

FARM AND DAIRY

RURAL HOME

DEVOTED TO
BETTER FARMING
AND CANADIAN
COUNