're the great idols of the world, as everybody knows, seein' what they done to Samson and Solomon, and pretty near all the rest of them, a-turnin' away all their hearts. Could you give up all idea of ever havin' a wife or a sweet-heart, or lovin' 'em of them and havin' 'em love you, if it was required of you?"

When he heard that question, Jim looked so happy for a minute that it 'peared like he was a-goin' to shout, and then in two shakes of a lamb's tail a shadder come across his face and there he was back ag'in in the slough, like he'd been for a month. And he spoke to the preacher, like the Old Boy was just about gettin' his claws on him:

"Alas, Brother Colder, you know I couldn't only give up women, but I'd be more than glad to do it. I never had a girl in my life, and I wouldn't take forty thousand dollars and have one. I'm that bashful and skeered of them. But it's done come to me like a condemnation, that my

Finally he says to Jim, says he, "You're a curious kind of a critter, anyhow, you are; I'm plumb disgusted with you." Take, for instance, little Susie Evans, who lives near town on the place next to you all. You've seen that girl all your life, and why, in the name of creation, you shouldn't be proud and happy to make love to her and ast her to marry you, I don't understand. I don't see any reason, neither, why she wouldn't look at you favorable, if you only showed a little gumption and brains. As for that girl—why, she's not a complexion like peaches and cream, her eyes are brighter than any star, and she's just as sweet and pure and healthy and wholesome as any bean on earth, could possibly be. And then she's as good and even-tempered and cheerful and industrious as she is nice-lookin', and as full of fun as a young kitten. Why, man, what's the matter with you that you think it would be an affliction from the Lord to court a girl like that?"

Jim Agrees to Try to Court Susie

"It's curious, ain't it?" asts Jim, mournful-like, as if he was just about to be strung up. "But I was thinkin' of that girl when you was a-arguin' with me, Brother Colder. Yet if I was to go near Susie she'd laugh at me, and I'd nary side by; for I'm so bashful that I'd get red in the face, and fidget and stammer, and not know what I'm a-talkin' about. Why, I wouldn't take anything to do it; I purty near believe I'd rather be lost than try. Now, if it was some ugly old maid—Miss Nancy Shay, for instance, I believe I could possibly do it, but that wouldn't be givin' up my dearest idol," he added, sad-like.

"Oh, you make me ever-lastin' tired, you great big baby," snorts the preacher at this, so disgusted with Jim that he had to hold himself in not to kick him, which same is mebbe what he had ought to have done just then. But still he was a kind of pleased, too; for he saw that the feller had at last got the idea fixed firm, that if he courted and married that purty girl he spoke about, he'd be saved. And it struck Brother Colder that, if he brought it out that way it'd be an extra neat job, both comfortin' Jim's soul by gettin' him into the church, and at the same time doin' him a mighty good turn; for a sensible wife was shore what that feller needed to make him spunk up and keep fool ideas, like he'd been doin', out of his head. So the preacher he as usual kept on a-laborin' away on the case, and, dog my cats, if he didn't ast Jim to make him agree to go a-courtin' of Susie Evans and to marry her, a persuadin' him that that'd be a proof that he hadn't committed the unpardonable sin, because then he'd be a-doin' for the Lord's sake the thing that he most hated to do. And he got Jim so worked up over it that he made him promise to begin that very evenin' if it killed him.

Now mebbe Susie Evans wasn't surprised when Jim showed up at her house about seven that night. There he was, with his best clothes on, and his boots lookin' like a stove that had just been polished, and his hair plastered down on his head as if he'd used tar on it; and when that girl come to the door, he stood there like an idiot, his face redder than a boiled beet, and he couldn't say nothin' for over a minute, when at last he blurted out, "Is—is your pa at home, Susie?"

"No, Jim, he ain't at home," answers Susie; and she was a sweat up to town for a little while, and left

(Concluded on page 31)

The Upward Look

Trusting in the All-Powerful One

"In nothing be anxious; but in everything, by prayer and supplication with thanksgiving, let your requests be made known unto God." Phil. iv., 6.

Paul sent this message to the Philippians from prison. His heart was tender and grateful towards them, for the present of money they had sent him to help supply his needs. It must have meant a great deal to them, when they thought of him who wrote it, in the midst of his own trials and privations.

The "nothing" and the "everything" include all; the small causes for anxieties as well as the great; the little annoyances that fret and hurt; the misunderstandings that cause so much trouble; the pressing need to meet certain obligations; the constant struggle to make ends meet; the cares and strain of every-day work; the disappointments we find so trying; the heavy sorrow so hard to bear.

Life is transformed, if this verse becomes a living, daily reality, by taking all the troubles and griefs, straight to our Heavenly Father.

There is one important thought which is often overlooked, and that is that there must be prayer before our requests are made. We must pray earnestly that God will direct us in our petitions, and that our

will and wishes may not be the dominant note.

Also, we must not forget the thanksgiving. How often we feel hurt and annoyed when, although we have done a great deal for another, we never receive an expression of gratitude from that one. Just so over and over again do we forget to thank our Father for blessings and help received, though it would seem that the first thought would be one of thankfulness towards Him.

This verse is followed by the one: "And the peace of God, which passeth all understanding, shall guard your hearts and your thoughts in Christ Jesus."

Paul could not have written this so convincingly if he had not himself realized its preciousness in those hard days of his imprisonment.—I. H. N.

Start Begonias Now

B. O. Tillet, Wentworth Co., Ont.
Some of the finest begonias can be raised cheaply from seed, and if this is sown in boxes now it will produce flowers in September. The soil should be coarse below, with plenty of drainage underneath, and very fine and even on the top. It should be firmly pressed down, well watered, and left for 24 hours. The seed is very small and should be sprinkled very thinly on the surface and lightly pressed with the palm of the hand. Do not cover it with soil. Cover the boxes with glass to check evaporation. The boxes should be placed in a glass house where there is some heat.

OUR HOME CLUB

Introducing "Aunt Margaret"

We have much pleasure in introducing to the members of the Home Club this week a new member of the fair sex. She comes to us under the guise of "Aunt Margaret" with an interesting letter on the life of the lumberjacks in our Canadian lumber camps. We know that Home Club members will welcome "Aunt Margaret" into the circle, and we hope that she will be a frequent visitor. We have two or three more new members to introduce, but lack of space prevents our doing so until our next meeting.

We are glad, too, to welcome back Aunt Jane after a few weeks' absence. There are a lot of old friends we would all like to hear from. Where, we wonder, are Father, Eek Boy, The Parson, The Doctor's Wife and many others whose visits were once so thoroughly appreciated? Drop back for a visit, please. We will give you a right royal welcome.

Life in an Ontario Lumber Camp

I wonder how many Home Club members know anything of the life of the lumber-jack. During the winter months the average back woodsman resorts to the nearby lumber camp, possibly 30 or 40 miles distant, with his turkey on his back. His turkey is a grain sack filled with a change of underclothes, a few pairs of socks and

possibly one or two handkerchiefs. Unless he manages to catch a tote-team going into camp with supplies he is obliged to hike all the way on foot.

There are usually four buildings at camp: the cook camp, sleep camp, office and stable. The cook camp is a long, low building with a kitchen in one end; this is the cook's domain. He has two assistants called cook-eyes; their tasks consist of peeling potatoes, washing dishes, preparing the tables and rendering all the assistance necessary to the cook. Every night an immense pan of yeast for bread is set, to be baked into loaves the following day. Pies, cakes and cookies are in abundance. Raisin is the principal pie; while a light-colored one without a cover, said to be made from the remains of old shoes-packs, is named "shoepack" pie.

Small granite dishes are used for tea and granite pie plates to eat from, with iron knives and forks and tin spoons; thus nothing is broken while being washed. After a meal they are dumped into a huge pan and covered with boiling water to remove grease, the water is then poured off and the dishes inverted upon the stove to dry, while the knives, forks and spoons are put into a large gunny sack, which is shaken back and forth a number of times. When the contents are removed they are perfectly dry.

No one is allowed to speak while at his meal, and must go to the sleep camp immediately after eating. In this camp two rows of bunks are arranged along each wall, and usually two men sleep in a bunk, which is



Add water to milk—
You weaken the milk.
Add soft wheat to flour—
You weaken your flour.
Cheapens it too.
Soft wheat costs less—worth less.
Soft wheat flour has less gluten less nutriment.
Your bread is less nutritious, sustaining, economical.
Soft flour has less strength, less quality gluten.
Giving less good things for your money and things less good.
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Without a grain of cheaper wheat.
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Use FIVE ROSES.

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KODAK on the Farm.

At every turn, country life offers opportunity for the camera. In a business way there are records of stock and crops and buildings and trees and ditching to be kept. From the standpoint of the family album there are pictures of the children and the pets and the home—pictures that grow in interest with every passing year.

And the Kodak adds fun to every wholesome frolic. At the picnic, at every evening gathering, on the trip to the city, on the shooting and fishing trips it adds to the pleasure at the time and the resulting pictures are a pleasure for all time.

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WE REQUIRE parties to knit men's wool socks for us at home, either with machine or by hand, especially for war purposes. Write for information. The Canadian Wholesale Die Co., Dept. D, Orillia, Ont.

well filled with hay. A large stove is in the centre, where the men may dry their clothes after a wet day, unless one lumber-jack later than the other throws his belongings just on top. Two pairs of blankets are allowed to each bunk, and often the occupants happen to catch another fellow going away and swipe his covers, hiding them in the hay during the day time. At nine o'clock at night—Saturday night being excepted—the light is turned out, and any conversation after that is immediately quitted by an obliging neighbor's boot.

After all the teamsters are in, the road is sprinkled. A box the width of the log bunks, and as long in comparison, is placed upon a sleigh, the runners of which are turned up at both ends. There are two tongues, thus the sleigh can be drawn in either way. Two holes in the box immediately above the runners allow the water to run into the sleigh tracks, where it freezes, but still leaves the ruts. Then the hills are sanded. In this way the roads are kept smooth, and no matter how heavy the load may be, the horses have not much of a haul except down hill. Young fellows of about 15 or 16, perhaps two of them, are employed in keeping the ruts free from sticks, dirt or horse chips. They are said to be chieftain cleaners.

At the end of the road, bushwhackers are cutting down pine—white, jack and Norway, with an occasional spruce. Further into the bush a bunch is cutting a new road for future work; here the foreman is called a buck-beaver.

The log bunks are not allowed to be over 12 feet wide, but the lumber companies, in order to get the necessary number of logs on, build them 11 feet 11 inches, and, provided the logs are small, as many as 300 can safely be piled on one sleigh.

Down the trail past the camps is the washerwoman's shack. "Here on Saturday night the men come with their dirty clothes and get their clean ones. For this they are charged the large sum of fifty cents per month. Some of the men, in order to have the full benefit of their pay cheque, do their washing on Sunday.

Where the logs are dumped into the lake, there are a couple of rollers or dumpers who, if the load is not brought far enough, roll the logs on to the ice. Sometimes the team is driven on the ice and the logs lammed on another pile. The weight of these often sink the ice, and as the logs sink, more are added, so that they are often piled from the bottom of the lake.

Even though the work does seem hard and steady, camp life has its pleasures. A quadrille in which all men take part is called a stag dance. When the foreman is not around poker is played, tobacco being staked. Feats of strength, acrobatic stunts or sleight-of-hand tricks round up the pleasure until an absent one slugs into camp laden with bottles, and is hailed with joy and all become hilarious.—Aunt Margaret.

Taking Care of Ourselves

In the Household Number of Farm and Dairy the subject of "Women's Work on the Farm" was very ably discussed by members of the Home Club, and I would like to express my opinion on that subject.

The more I think of it the more I am convinced that if work on the farm is drudgery for the women, they have themselves to blame. Of course, there are men who should never have been married, but taking the wife of the average farmer, I think her work all depends on circumstances. Here is an illustration of what I mean.

If there should be a man and boy, or two men and one woman on the farm, then I think the woman should not be expected to do any work out-

side of the house, unless help with the milking and look after her chickens and garden. It will guarantee that if she is a good housekeeper and does this work as well, she will not have many idle moments. On the other hand, should there be two women and one man, I am sure there would be times when the women could help out in many ways. I am a firm believer in the theory that honest work, no matter what it is, will not lower the standard of any woman.

Why is it that the majority of women become old-looking earlier in life than men? Simply because we do not take proper care of ourselves. Who is to blame? Some may say the men are, but I do not quite agree with that. Women get just the love and respect they demand, and if we are willing to make slaves of ourselves, we will be allowed to do so. I have seen women with little children around them, working in and out at anything they were called to do, and they imagined they could not

Kindness

(Written for "Farm and Dairy" by E. Robeson, Athens, Ont.)

It is indeed a comfort to us
As we watch the setting sun.
In reviewing just the love and respect they demand, and if we are willing to make slaves of ourselves, we will be allowed to do so. I have seen women with little children around them, working in and out at anything they were called to do, and they imagined they could not

Deeds of kindness have been done;
Little duties not forgotten,
Words of comfort and cheer,
To some weary friend or stranger
Struggling under doubt and fear.

Let us heed the passing moments
And our watchfulness increase,
That we may by careful living
Find a sweet reward of peace.
And when waiting in life's evening,
"Ere the sands of time are run,
It will bring us peace in knowing
Deeds of kindness have been done.

spare an hour off to rest under any conditions. Those same women would lose a whole night's rest if anything siled one of the children. I have often wondered if those women ever stop to think what would become of their little ones if they should be called away. It is one of the saddest things possible to see a family of little children go out into the world motherless.

I am reminded of a story I once heard of a couple who had lived together for years. Finally the wife died and after the funeral the husband said to a neighbor: "Well, Jane was a good wife. She always kept my clothes clean and mended and was a good cook, but I never liked her." This story would lead one to believe that when women let themselves get into a rut of thinking they are imposed on, the proper love cannot exist. If there was more of the spirit of a helpmate existing between husband and wife, how much happier this world would be, and if women would stand up for their rights we would have better men.

Let us waken up and feel that we are not here to be made drudges of, but that we are here to do some good and to be honored and respected.—Aunt Jane.

Proof Positive

Little Ada came in to her mother from her play, and asked:

"Have gooseberries any legs, mother?"

"Why, no, dear," replied the mother, "of course not. Why do you ask?"

Ada looked solemn as she raised her face to her mother's.

"Why, then, mother," she said, "I've been eatin' 'em waterpillars!"

When ironing it is a very good plan to get a clean brick, white one if possible, as a stand. The iron will retain heat much longer than if an open ironstand be used.

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ACT TO-DAY
and take advantage of our introductory offer.
Wears prepared to supply a made-to-measure costume (coat and skirt) in either Black or Navy Blue Serge. *Cost for Spring Wear—for \$6.00.* Two mixtures supplied if preferred.

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SAWYERVILLE, P. Q.

Tonight Plan whom you will see about taking FARM AND DAIRY.

House-Cleaning in the Garden

Alice A. Ferguson, York Co., Ont.

WITH the first warm breath of spring comes the desire to houseclean. Ambition lends strength, and we plan a campaign that should be carried into effect in short order. But while I do want to scrub and scour from attic to cellar, garden. The lure of the out-of-door is upon me, and I turn my back on broom and brush, shoulder the garden rake and spade, and imbibe the best spring tonic pure air, sunshine and the wonderful something that invigorates when we stir up old Mother Earth.

Outside cleaning first, then, a clean lawn, trim paths and borders give an air of respectability, care and good taste. We have a staid feeling of satisfaction, as we come in sight of our own well-appointed, neatly kept lawn, and the fact that the inner housecleaning is not finished is not so patent to outsiders.

In early spring March or April, is pruning time for roses and hydrangeas if we desire quality in roses and quantity of bloom in hydrangeas. Have the roses been cuddled in straw jackets during the winter? Loosen the straw covering, and gradually accustom them to the weather. All bulbs that have been covered with manure, litter or leaves, should have this covering opened out, but not entirely removed. If left on too long, the bulbs will grow rapidly, and finding the temperature too cold, will be chilled, and their bloom retarded, while if the mulch is removed too soon, they will also chill. It is well to leave part of the mulch convenient to near, and cover them with it on cold nights. The mulch may be dug in around the roots of flowering shrubs if done carefully. Remember that the spread of the roots is equal to the spread of the branches. Beds in which early flowering bulbs are growing should not have the soil disturbed by digging till the flowering season is over. This rule applies to plants as well, though for late blooming plants and shrubs digging may be advantageous.

The pruning of roses should be attended to before the sap begins to run. First cut out all dead wood—if there is no green showing under the bark when you scrape it—it is dead. Use a sharp knife, so that the cut will be clean, and cut close to the stem or ground, so as not to leave a inch or two as a convenient place for the board and lodging of insects. Rub a little fresh earth on the cut. If you desire few large roses, cut within the branches, leaving one or two stems, and cut these back to within five or six eyes from the ground. It requires a hard heart and experienced eye to prune to advantage. All early blooming plants should not be pruned till their blooming season is over. So the work must be done with discrimination. All suckers should be cut away from roses and lilac bushes, in fact from all grafted stock.

Having then attended to the removal of the winter coverings, and the pruning of the rose bushes, look over the lawn. It may require renewing or leveling. All in depressions, first removing the sod, roll firmly and replace sod. Make the lawn with the garden rake, scatter fresh grass and clover seeds, and roll well with a lawnmower. Frequent rolling during the summer is as important as mowing the grass, as it makes the sod firm and the grass grow thicker.

The vegetable garden requires its spring cleaning also. Grass that has grown where it is not wanted can be most easily dug or pulled up by the roots, while the earth is in its first stage of spring softness. If it is not

attended to then, the grass roots take firm hold, and refuse to be pulled up. The mulch on the asparagus bed, around the rhubarb, and the straw-berries should be loosened, and gradually removed. All weeds that show their heads should be removed, root and branch, catnip, dock—red and yellow—and dandelions, unless desired for greens. All kinds of docks, especially seem very tenacious of life. You may plow it up, turn upside down, out asunder, it matters not; it is soon growing right side up again. Loosen the tap root with the spade, and pull it out; feed it to the pigs, as a spring tonic for them, for all of these weeds have a medicinal value. In digging the garden, keep an eye open for all "roes" that are not desired—thistle, dandelion, etc., and send them off also to piggy. During the summer, after a rain, I go around the garden digging out all such weeds by the roots, and I find the work becoming less each year. Where weeds can flourish, surely something more useful can grow.

As bees on bright days gather honey, and on cloudy days make their wax, so I garden when the weather is right, and the seeds will be growing into food, while the house is receiving its vigorous cleaning—more vigorous because the out-of-door invigorator—gardening, is desired.

Feed the House Plant

John Galt, Peel Co., Ont.
If you desire a good house plant, you must feed it. In the first place, a soil should be used that will return its feeding properties for some time, and for this purpose bone meal should be used when potting. This dissolves into plant food gradually, and therefore produces a supply for a considerable length of time. Always use the finest bone procurable, and the action will be quicker.

Many plants require a loam, open soil, which soon becomes depleted owing to the water easily draining through, carrying with it the food necessary for the continuance of growth and life to the plant, and in this case other methods must be employed.

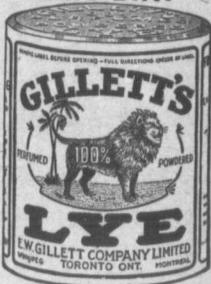
Occasionally a little household ammonia in soft water can be used as a stimulant, but great care must be taken not to apply it too strong, and only to growing plants in good condition.

There are many kinds of plant foods on the market, all directions as to their use are generally supplied as to the packages. Never give a plant liquid manure or stimulant when the soil is dry. Never use hard water or possible rain water to make it, and if none on hand use tepid water, not hot.

An excellent plan for feeding plants is to soak them in a tub of water, with some liquid manure mixed with it. This gives a little more tonic, but it thoroughly impregnates the soil with plant food. Put enough liquid made from old cow manure into a tub of soft water to make it the color of tea. Plunge the pots into this to just below the rim, and allow them to soak for about an hour; then lift out and allow to drain for a short time before putting into their respective places. They will not require water for a day or two, or even more, according to the temperature of the room.

Strong plants can take up much more food, and take it often than the weaker ones; therefore, be careful not to overfeed the weaker ones. With these in mind, use judgment, and common-sense, and success should be yours.

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The Makers' Corner

Butter and Cheese Makers are invited to send contributions to this department to ask questions on matters relating to cheese making and to suggest subjects for discussion.

Each Macker a Judge

G. G. Publow, Chief Dairy Instructor, E. Ont.

No man should be a better judge of cheese than the man who makes them. And yet there are more expert judges among the merchants of Montreal than among the cheese makers of Ontario.

Our cheese makers are becoming too mechanical. They do a certain thing to-day and the same thing to-morrow and the next day. And yet we all know that every change in the atmosphere makes different methods necessary. We need to be always studying our business, using our common sense all the time. No system that the school can give will enable the maker to go home and make good cheese. That is his own problem. — Extract from address.

Are Official Testers Advisable?

All creamery men and all cheese makers who have had pay-by-test, have had experience with the disgruntled patron who believes that the testing has not been honestly done, because his milk or cream happens to test lower than that of his neighbor. It has been suggested many times in Farm and Dairy that the appointment of official testers, who should do the testing of all dairy factories, would relieve the maker of suspicion, satisfy patrons, and be an improvement all round on the present method. Writing to Farm and Dairy on this subject, a prominent creamery man of western Ontario, who does not wish his name to be given publicity, comments as follows:

"That there is great dissatisfaction with the testing of cream I am well aware. Some of it is imaginary. I know that many farmers are dissatisfied when they are getting credit for all the fat that is in their cream. I know also that the appointment of official testers will not remove all the difficulty.

Would Tamper With Samples?
"If it is a fact that any who are buying cream are under-reading tests for the purpose of being dishonest, if the testing were taken out of their hands they would likely tamper with the samples unless the sampling were also taken out of their hands, which I don't think would be practical. Where the testing is being honestly and efficiently done, the tests would not be raised, the farmer could not get credit for any more fat, and I am afraid the same dissatisfaction would remain.

"It is not likely that the Government at the present time will assume the expense of official testers, but an arrangement might be made so that a portion of the expense might be borne by the seller and a portion by the buyer by taxing the fat so much a pound. This would be no hardship to either party, as at present the buyer is at the expense of all the labor of testing. If he were relieved of this expense by paying half the expense of an official tester it should be no hardship.

"If on the other hand the seller has any grievance in not having his testing properly done, it should be no hardship for him to pay a very small fraction of a cent per pound to know that his testing was efficiently done by a disinterested party."

Cream Sampling

Jan. Svendsen in *The Dairy Record* Of all the work done in the creamery, probably none is of greater importance than getting correct samples for testing of all milk and cream delivered. When each lot of cream is tested daily, the method of sampling does not need to be given the attention which is necessary when composite samples are taken. The cans of cream must, of course, be thoroughly mixed, but if the cans are dumped into a larger can and then well stirred, it does not matter if the sample taken for testing is large or small, and the sampling can be done with an ordinary dipper. If the samples are not tested at once they should be kept tightly covered to avoid evaporation of moisture.

When composite samples are taken of cream it is important that a proportionate sample is taken, and when sweet cream is handled, we believe that the tube sampling will give very satisfactory results, as the size of the sample taken will be in proportion to the amount of cream sampled. It is important that the sample bottles are kept tightly covered, and the glass-stoppered bottle will be found the most satisfactory. There are still some creameries using the tin-top bottles, but these are very unsatisfactory, as the tin covers do not always fit tight, and then some of the covers are tighter than others, making a variation in the moisture which escapes from the samples. Then again the tin covers become detached and we often find some samples entirely without covers, which, of course, results in unfair discrimination in favor of the uncovered samples.

To get satisfactory results from composite testing a proportionate sample should be taken, and the sample bottles should be kept tightly covered, and after the day's run they should be kept in the refrigerator, as the lower temperature will help to keep the samples in good condition and avoid evaporation of moisture.

Educational Work among Patrons

F. Brown, Grenville Co., Ont.

There is no way, to my mind, in which so much good can be done in educating the patron to care for his milk and to avoid tampering with it as frequent visits from the instructor. On my experience in the cheese business I have found that most good has been accomplished in special meetings and visits at the various farms.

Patrons are being fined all the way from \$5 to \$50 for perhaps taking only what they think is good milk from their can for their use. Others are allowed to go free that are sending milk that will turn out a smaller amount of cheese and of a poorer quality. My opinion is that if such people had been visited, less fines would have to be imposed, as fines are a curse to the factory and a disgrace to the community.

Some people wonder at their neighbor for taking a little cream from their can to make a cake or for their stomach's sake, and as a result have them fined, but the same people think it is all right to fill their cans with their neighbor's whey for the sake of their pigs' stomachs. There is no law against that.

I believe in the dual purpose cow. If the calves of pure-bred dairy cattle can be sold at fancy prices it is well. But half the calves are bulls, and if sold to dealers are worth \$1 less at two weeks old than the dual purpose calf, and if kept as steers they are at a still greater disadvantage. I have Ayrshire bulls and cows, so I think I know. — Geo. K. Robinson, L'Assomption Co., Que.

Much Depends on HOW You Sow!

A lot depends on the seed you use—a whole lot upon how you sow it. Proper seeding means that every seed is deposited where it will get the best chance. The "Leader" Disc Drill places the seed right at the bottom of the furrow, because the shelds go well down on the discs. No haphazard scattering of seed when you are seeding with a "Leader."

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BEEF

Country	Population Since 1890	Increase	Cattle Since 1890	Decrease
France	2%	2%	.....	.....
Germany	16%	4%	.....	.....
United Kingdom	10%	4%	.....	.....
Austria-Hungary	10%	2%	.....	.....
European Russia	14%	.....	12%	.....
Canada	34%	17%	.....	.....
Argentina	40%	40%	6%	.....
Australis	18%	16%	.....	.....
New Zealand	20%	16%	.....	.....
United States	24%	.....	30%	.....

Study this table, which was prepared before the war. Only one country increased its cattle more than its people in the past ten years. And, in it (Australia) in 1914, there was a tremendous loss of live stock through an unprecedented drought—a fact which the table does not show. Do you need any stronger argument than this table that there is bound to be an increasing demand for beef? Add to this con-

dition, the destruction of live stock of all kinds, breeding and young stock included, in the war zones. The war has merely hastened the meat shortage of the world. When it is over, the farmer with live stock will continue to profit in the world's markets, and, in addition to having helped feed our soldiers at the front, will be in position to reap a further reward for having stayed with the live stock industry.

SHEEP. Canadian farmers have been losing great opportunities in sheep raising and sheep feeding. Hundreds of thousands of sheep have been slaughtered to provide winter clothing for the soldiers of the different armies. Australia's losses, through drought in 1914, were very heavy. Canada has been importing frozen mutton from New Zealand. In view of these conditions, wool and mutton should prove very profitable for Canadian sheep raisers during the next few years.

SWINE. Through the indiscriminate sale of swine in the Canadian West in the past three months, the supply in 1915 promises to be little more than half of 1914. Add to this the fact that the British soldier is allowed 1/2 lb. of bacon per day, and that of sausage is the principal meat food of the German soldier, and you will understand the outlook for the future. Those who stay

steadily with swine, year in and year out, make money. Those who rush in and rush out, generally lose money. "Buy when others are selling, sell when others are buying," applies to live stock as well as to Wall Street stocks.

DAIRY. Milk cows increased in Canada from 2,408,677 in 1901 to 2,594,179 in 1911. This increase did not amount to 8% and was less than one-quarter of the population increase of Canada. At the same time, the per capita consumption of milk by Canadians increased 30%. Is there any wonder we had to import 7,000,000 lbs. of butter from New Zealand?

The exports of Canadian cheese have been steadily declining for ten years. Look at the market prices today. Do they not suggest the advantage of increased production?

Through cow-testing, selection and better feeding, the

average annual production per cow in Canada did increase from 2,860 lbs. per cow in 1901 to 3,908 lbs. in 1911, but this was only a beginning. Last year one cow in Canada produced 26,000 lbs.

The dairymen of Denmark who supply Great Britain with butter and bacon are not satisfied unless their herds average 10,000 lbs. per cow. Let Canadian dairymen work to increase the productiveness of the milk cow. Breed for milk. Test your cows. Save your calves. Select your milkers. Feed for yield. Read the Agricultural papers and Government reports and bulletins on dairying.

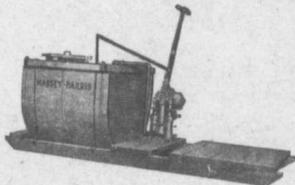
CONFERENCES

Now that you have attended the Conferences, or have read about them, get together and talk things over. Also write to the Publications Branch, Canadian Department of Agriculture, Ottawa, for bulletins and reports on live stock and dairying.

Canadian Department of Agriculture,
Ottawa, Canada

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Unsprayed fruit is liable to be a drug on the market.
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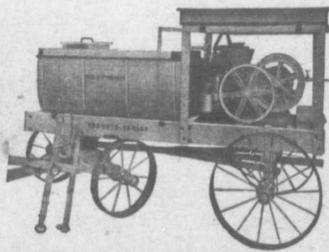


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(Continued from page 8)

ed in order that we may begin something systematic in that direction, or we shall have to wait until the accumulation of profits enables us to do so. The major part of the paid up capital stock has been used for organization work. Our aim has not been so much to get a large amount of capital subscribed as to get the farmers of Ontario organized and interested in our movement. Up-to-date we have 33 individual shareholders, and 88 corporate shareholders. The number of farmers represented by the latter may be reckoned by thousands. Considering these facts, we do not think it extravagant to state that we have had a most gratifying success."

Club Representatives

It was proposed to amend the constitution of the company to enable representatives from clubs to act on the directorate of the central association. It had been understood that representatives of clubs could act in that capacity. Later it was found that a clause in the Ontario Company's Act prohibits a man from acting as a director on any company unless he holds stock in that company absolutely in his own name. Last year all the directors of the company had bought stock for themselves.

The lawyer of the company, Mr. Gordon Waldron, of Toronto, was consulted. He reported that representatives from clubs could not act unless the Act was changed. It was realized by all that this was an injustice to the clubs, and it was decided therefore that the officers of the company should take the matter up with the government, or do whatever else might be necessary to make it possible for representatives of branches to act as directors of the central company without their having to hold stock in their own name.

Secretary's Report

Secretary Morrison reported that no effort had been made to extend the movement, simply because the applications received for assistance in organizing branches and addressing clubs had exceeded the company's ability to furnish speakers. He reported that the business of the company had assumed such proportions that it was desirable that there should be a field organizer as well as a general manager and an executive head in the office besides the bookkeeper. A full report of Mr. Morrison's address will be given later. The idea of pub-

lishing an official organ in a small way in order that the branches might be kept in touch with the central was approved and the directors were requested to arrange for such a publication if possible.

Directors Elected

The by-laws of the company require that two directors should retire each year. The three directors who retired according to the provisions of the by-law were Colonel J. Z. Fraser, of Burford, John Pritchard, of Gorrie, and S. A. Beck, of South Cayuga. In addition, Mr. C. W. Gurney, of Paris, and Mr. C. F. Rath, of Lansdowne, retired voluntarily. Mr. Rath asked not to be re-elected. The election of directors resulted in the other four old directors being re-elected, with Mr. Lawrence Schurr, of Park Head, Ont., to replace Mr. Rath. The other directors are: A. E. Vanco, Forest, Ont.; Jas. R. Anderson, Mountain View; E. G. Drury, Barrie; C. F. Whitaker, Williamsburg; Geo. Carlaw, Warkworth; A. A. Powers, Orono; W. C. Good, Paris, and Anson Groh, Preston. Mr. A. J. Reynolds, of Solina, was appointed auditor.

Officers Elected

At a subsequent meeting of the Board, in order that the increased business of the office might be properly looked after, a reorganization of the work was effected. Mr. Anson Groh was elected president and general manager. Mr. Powers, vice-president, and J. J. Morrison, secretary and organizer. C. E. Birkett, of Toronto, who has been acting as accountant, was made treasurer. The executive committee will be composed of Messrs. Groh, Powers, Good, Drury and Gurney, with Mr. Morrison as an ex-officio member.

Mr. Groh is able to devote to the company whatever time may be necessary. He is a practical farmer, who has had a wide experience in various business enterprises. He holds the confidence of the board and seems in every way well qualified to fill the position which he will hold. By this reorganization the work of the company should be greatly facilitated. Mr. Morrison, who has been greatly overworked, will have his burden lightened considerably. Marked progress should be made by the company during the coming year. The directors will meet at least every two months, and the members of the executive as often as may be necessary.



What We Have We Hold



AT THE ANNUAL MEETING OF THE

BELLEVILLE HOLSTEIN BREEDERS' CLUB

Held in Belleville on Monday, February 15th, it was unanimously decided (in duty to our patrons as well as to ourselves), that owing to the splendid patronage accorded our April sales in the past, and the assurance of a continuation of the same should we hold a sale in 1915, that 80 head of our choice individuals be offered by Public Auction at

BELLEVILLE, ON THURSDAY, APRIL 1st.

Catalogues are not ready at present, but will be about March 15th. File your name for one.

We extend a hearty invitation to all breeders to attend.

Watch Farm and Dairy for further particulars

G. A. BRETHEN, Sales Mgr., NORWOOD

LARGE Improved Yorkshires
Borns and Sows, from 8 weeks to 8 months old, sows in price. Priced consumable. Write
R. J. DAVIS - WOODSTOCK, ONT.
D. PHOENE

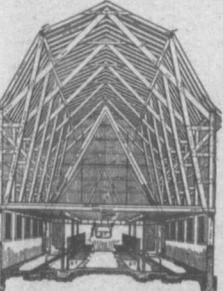
FOR SALE—Three-year-old Black Registered French Canadian Stallion, From celebrated strain, Basco, 715; 5 ft. 1 1/2 in. Also two Black Mares, 4 and 5 years, registered, French Canadian, sound; 5 ft. 1 1/2 in.—Adelard Forget, St. Albans, St. Eustelle, Que.

FOR SALE Thoroughbred Stallion
Registered in both American and Canadian Stud Books. Been imported and controlled, is good performer. Stands 15 1/2. Will sell at bargain. Write
H. SNELL, R.R. NO. 1, NORWICH, ONT.

SEED CORN FOR SALE
A quantity of carefully selected and well cured; Bailey, White Cap and Wicomin No. 7. Prices reasonable. Orders solicited.
JOHN WALLACE - RUSCOMB, ONT.

"Facts About Sweet Clover"
History of the Plant, Seeding, Hay Harvesting, etc.
A most little booklet that it will pay you to have. Price 25c.
WM. LINTON, AURORA, ONT.

SALE OR EXCHANGE—Mason Bunch Player Piano. Owner moving to farm. Holstein breeders esp. particulars. - Kohl St. Alma St., Guelph.



A Barn You Can Build Yourself

YOU can build or remodel your stable yourself if you equip it with BT Galvanized Steel Covers and accept the barn plan service we offer. No high-priced carpenters to hire and load for days. Your barn will cost less to frame, yet have greater storage capacity and more accommodation for stock.

BT STEEL STALLS EASY TO INSTALL

We send you blue-print plans and cross sections, showing best layout for your stable, best material for construction, passages, gutters, etc. You can install the BT Steel Stalls in two hours, with only a few tools, for they come ready to set up from our factory.

We'll Make the Plans

Write to-day for full details of this valuable service. Also get our valuable book, "How to Build a Dairy Barn," and Book No. 21, about BT Galvanized Stable Equipment. Either or both sent free for a copy sent and address on a post. Write to

BETTY BROS., Limited
1543 Hill St., FERGUS, ONT.

THE ELLIOTT SALE
Good fair prices were realized on the 45 head of pure-bred Holsteins sold by V. F. Elliott, Unionville, Ont., on Feb. 6th. The highest price realized was for May Johanna of Manor, a four-year-old, at \$220. Individuals realising over \$100 were sold as follows:
Livermore Blue Bell, A. Oloaker, Birth, \$105; Blue Bell Princess, H. Adamson, Edinville, \$100; Lady Maida Johanna, Reg. M. Van Wart, Richmond Hill, \$200; Mercedes Poach, A. Gilbert, Ringwood, \$175; Lella Queen 3rd G. A. Gilroy, Glen Burnie, \$175; Lella Queen, J. B. Turner, Stoneville, \$135; Ernestine Grace, Blair, \$100; Highland Kornel, G. Luss, A. A. Slesinger, Hagerman, \$105; Susan Ann's Plum 3rd, Moyer Bros., Markham, \$140; Nellie, W. H. Westney, Whitby, \$135; Mabel Pink Poach (and calf), W. Beck, Brook, \$200; Lavina 4th, C. P. Thomson, Markham, \$175; Cairn-corn Aargie, A. Kennedy, Arr. \$205; May Johanna of Manor, H. Jenkins, Bethesda, \$200; Lady Fafort's Poach, Moyer Bros., Markham, \$200; Sadie, A. Oberker, Sherick, Bethesda, \$165; Sadie Korlythe De Kol, A. Sherick, \$125; Sylvia Flower Poach, W. H. Westney, \$150; Sylvia Goldie Poach, W. H. Westney, \$125; Henger-ville Sylvia Thea, T. Banks, Markham, \$150; Bessie Walker Korndyke, E. A. Lloyd, Stoneville, \$200; Countess Verelie Regis, M. Van Wart, E. K. J. Gem- N. McLean, Rockwood, \$130; Marjory Paul, W. Jackson, \$120; Ivy-ville Jessie De Kol, C. R. Rennie, Unionville, \$100.

Bayside, Dec. 26, 1914.
Farm and Dairy, Peterboro.

Dear Sirs—It certainly pays to advertise. My pullets are all sold and have sold a hundred if I had had them, as I am getting replies to my ad. every mail. Thanks.
Yours truly,
Mrs. Wm. Hadrell.

Our good "Woman Folk" on the farms are no longer satisfied with a mongrel flock of fowl. They want pure breeds. This explains the big demand every season for birds for mating, eggs for hatching, etc., and the wonderful sales made by our advertisers of such. Moreover, "Our People" who keep pure bred dairy cattle, also like to have everything else on the farm well bred.

Farms and Dairy can get you in touch with these people, if you have eggs or pure bred fowl for sale. Our big Poultry Magazine Number will be out Feb. 4. Write us tonight about having your advertisement in it.

FARM AND DAIRY, PETERBORO

CANADIAN H.F. YEAR BOOK

The 1914 Year Book, containing a list of all official and semi-official butter and milk records of the Holstein-Friesian Association of Canada, is now to hand. The volume also includes a list of all record cows under the name under the name in Ottawa as a agitation against the use of Holstein milk was being conducted in some of the papers—two letters on that subject having appeared in one of the city papers the day before.

QUALITY OF HOLSTEIN MILK

While speaking at the banquet tendered by Mr. W. H. Cherry and W. J. Bailey, of Haverhill, to the dairy cattle exhibitors at the recent Ottawa Winter Fair, Mr. John Bingham, of the Ottawa Dairy Co., pointed out that Holstein breeders probably spend part of their funds advertising the merits of Holstein milk in the city. He pointed out that the city in Ottawa an agitation against the use of Holstein milk was being conducted in some of the papers—two letters on that subject having appeared in one of the city papers the day before.

AN UNPARDONABLE MISTAKE

Mrs. De Frogg, who is short-sighted: "Good morning, Mrs. Simkins. Your hand may be very fond of gardening. I saw him the first time this morning digging in the bottom of the garden. And how well he looks, to be sure!"
Mrs. Simkins turned her back and slammed the door in her neighbor's face. The latter, when she went to tell her daughter.
"And you told her, mother, that the thing in the onion patch was her husband?"
"Of course I did."
"Well, that's not her husband, that's a scarecrow!"—New York "World."

Twenty-one milking cows in the Brampton herd of Jerseys were recently tested and the average per cent. of fat in the milk for the year was 6.4.

FARM LUBRICANTS

THE Imperial Oil Company, Limited, manufactures at its refineries at Sarnia and Vancouver a complete line of lubricants especially prepared to meet the requirements of the Canadian Farmer.

Standard Gas Engine Oil, Prairie Harvester Oil, Capitol Cylinder Oil, Eldorado Castor Oil, and Arctic Cup Grease are brands which have been supplied to Canadian farmers for years.

They are known to be absolutely reliable lubricants—each carefully manufactured to meet particular requirements.

Each one carries the guarantee of the oldest oil-refiners in Canada.

Branch Stations Throughout the Dominion
THE IMPERIAL OIL COMPANY Limited



IMPROVED HEAVY-BREEDING YORKSHIRES
Woodstock Silver Duchess 4th has produced 2 litters of 13, 15 litters of 12 and one of 11—every one a choice pig—show type. This is my strain of breeding. Young Pigs and Brood Sows (breed) for sale. Priced reasonably. Write me.
F. J. McCALPIN, Kergald Stock Farm, GANANOQUE, ONT.

Burnside Ayrshires FOR SALE
Winners in the show ring and dairy tests. Animals of both sexes, imported or Canadian bred, for sale. Long Distance Thone in home.
R. R. NESS - HOWICK, QUE.
OUT OF WHITE FLOSS OF SPRINGBANK (36286), who just won 1st in 3-yr-old class at Ottawa Dairy Show, testing over 41, and was only 2 points behind winner in aged class. We have a grand young Bull Calf from this cow, sire is Whitelough Charm (1608), whose grand-dam is full sister to Ex-American Champion Brownie 8th. Have also one other young sire of fully equal breeding. Write us about them.
JOS. HUDSON & SONS, BURNBRIE FARMS, R. R. 1, LYN, ONT.

ABERDEEN ANGUS
Still have 2 Bulls, 11 and 12 months, that will make excellent animals and will pay for themselves for crossing purposes alone in any neighborhood. Sire, Elmport Ring-leader 8th. Write
R. OSWALD GIBBS, Stewart Hall P.O., Ont. Peterborough Station

FOR SALE
At reasonable prices, 3 Yearling and 3 Holstein calves. Apply to
NORMAN HUTCHISON, Ont. R.R. No. 9 Mallorytown, Ont.
When writing to advertisers mention Farm and Dairy.

AUCTION OF ENTERPRISE REG. HOLSTEINS TUESDAY, MARCH 16th, 1915

Surplus stock of young bulls fit for service, bull yearling and heifer calves, and 2 grade yearling heifers, about 15 head in all. All bred by Lakewood King John De Kol 2nd, 1645. His sire, Count Hengerveld Payne De Kol, has over 30 A. R. O. daughters some up to 28.33 lbs. butter in 7 days. His 37. sr. sire, Pieterse Hengerveld Count De Kol, has 90 A. R. O. daughters, some up to 31.31 lbs. butter, and 47 proven sons. His dam, Queen John De Kol, butter, 7 days 27.53 lbs. 30 days 111 lb. milk, 4 day 109.4 lb. 1 yr 24.27 lbs. butter 8 mo. after calving 39.34 lbs. 1 year 120.75 lbs. fresh bull, is offered on reserve bid. Private records of dams of our offering run from over 6.00 lb. milk in 1 year for 3-yr-olds to nearly 11.000 lbs. for cows. One heifer as a sr. 3-yr-old made 21 lbs. butter in 7 days. All records made on ordinary care. Cows milked twice a day.

Sale at 1 o'clock in vicinity of Enterprise, Bay of Quinte Branch C. N. R. Terms cash or 5% on approved notes. Write for catalogue.
THOS. WILSON & SONS, R.R. NO. 1, ENTERPRISE, Addington Co., Ont.



Poultry

Depend on the Condition of Your Hens

Poultry Flocks increase as fast as the care of poultry is better understood. Health is known to be the prime requisite for successful layers and broilers. Roup, Diarrhoea, Scaly Leg, Cholera, Grip, etc., are cured by using a little ZENOLEUM according to directions. A single quart will rid 100 disinfest the nests, incubators and brooders—to kill vermin and all bugs and germs about the roosts and hen houses; to dip eggs to hatch as well as for incubator moisture. Perfect sanitation **INCREASES YOUR** greater egg production, greater hatching returns, and more live, healthy chicks. Postmaster call ZENOLEUM the "Health and Profit Maker." Try it yourself.



ZENOLEUM

MADE IN CANADA.

If you KEEP HENS, you should KEEP ZENOLEUM. Ask your dealer first, or we will send direct, express prepaid, one tin, enough for 50 flocks of "dips" for \$1.50; 5 gallons, enough for 400 gallons of "dip," or freight prepaid, price \$3.25; or a trial tin, enough for 5 gallons of "dip" for 25c.

FREE POULTRY LIFE INSURANCE POLICY. IF YOU MENTION SENDS OUR ADVERTISEMENT IN THIS PAPER.

ZENNER DISINFECTANT CO.
318 SANDWICH ST. EAST, WINDSOR, ONT.

Use by all Canadian Agricultural Colleges and Experimental Farms at the Livestock Shows. They know what's best; it is wise to try their methods. Don't waste time and money in home-made mixtures when standard remedies are cheaper.



A hundred cents worth of fence for a dollar!

That's what you have a right to demand before parting with your money. That's what we want you to insist upon getting, whatever make of fence you buy. It's what you will get if you buy FROST FENCE.

We have never yet offered you man two dollars' worth of fence for a dollar. It can't be done. We wouldn't expect you to believe us if we claimed to be doing so week after week and still continued in business.

We can make good fences at less cost than other firms because we make our own wire. Frost Wire is carefully drawn to gauge, then finely tempered to the proper degree of hardness for fence, and finally gives a heavy coat of galvanizing to fit it for withstanding Canadian climatic variations. Any unprejudiced opinion will readily pronounce

Frost Fence First

We build it for long service. The deep wave-spring in the laterals furnishes ample reserve spring for future give-and-take. "Cheap" Fences fall down right here, because the spring is drawn out of the laterals at the time when the fence is tight enough to strangle the posts, and future expansion during the hot summer leaves the fence all slack and out of line.

You simply can't find a weak spot in either the material or workmanship of FROST FENCE, and the test of years confirms your judgment in buying it.

If you can't get FROST FENCE, write us direct. We may need an agent in your district.

Frost Wire Fence Co., Limited, Hamilton, Ont.

MARKET REVIEW AND FORECAST

Toronto, Monday, Feb. 23.—The trade in the wholesale market is continuing a little longer than usual this year. Orders have been given on a more conservative scale than in previous years, and the tendency to buy from abroad has been more than offset by orders coming in from normal sources of supply. This is an indication of the general business policy all over the country. There seems to be a disposition to buy more conservatively. The slowness of country trade with war time products is also to be noted. The plain fact of the matter is that the farmers of Eastern Canada have not benefited as extensively as usually expected. While grain prices are high, this very fact is a detriment to livestock which must feed their high-priced grain to stock that is bringing prices which average one dollar less than a year ago when grain was cheaper. Poultry products, potatoes and butter have not advanced as a result of war, and the fruit crop of last year was marbled only with extreme difficulty. Farmers are finding the pinch of war as well as the workers of the city.

A pleasing feature of the markets of the past week has been the increase in strength of live stock. Dairy produce too is stronger. Other lines are practically unchanged.

WHEAT
Wheat at \$2 a bushel is being freely talked. No. 1 Northern has now reached just below the market at \$1.95. It is at this level was illustrated in the past week when a report that Russia was going to undertake the engine Constantinople, sent the price down 5c to \$1.90. The market is now under taking seriously Mr. Cokohatch's motion to make dealing in wheat practically a government monopoly, on the suggestion that the United States may prohibit the export of foodstuffs to Germany. Current quotations: No. 1 Northern, \$1.65; No. 2, \$1.65; No. 3, \$1.65. Ontario wheat, \$1.50.

COARSE GRAINS
The market is firm. A slight decrease in corn quotations has been conducive to higher quotations on feed oats. High insurance and lack of ocean room has been a hindrance to further export trade. Oats, G.W. No. 2, 75c; No. 3, 69c; No. 1, 75c; Ontario oats, \$1.50 to \$1.60. Corn, No. 2, 82c to 83.5c; buckwheat, 80c to 80c; rye, \$1.25 to \$1.35; barley, malting, 80c to 85c; Montreal quotations: Oat, \$1.00; No. 2, 75c; No. 3, 69c; extra No. 1, 75c; local white, 80c to 85c; corn, 82c to 85c; barley, feed, 80c; malting, 90c to \$1; buckwheat, 80c.

MILL FEEDS
Bran is quoted steadily at \$29. shorts, \$29; middlings, \$30; No. 1, \$30. The Montreal quotations are: Bran, \$27; shorts, \$29; middlings, \$35; mouline, \$34 to \$37.

HAY AND STRAW
It is not long since the arrangement offered \$17 a ton for No. 2 hay delivered at Montreal. More and more the hay merchant is content to take No. 3 hay for \$17. The market is now reduced to local and United States demand. So high has been the price that a buyer from Cardiff, Wales, found it would cost him \$50 a ton to buy down Canadian hay on the other side. This is prohibitive. At Montreal, No. 1 timothy brings \$15.50 to \$16; No. 2, \$16 to \$17.50.

SEEDS
Seeds are quoted in wholesale quantities as set. as follows. Red clover, No. 1, \$21 to \$22; No. 2, \$19 to \$20; No. 3, \$18; white, No. 1, \$19.50 to \$20.50; No. 2, \$17.50 to \$18.50; No. 3, \$16; No. 4, \$15; No. 5, \$14.50 to \$15.50; No. 6, \$9.50 to \$9.75; No. 3, \$8.75.

EGGS AND POULTRY
In the week ending Feb. 22 the market has not changed, but mild weather has made the market decidedly firmer. In spite of the Lenten demand, here and in certain sections are quoted 30c to 34c and storage, 30c to 32c. At Montreal, No. 1, 30c to 32c; No. 2, 28c to 30c; No. 3, 26c to 28c. Poultry is quoted as follows: Chickens, live, 10c to 15c; dressed, 15c to 16c; fowl, live, 10c to 15c; dressed, 15c to 16c; ducks, 10c to 15c; geese, 15c to 17c; turkeys, 15c to 18c; dressed 15c to 20c.

POTATOES AND BEANS
The potato market still presents the same colorless condition. Ontario potatoes are quoted in car lots at 60c a bushel while at Montreal there is a local demand for car lots at 50c a bushel.

Beans are quoted at \$1.10 for primes and \$1.10 to \$1.20 for hand picked. The Montreal bean market is 25c to 35c; pickers at \$1.05 to \$1.10, as compared with \$1.20 at the beginning of the season.

DAIRY PRODUCTS
The Montreal market reports a general all-round firmness. The creamery trade is round lot of creamery is known to have been sold at 35c. A good lot here recently gone to Winnipeg at 32c to 33c. September creamery now brings \$4.50. In this market the creamery now brings \$4.50 to \$5; solids, 30c to 35c; dair products, 30c to 35c.

LIVE STOCK
The live stock situation this past week, so far as quotations are concerned, has looked decidedly more promising for the feeder and drover. There is a general

OUR FARMERS' CLUB

Correspondence Invited

ONTARIO
GRENVILLE CO., ONT.
DOWVILLE, Feb. 23.—We are having nice weather here and the snow is melting. Most free of snow and roads are bare in spots. The few farmers in order with fine hay put in. We had two Dominion shows on Saturday, "Patriotism and Production" last Wednesday at Prescott. Large crowds. Some of our farmers are sowing wheat this year. Almost all farmers will try and produce more. The farm boys are recruiting in this section. There are very few accidents since this winter. Calves are in good demand, mostly taken by local traders.

ARTHEUR, WELLINGTON CO., ONT.
The weather has been very good since we were here for two weeks. The farmers have had ideal weather for two weeks. Grain markets have risen and farmers have been advancing of late. If price holds out for another week there will be a very big crop of the farmers' hands. Oats are 60c; barley, 60c. Cattle and hogs are fat. It is paying to feed them. They are going on to market half finished.

OXFORD CO., ONT.
WOODVILLE, Feb. 23.—This is a very wet day, with a slight snow. Some have had some splendid shipping for some time and a good number of cattle at high prices. Grain is very high also; wheat, \$1.25 to \$1.30; corn, 80c to 70c and some farmers holding out for 70c. We get 10c for our milk; we deliver it at that figure. Winter dairying is becoming common among the farmers, in fact some are milking in winter. It has been seen in this section and it looked well in the fall. A. M. D.

NORFOLK CO., ONT.
HEMLOCK, Feb. 23.—The weather has been very severe, but recently it has turned warmer. Farmers are busy laying in a stock of wood for stumps and fall use. Stockmen are handling manure from Fort Erie and other places. Some from Toronto and used to fertilize trees. The weather is very quiet. No. 2 wheat, \$1.25; No. 3, \$1.20; No. 4, \$1.15; No. 5, \$1.10; No. 6, \$1.05.

SIMCOE CO., ONT.
The organization of the Norfolk Farmers' Club was effected and promising. The club will be held at the Norfolk Farmers' Club is holding a very short course in stock judging. The short course is being held at the Norfolk Farmers' Club is holding a very short course in stock judging. The short course is being held at the Norfolk Farmers' Club is holding a very short course in stock judging. The short course is being held at the Norfolk Farmers' Club is holding a very short course in stock judging.

THORNHILL CO., ONT.
THORNHILL, Feb. 23.—We have had lovely weather, but it has rained all day to-day. We are looking forward to an early spring which will be very beneficial. The club held here in aid of the Belgians was a grand success. The ladies are spending their time knitting socks for the soldiers. The club is holding a very short course in stock judging. The short course is being held at the Norfolk Farmers' Club is holding a very short course in stock judging. The short course is being held at the Norfolk Farmers' Club is holding a very short course in stock judging.

BRITISH COLUMBIA
NEW WESTMINSTER DIST., B.C.
CHILLIWACK, Feb. 19.—February has been a lovely month. The farmers are turning over the sod at a faster rate. The weather is just beautiful. White frost at night with bright sunny days. The horse buyers for the army are around again. They don't seem at all anxious for horses. The buyers give the horses a very queer test. N. O.

434-9 lbs. milk, 14.8 lbs. fat, 3.76 lbs. butter.
 Fourteen-day record, 57 lbs. milk, 672-8 lbs. milk, 27.88 lbs. fat, 24 lbs. butter.
 Chas. W. Goodland, Milton, Ont.
 Nelson's Calamity, 24 lbs. fat, 21.4 lbs. milk, 11.2 lbs. fat, 27.76 lbs. butter.
 Thirty-day record, 27 lbs. milk, 1.227 lbs. milk, 56.01 lbs. fat, 70.03 lbs. butter.
 Thos. H. Goodland, Watford, Ont.
 Sadie Vale, Barton, 2067, 57, 100, 174; 379 lbs. milk, 15.63 lbs. fat, 16.30 lbs. butter.
 J. W. McQueen, Milton, Ont.
 5. Queen Fayne Clothide, 33669, 57, 74, 224; 285.4 lbs. milk, 13.87 lbs. fat, 14.06 lbs. butter.
 Peter Smith, Stratford, Ont.
 6. Rita of Lulu, 23285, 57, 90, 78; 238 lbs. milk, 11.18 lbs. fat, 14.08 lbs. butter.
 J. M. Steves
 7. Hilda's Maiden, 3900, 57, 114, 34; 290.3 lbs. milk, 10.49 lbs. fat, 13.71 lbs. butter.
 J. W. McQueen
 8. Lakewave Dutchland Aris, 2111, 57, 74, 234; 286 lbs. milk, 10.37 lbs. fat, 12.96 lbs. butter.
 Lakewave Farm, Brant, Ont.
 9. Ada, Nadine Abbecker, 2251, 57, 74, 224; 285.4 lbs. milk, 13.87 lbs. fat, 14.06 lbs. butter.
 J. W. McQueen
Junior Two-Year-Old Class
 1. Lyons Segie Alta Pouch, 5476, 57, 114, 34; 330.1 lbs. milk, 11.43 lbs. fat, 15.53 lbs. butter.
 Allison Brown
 2. Abbecker Lass, 3496, 57, 90, 194; 327.7 lbs. milk, 11.46 lbs. fat, 14.33 lbs. butter.
 Thos. H. Smith, Stratford, Ont.
 3. Johanna Peer, 3686, 11, 10, 54; 323 lbs. milk, 11.11 lbs. fat, 13.19 lbs. butter.
 Arthur Pardy
 4. Riverside Lady Lyons, 2145, 57, 44, 94; 232 lbs. milk, 9.01 lbs. fat, 11.11 lbs. butter.
 Allison Brown
 During the first half of February, reports of the official tests of 39 cows and milkers were received and accepted for entry in the Record of Merit. Among a good lot of mature cows, Rowland County De Kol Lady Pauline stands first with 29.47 lbs. butter from 72.6 lbs. in seven days and 122.6 lbs. butter from 150.73 lbs. milk in 30 days. May Bebo Verelle just names the 36th class, making 39.87 lbs. butter in seven days and 119.63 lbs. in 30 days. Lawncroft May Bebo leads the senior four-year-olds with 29.47 lbs. butter in seven days and else behind her 42 lbs. in the junior four-year-old class. Hillebert Hongerfeld Lamsie with 34.05 lbs. in the junior four-year-old class. Dixie Queen of Loree is first with 23.05 lbs. in the junior four-year-old class. The Canadian leader for senior three-year-olds with 31.79 lbs. butter in seven years, displacing Alice Fensel, Calamity Pauline, Peterie Wayne is the only junior three-year-old with 24.13 lbs. butter, although Lady Peilsie Oshawa's Jewel completes eight months of her official record with 17.81, 7 lbs. milk and 8.6 lbs. but-

ter. Lyndenwood Calantha is first among the senior two-year-olds with 28.08 lbs. butter, while Lyons Segie Alta Pouch leads the juniors with 15.63 lbs. butter.
W. A. CLEMONS, Secretary.
SEMI-OFFICIAL RECORDS OF HOLSTEIN FRIESIAN COWS FROM FEB. 15 TO FEB. 17TH, 1915
Mature Class
 1. Fairmont Wayne, 10071, 57; 14,796 lbs. milk, 492 lbs. fat, 510 lbs. butter. Walburn Rivers, Ingersoll.
 2. Elsie Mae of Grand View, 10000, 57; 15,363 lbs. milk, 496 lbs. fat, 516 lbs. butter. Thos. F. Pattison, Thorold.
 3. Calamity Dutchess Pouch, 7604, 71; 12,143 lbs. milk, 409 lbs. fat, 510 lbs. butter. John C. Brown, Stamford.
 16096, 57, 2742; 10,849 lbs. milk, 429 lbs. fat, 538 lbs. butter. R. W. Walker, Utica.
 3. Nettie Hooker, 13642, 57, 3364; 10,770 lbs. milk, 415 lbs. fat, 516.25 lbs. butter. Walter M. Lee, Victoria, B.C.
 4. Orrilla Susie Abbecker, 10792, 57, 3741; 11,770 lbs. milk, 398 lbs. fat, 485 lbs. butter. Laidlaw Bros., Aylmer.
 4. Homestead Helion Abbecker, 14391, 57, 3264; 11,322 lbs. milk, 378 lbs. fat, 465.50 lbs. butter. Laidlaw Bros., Aylmer.
 5. Ontario Calamity Ormator, 10783, 57, 3544; 11,353 lbs. milk, 378 lbs. fat, 472.50 lbs. butter. Laidlaw Bros., Aylmer.
 6. Elmida M. of Grand View, 2414; 9,543 lbs. milk, 309 lbs. fat, 386.25 lbs. butter. E. M. Holby, Manchester.
 Fourteen cows and heifers qualified in the Record of Performance yearly test

The cows averaged nearly 8000 and the young stuff sold well. The highest price received for a female was \$200, paid for Elmida Pearl.
PRICES AT HIRAM HANCOCK'S SALE
 Some of the prices paid for Holsteins at the sale of Hiram Joseph, Courtdand, Ont., were:
 Lindley De Kol Beauty, \$200. B. Nance-shire, Ingersoll; Courtdand Beauty, \$150. W. Fensel, Tillsonburg; Courtdand Henry, \$110. B. Nance-shire, Ingersoll; Pride, \$170. B. Nance-shire; Calamity Beauty, \$100. W. H. Bonson, Courtdand; Lady Calamity Brookbank, \$233. Thomas Down, Courtdand; Lady Hengerfeld Brookbank, \$125. A. Wilkeson, Courtdand; Lady Calamity Snow Ball, \$105. W. Legg, Griffen's Corners; Lady Calamity Hengerfeld \$115. Bert Holbrook, Delhi; Lady De Kol Snow Ball, \$150. W. Fensel, Violet Hengerfeld, \$124. James Camp, Tillsonburg; Queen Beanie Calamity, \$105. B. Nance-shire; De Kol Snow Ball Hengerfeld, \$110. W. A. Buchner, Courtdand; Dutchland Sir Hengerfeld, \$100. Dutchland Sir Hengerfeld, \$100. Maplecroft, \$125. Charlie Grydon, Courtdand; Queen Calamity Beauty, \$150. A. Wilkeson; Lady Pauline Calamity, \$25. Mr. Nevill, Stratfordville; Queen Hengerfeld Calamity, \$175. B. Nance-shire.

Results That Are Appreciated

Farm and Dairy, Peterboro:
 Dear Sirs—Enclosed find cheque for my advertisement in Farm and Dairy, also citations marked as requested.
 I am pleased with any advertising and also the results from the same, and I can assure you I wish Farm and Dairy every success and the compliments of the season.
 Yours very truly,
 WALTER W. BOWLEY

Such results as these are being secured by Farm and Dairy for its advertisers from week to week. In writing us sometime ago in reference to a big sale, one of our advertisers in Western Ontario stated that more citations were requested through the advertising in Farm and Dairy than in any of the other papers he had seen. It clearly points out that Farm and Dairy reaches the people who are interested in the purchase of pure bred dairy cattle as our custom sales. If you are planning a sale of any kind, make sure of it being a success by advertising it strongly in Farm and Dairy.

FARM AND DAIRY, PETERBORO, ONT.

1. Silver O' Bella, 9967, 57; 10,870 lbs. milk, 377 lbs. fat, 463.75 lbs. butter. Thos. W. O'Brien, Stratford, Ont.
 2. Edler J. G. 9205, 57; 13,616 lbs. milk, 570 lbs. fat, 602.50 lbs. butter. G. H. Wilcox, Kings.
Two-Year-Old Class
 1. Ann of St. 12,389 lbs. milk butter, 307.7 lbs. fat, 313.75 lbs. er. St. Mary's, Kings, 1722, 57, 694; 11,169 lbs. milk butter, John H. Wilber, Lennox.
Two-Year-Old Class
 1. Sara Jewel

during the first half of February. Fairmont Wayne leads the mature class with 610 lbs. butter from 14,787 lbs. milk. In the three-year-old class, Ann of Maple Lodge stands first with 513.75 lbs. butter from 12,389 lbs. milk. The two-year-olds are headed by Sara Jewel Hengerfeld Korndyke with 526.25 lbs. butter from 10,649 lbs. milk.
W. A. CLEMONS, Secretary.
LAWLESS ESTATE SALE
 The 1/2 of Holstein cattle belonging to the Lawless Estate on Feb. 16th, although a sheriff's sale, was characterised by a good crowd and brisk bidding. Guyver Change, the best sire, was purchased by Mr. Jacob Leunler, of Bright, for \$300.



PEDLARIZE your Barns and Dwellings now. Pedlar's "George" and "Oshawa" Metal Shingles typify the highest development in metal roofing. A "Pedlarized" Roof is safe and inexpensive—proof against fire from lightning or sparks from the threshing engine.

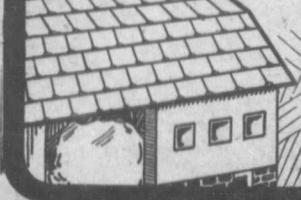
Pedlar's "GEORGE" Shingle

is made expressly for barns and large buildings. It is 24 in. by 24 in., and it requires only 25 shingles to cover a roofer's square of 100 square ft. (10 ft. x 10 ft.). You can lay "George" Shingles yourself with the aid of a hammer, nails and a pair of snips. The nailing flange of each "George" Shingle has nail holes placed at regular intervals which act as a guide and make laying easy. The side lock is very tight-fitting, and when one shingle is nailed in place, the nailing flange is completely covered by the next shingle which effectively seals it against rain, snow or moisture. "George" Shingles interlock on all four sides, providing a roof that is practically one solid sheet of galvanized steel, fire-proof, weather-proof, wind-proof and rust-proof. The "Oshawa" (16 in. x 20 in.) steel shingle, for dwellings and small buildings, is of the same high quality as the "George" Shingle, and has all its special features, excepting size.

MADE IN CANADA

Write to-day for Free Booklet—also get our quotations on Galvanized Corrugated Iron Siding or Roofing, Corrugated Copper Roofing, Sile Covers, Rivets (Cylindrical and Notched), Eaves Hough and Manufacturers Pipe, Tanks and Cisterns, and all other building iron, steel, zinc and everything in metal products. Ask for Catalogue, P.D. Address:

THE PEDLAR PEOPLE Limited
 Established 1861
 Executive Office and Factories - OSHAWA, CANADA
 MONTREAL TORONTO WINNIPEG
 OTTAWA WOODBURY LONDON CHATHAM



Clean Milk Cheaply Produced

CERTIFIED milk! What a vision these two words bring before us of stables scrubbed, cows scrubbed, white clothed attendants, a perfect sanitary dairy room, and all kinds of extensive precautions that only an excessive price for milk could justify.

This is the usual conception of milk production. This does not mean, however, that people who cannot afford to pay a certified price for milk must of necessity drink dirty milk, or milk containing a very great number of bacteria. At least that is the conclusion reached by experimenters at the New York Agricultural Experiment Station and published in a recent bulletin. The milk produced in these experiments averaged only about 500 bacteria per cubic centimeter of milk. This certified milk standard is 1,000 bacteria per cubic centimeter. This standard is taken as ensuring a milk that is above any suspicion of uncleanliness. Here is what the experimenters have to say of their results:

"There seems to be no escape from the conclusion that the germ count of these samples was low, simply because the samples did not contain many germs which were capable of growing in the media ordinarily employed in such studies even when unusual care was exercised in stimulating their growth.

"NOT 'CERTIFIED' CONDITIONS
 "This milk was produced under general conditions which appear to be no better than those surrounding a considerable number of the ordinary city dairies, conditions which probably would not be acceptable to any certified milk commission. Notwithstanding these facts the extended study of the product indicates that in bacterial content at least it is of the very highest quality. That milk of this quality is not uniformly produced under such general conditions is illustrated by the fact that a local commercial dairy in which the methods and equipment resemble that at the Experimental Station, except that steam is not available for treating the utensils, quite uniformly turns out a product with a content approximating 1,000,000 germs cubic centimeter.

"Under such circumstances it is pertinent to inquire as to the points



A Primitive Mexican Silo.

This is an old Mexican adobe clay silo in which is stored green feed to carry out in and sheep through troughs. There are many such structures all over Mexico—some of them centuries old. The original Mexicans did not square but the later ones were made round to allow better packing.

of difference between these two dairies. At the Experiment Station, the stable is kept cleaner, the cows are much cleaner, the milkers are cleaner and the utensils are thoroughly steamed. Apparently the wide difference in the germ content of the product from the two dairies lies in the influence of one or more of these factors."

The important fact which is being gradually recognized through these and similar observations is that the production of a reasonably clean and low germ content milk will be a far simpler and less expensive undertaking when the factors which really govern its production are actually understood.

Who Shall Keep Pure-Breds?

W. A. Clements, Sec'y Canadian H.-F. Breeders' Association.

I do not expect that more than five per cent. of our dairymen will ever be breeders of pure-bred stock. Even if the foundation animals were available, it is scarcely desirable that everyone should blossom out as a pure-bred stock breeder. Only at rare intervals do we find a man with an inherent love of good stock, a skill in feeding, and a genius in mating, which will ensure a steady improvement in the herd under his charge.

A considerably greater number of men may be found who are able to keep their herds up to the standard of their foundation stock. With a majority of the so-called breeders there is a more or less steady deterioration in the quality of their herds. It goes without saying that the operations of the latter class must be of little or no benefit to the breed with which they are concerned.

Those who belong to the country and small towns to-day are most fortunate.—President Falconer, Toronto University.

Farm property is the only kind of real estate advertised in British Columbia now. In this class quite a number of transfers are taking place on Vancouver Island and the Lower Mainland. The brokers as usual are keeping prices up as best they can, but prices and values are much nearer together than they were two years ago.

A More Modern Type.

The silo of to-day is independent to the live stock farmer. The one here illustrated, a hollow tile silo, is a long, long advance on the primitive structure of yesteryear. The principle of both, however, is the same—the holding of food in the excellent state in which outside life best.

AVONDALE FARM FIRST PUBLIC SALE

At the Farm, BROCKVILLE, MAY 26, 1915

This is just a foreword to show a FEW GOOD THINGS. At least 2 3/4 lb. cows. We hope two more to make as high records. At least 7 with 14 lbs. and better.

Also SEVERAL DAUGHTERS OF PRINCE HENRIEVILLE PIETJE, sire of Senior 3-year champion and the two highest Jr. 2-year-olds. And at least eight daughters of King Pontiac Arta Canada, the only son in Canada of King of the Pontiacs with official record. We don't expect to offer any bull.

Every mature cow expected to have Official Record.

Remember the date—MAY 26th

A. C. HARDY PROPRIETOR

LOOK HERE--HOLSTEIN BUYER!

In the past few weeks we shipped young silos to Geo. Hannah, Copetown, Campbell, Rossco, Ont., and others. Those young bulls are grandsons of King of the Pontiacs, King Sire and the great Max Echo, and still have a grand-son of King Sire, sired by his \$1,500 son. This bull is 7 months old, mostly white, and is all that could be desired as an individual. His dam is a grand-daughter of De Kol Sire's Butler Boy 2nd, now in official list, and promises to make 15,000 lbs., 2 milkings a day. She tested 4.7% fat 6 months after freshening. If you are a choice bull, with choice breeding, priced very reasonable, write at once or come and see him.

JOSEPH O'REILLY ENNSMERE, ONT.

Prince Edward County Holstein Breeders' Club

Fifty Breeders Club Five Hundred Head

The offerings are all young and sound and are backed up by the reputation Prince Edward County Breeders are making for themselves. Every visitor will be cordially treated and drives free of charge among the breeders. For information apply to the Secretary.

CLARENCE MALLORY Secy.-Treas. BLOOMFIELD, ONT.

THREE BULLS sired by a son of Pontiac Korndyke and from good one evenly marked and one white. Good individuals. Fine mostly white, and see them. J. M. TAYLOR & SONS, R. 2, No. 5, SCOTLAND, ONT.

THE MAPLES HOLSTEIN HERD All closely related to the R.O.P. 2-year-old champion heifer, milk and 945 lbs., better—25 lbs. as a 4-yr.-old—3 bull calves for service offered at present—one a half brother to Duchess; one from a 20-lb. 2-yr.-old sister to Duchess and the third from a closely related 20-lb. cow. Could you ask for better backing? They are all splendid chaps. Write or come and look them over. WALBURN RIVERS R. R. 5, INGERSOLL, ONT.

Get a Sire of Korndyke Blood

We offer a choice one out of a 20,000-lb. cow, sired by Colantha Pieterje Korndyke, whose dam has a 7-day record of 20.80 as a 2-yr. 4-year-old. Just a few of these left. Come and see them or write for pedigree and backing.

W. A. McELROY, HILLSIDE FARM, CHESTERTVILLE, ONT.

PUBLIC AUCTION OF CHERRYCROFT HOLSTEINS

20 HEAD—MARCH 12. 6 Pure-breds 14 Grades

All in calf to Hillcrest Pontiac Madrigal, a son of Pontiac Hermes. Young stock. No hard sale or quarters.

JOHN PRENTICE, Auctioneer JAS. INSON, SCARBOROUGH JCT., G.T.R.

The Oxford District Holstein Breeders' Club

Will Hold Their

4th Annual SALE OF Registered Holstein Cattle

In the City of

WOODSTOCK, MARCH 24th, 1915

and will sell 90 Head of Choice Young Cows and Heifers and Bulls ready for service. Parties wanting good foundation stock should attend this Sale, as we intend to make it the best of the season.

Catalogues will be ready for distribution by the Secretary after the 10th March.

JAMES RETTIE
Norwich, President

W. E. THOMPSON
Woodstock, Secretary

A. E. HULET
Norwich, Sales Manager

Jim Borts Escapes Reprobation

(Continued from page 18)

me alone here with my old Aunt Chloe on the place. You won't you come in and set down a-while? They won't be gone very long."

All this time Susie had been a-doin' up her hair and a-turmin' down her sleeves that was rolled up, and a-makin' all them funny little fixin's that women do when they're caught sudden by company without their best duds on; for she was flustered, too, only cootin' like Jim was. And she liked him so well, he bein' a fine-lookin' feller and havin' a mighty favorable reputation among the women on account of his good behavior, that she never felt a bit like laughin' and was only sorry for him a-sufferin' so with his bashfulness.

This helped Jim a whole lot, and he did finally manage to shuffle in and set down on a rockin' chair in the parlor without actually faintin'. A sweeter and purtier thing than Susie 'ust then he thought he never had seen in his life before; but, gosh, how he did suffer, he felt so funny. He mighty near made up his mind to make a dash for the door and give up that he was forsaken of the Lord, rather than try to talk to her; but at last he made a desperate effort, and he says, says he:

"How's your pa's cotton, Susie? Our'n ain't got a good stand, and I'm afraid the boll weevils is goin' to be mighty bad. I didn't see you at the meetin' last Wednesday night, and—"

What Precipitated the Proposal

Jim hadn't but just got stuck on them identical words, when it seemed that Providence interferred right in the nick of time to save his soul, or there's no tellin' what would have happened. For all at once Susie let out an unearthly scream that you could have heard purty near to town and run right over to that feller and took a-hold of him. That was because there had come a-creeppin' out from under the sofa she was settin' on a great big five-foot rattler that started to coil himself in the middle of the room, makin' his tail buzz all the time like a circular saw.

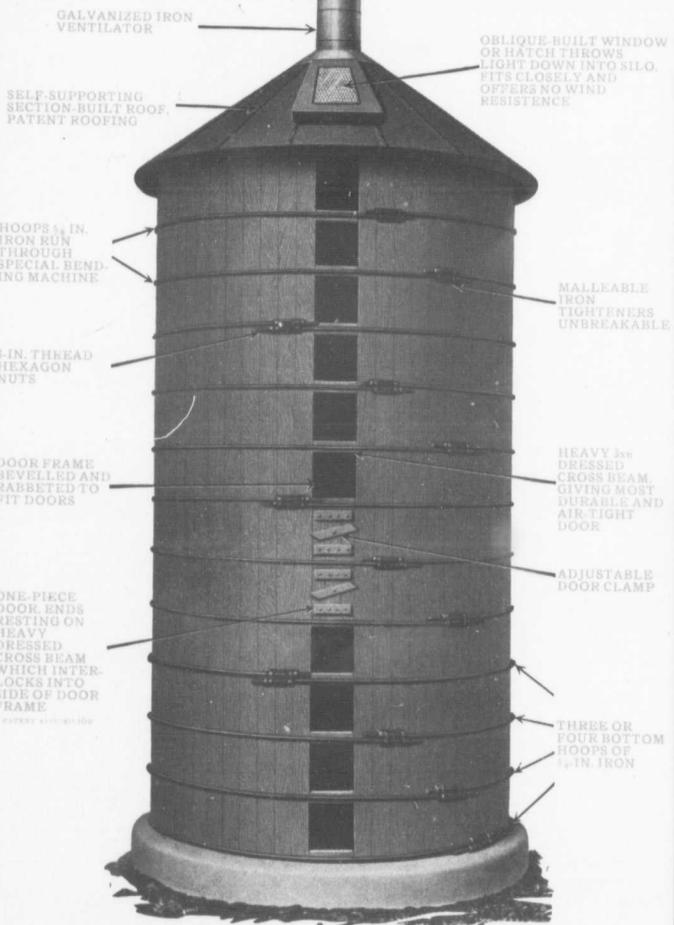
Well, Jim, he picked up a chair and smashed at the snake and threw him out of the door in a minute, then he turned to Susie, who was a-hangin' to him and takin' on dreadful; and in the excitement of the rookus, ding-in' as he didn't forget all about his bashfulness, and purty near carry that girl, who was about to faint, clear over to the sofa and put his arm around her and try to comfort her, tellin' her that there wasn't no more danger now, and that he'd protect her, if it rained rattlers and cottonmouths, to boot.

And mighty soon Susie got comforted all right, and told him that with him a-sittin' there she wasn't afraid at all any more, not even mentionin' his arm. And still the bashfulness kept away from Jim, and they got to talkin' earnest and confidential like, and may I be everlastin'ly dead, burned, if Jim—yes, that infernal bashful Jim Borts—didn't spunk up and tell that there purty girl that he loved her harder than a sugar mule could kick, and ast her if she wouldn't marry him. And she said "ye" just as easy and natural as if he'd been courtin' her for the last six months, which Jim thought was a special sign that he'd escaped reprobation. And by thunder he kissed her, even if she did have to sort of suggest that proceedin', they bein' now engaged.

Jim didn't dare to mention to Susie that night how she'd lifted a great burden off of him and saved his soul by lettin' him a-sittin' there he could do anything for the Lord's sake; but he shore told Brother Colder about it the first thing next mornin', addin' that he didn't feel worried about his soul any longer.

THE LISTER SILO

One Quality Only ---THE BEST



Write for particulars to Department K

R. A. LISTER & COMPANY, Limited

58-60 Stewart Street, TORONTO, ONT.

Branches at WINNIPEG, MAN., and 88 Water St., ST. JOHN, N.B.

A month later they were married. That feller that used to go around lookin' s'olemnner than a owl at a funeral was as happy that day as a nigger gin's courin'. He laughed and joked with everybody, like he'd always been that way; and he says to Brother Colder, says he, "If I'd a-known that the givin' up of idols was that easy, I'd been a member of the church long ago, I shore would."

Silo Building Activity

Close estimates show that during the past season, Eastern Ontario dairy and stock farmers built 902 silos. In one township alone, over 20 silos were rushed up directly as a result of this apparent shortage in feed as compared with the men who had silos. The total number erected over all Ontario would possibly exceed 2,000. And yet

1914 taught its lesson with such good effect that the coming season will be our greatest in silo construction. Most of us have learned that the silo is by all means our most economical way of handling the feeding problem. Corn has been our one great salvation in the production of cheaper milk. It is scarcely possible to make a close estimate of the number of corn tanks that will go up in the next year.

INTERNATIONAL WORM POWDER.

Quickly effective.

INTERNATIONAL WORM POWDER is a superior concentrated Vermifuge for Horses, Cattle, and other Animals. It expels the worms and removes the primary cause. It is very effective and absolutely safe for young animals.

Price per package, 50c.

INTERNATIONAL COLIC REMEDY.

Cures Colic for 50c.

Colic in its various forms kills more horses than all other poisonous diseases combined. **INTERNATIONAL COLIC REMEDY** is guaranteed to cure in ten minutes, and no bad effects will follow its use.

In bottles of two sizes, 50c and \$1.00.

INTERNATIONAL DISTEMPER REMEDY.

Colds, Coughs, and Distemper can be cured quickly by using **INTERNATIONAL DISTEMPER REMEDY** and following the simple directions given on each package. **INTERNATIONAL DISTEMPER REMEDY** is prepared from absolutely pure drugs in a highly concentrated form. If it ever fails, your money promptly refunded.

Price per package, 50c.

INTERNATIONAL HEAVE REMEDY.

For Heaves, Asthma, Broken Wind, Coughs, Etc.

INTERNATIONAL HEAVE REMEDY is prepared from several vegetable medicinal ingredients, and gives remarkable results. We will promptly refund your money if your horse is not cured or benefited by its use.

Price, per package, 50c.

INTERNATIONAL COMPOUND ABSORBENT.

Absolutely cures Cabs, Inflammation of the Tendons, Inflammation of the Coronary Curbion, Swellings of the Tendons, Wind Galls, Clapped Elbows, Bog, Spavin, Tendon Spavin, Clapped Hoofs, Enlarged Glands, Warts, Hard Swellings, Sprains, Splint, etc.

Price per box, 25c.

INTERNATIONAL GALL CURE.

Cures White Horses' Udder or Ribs.

INTERNATIONAL GALL CURE is a certain, sure, quick, and infallible cure for Gall, Sore Necks, Sore Backs, Sore Mouths, Cuts, Bruised Hocks, etc.

We will refund your money if it ever fails to cure.

Price per box, 25c and 50c.

INTERNATIONAL PHENO CHLORO (Disinfectant).

Kills Microbes and Germs.

Medical authorities universally recognize the absolute necessity of a reliable disinfectant and germicide as a means of preventing and stopping contagious diseases. **PHENO CHLORO** is one of the greatest known disease germ destroyers and equally efficient for either household or veterinary use. When used in connection with **INTERNATIONAL STOCK FOOD TONIC** we positively guarantee that it will prevent and cure hog cholera.

One 50c can of **INTERNATIONAL PHENO CHLORO** makes 25 gallons of disinfectant, ready for use.

In cans, 25c, 50c, \$1.00, and \$3.00.

3 FEEDS FOR ONE CENT

This is undoubtedly the most popular, most reliable, and most successful tonic **STOCK FOOD TONIC**. Why is this? Simply because **INTERNATIONAL STOCK FOOD TONIC** is a common-sense, every-day tonic, blood purifier, and general strengthener, a great aid to better digestion and assimilation, so that at a using expense of only 75¢ per year, and also to keep horses healthy and strong. It is the best thing you can give a horse for **INDIGESTION, LIVER TROUBLE, COUGHS, INFLUENZA, HIDE-BOUND, or BLOOD TROUBLE**, etc. It makes colts grow and develop very rapidly.

INTERNATIONAL STOCK FOOD TONIC was originated by one of the largest harness horse breeders in the world (M. W. Savage), who carefully experimented on both his horses and other stock for many years before placing it on the market. It is guaranteed to make cows give from one to three more quarts of milk every day and make calves quick growers. It has always had the largest sale in the world for preventing diseases in hogs and for helping to make pigs, shoats, or hogs grow amazingly. It is not to take the place of grain, but is to mix with grain for better health and larger profit by improving digestion and assimilation of all animals. **INTERNATIONAL STOCK FOOD TONIC** helps keep every animal up to the full normal strength and health, and is a remarkable preventive of disease. You eat several kinds of medicinal ingredients in your own food every day. Doesn't it seem just as reasonable to think your animals should have certain vegetable medicinal ingredients which they eat freely when running wild? The mere fact that **INTERNATIONAL STOCK FOOD TONIC** has successfully stood the practical, every-day test of farmers and stockmen the world over for a quarter of a century is absolute, indisputable proof to any fair-minded, intelligent man that it must possess very superior merits. The increasing sale for over 25 years can be explained on no other basis. The largest seller in the world can be built up only on merit.

Dealers everywhere sell **INTERNATIONAL STOCK FOOD TONIC**. In 25c, 50c, and \$1.00 packages, and in 25-pound pails, at \$1.75, on a Spot Cash Guarantee to refund your money in full if it ever fails to keep your stock better health and make you big, extra profit for its low-using cost. The wide-awake, fair-minded farmer will admit this is a square deal. There is an "INTERNATIONAL" dealer in practically every City, Town, or Village in Canada. If you don't know our nearest dealer, write us for his name.

Three Million Farmers use **INTERNATIONAL STOCK FOOD TONIC** regularly, because it makes them extra money in growing, fattening, or preventing disease.

INTERNATIONAL GROFAST CALF MEAL.

INTERNATIONAL GROFAST CALF MEAL is a scientific, high-grade substitute for milk in the quick growing of calves. **"GROFAST CALF MEAL"** is easily mixed; calves like it, and they grow and develop as rapidly as on new milk. So you can raise your calves at a very low feeding cost, which will make you much more money.

GROFAST CALF MEAL will raise three or four calves at the cost of raising only one on new milk. **GROFAST CALF MEAL** is manufactured exclusively as a perfectly balanced, scientific substitute for milk from high-class, carefully selected ingredients.

We have a special booklet, entitled "How You Can Raise and Grow Calves at a Low Cost Without Milk," which we will gladly mail anyone interested.

GROFAST CALF MEAL is put up in 7, 50, and 100-pound bags.

Use **INTERNATIONAL PREPARATIONS** entirely at our risk; your money refunded in case of failure. These are preparations which you are likely to need at any time, and are in the nature of insurance for your stock. Keep a supply on hand, as they may be the means of saving several hundred dollars. Refuse substitutes and imitations, and if your dealer cannot supply you, order direct from us.

INTERNATIONAL STOCK FOOD CO., LIMITED
TORONTO CANADA**INTERNATIONAL POULTRY FOOD TONIC.**

MAKES HENS LAY.

INTERNATIONAL POULTRY FOOD TONIC is a mixture of roots, herbs, seeds, and spices, supplying to the food the elements not contained in the grain feed. It makes hens lay more eggs, and keeps the system healthy by using the egg producing organs, as is indisputably proven by the sale of over five million pounds of this keeps poultry healthy and vigorous.

You know that what a tremendous strain it is to a hen to produce 14 eggs. Nature intended her to lay 4 or 10 eggs, then set up, them and hatch and rear her brood. Nowadays we expect a hen to lay 20 eggs and more per year. We positively guarantee a great increase in the number of eggs received when **INTERNATIONAL POULTRY FOOD TONIC** is fed. It is put up in 25c, 50c, and \$1.00 packages and 25-pound pails.

FREE—We have recently published a neat, handy book, entitled "THE INTERNATIONAL POULTRY GUIDE," which tells you many things you want to know about poultry, and gives valuable information about feeding poultry, and also about the common ailments and diseases of poultry and how to cure them; also about turkeys and ducks. You can have a copy of this Poultry Guide FREE, if you write and request it.

INTERNATIONAL LOUSE KILLER is a very fine, pure white powder that kills all lice when applied, and is sure death to lice. Will not discolor the feathers or plumage of the whitest birds. It also is a reliable disinfectant and germicide, and will kill all lice, mites, and worms there have been contagious diseases. **INTERNATIONAL LOUSE KILLER** kills lice on horses, cattle, sheep, dogs, poultry, and pigs. Put up in an extra large tin box with its sprinkling tool, ready for instant use.

Price per box 25c.

INTERNATIONAL ROUP REMEDY.

Death to Roups.

INTERNATIONAL ROUP REMEDY will cure all rousps, prevent one of the most deadly of diseases that the poultry raiser has to contend with. Roups is a contagious disease, and an infected bird can impart the disease to the whole flock. Every poultry raiser should have a full supply of our guaranteed remedies on hand at all times. Price per box (can be sent by mail), 50c.

SILVER PINE HEALING OIL.

Quickly Heals Cuts, Bruises, Etc.

SILVER PINE HEALING OIL is composed of pure vegetable oils possessing wonderful healing properties. Equally good for either human or animal use. For human use it quickly cures sores, burns, ulcers, bruises, kicks, sprains, scalds, flesh wounds, rusty nail injuries, etc. For animal use, especially recommended for sores, kicks, sprains, inflammation, swellings, bruises, injuries, cuts, and sores, all flesh wounds, etc. A Wonderful Cure for Rabbits When Cured.

In bottles, Price 25c, 50c, and \$1.00.

**FREE** The Racing Life of Dan Patch, 155
A General and Veterinary Stock Book

This Big Book treats of all kinds of diseases and how to Cure and Prevent them, and gives hundreds of Valuable Money-Making Points for the every-day Practical Farmer or Stock Raiser. The FRONT COVER PAGE is printed on EXTRA HEAVY ENAMEL Paper in 14 blended colors, and shows M. W. Savage driving Dan Patch, and is one of the best pictures ever made of the Great World Champion. This Big Book is 155 pages, 8 by 11—gives a complete History of Dan's Racing, and includes the Best and Every Record-breaking Speed Exhibition; VALUABLE VETERINARY DEPARTMENT with Scientific Illustrations. Most Expensive Book of its kind ever published. Also a special feature for your Library, as a part of the **INTERNATIONAL STOCK FOOD TONIC**. WORTH DOLLARS with your livestock. We do not believe you would take \$5.00 for this Big Book—if you could not find another copy. You ought to have the Thrilling Life of Dan Patch, 155, in your Library. The Great Champion of All World Champions. The Most Popular Horse ever known, as proven by over 2,000,000 people writing for his picture, and the Best of Horses. Not only a Thrilling and Sensational Horse Story, but also a LIBRARY for the Poultryman, the Hog Raiser, or the Cattle Raiser, or for the Horseman; the **INTERNATIONAL STOCK FOOD TONIC** is also a part of the **INTERNATIONAL STOCK FOOD TONIC**.



The Veterinary Information in this book is from the brains of the best men in America, the kind that are called into consultation on Animals worth fortunes on the **INTERNATIONAL 155 Horse Breeding Farm**.

THIS BOOK MAKES FREE IF YOU SEND US IN STAMPS, OR CASH, TO COVER THE ACTUAL COST OF PACKING AND MAILING.

Providing you are a farmer or stock-owner, over 21 years of age, and if you will answer these three questions: First—In what paper did you read this offer? Second—How many horses, cattle, sheep, hogs, and poultry do you own? Third—Have you ever used **INTERNATIONAL STOCK FOOD TONIC**?

Write to **THE INTERNATIONAL STOCK FOOD CO., LIMITED, TORONTO, CANADA.**

200 Fine Pictures in this Big 8 x 11 book.

ALL INTERNATIONAL PREPARATIONS ARE MADE IN CANADA BY CANADIANS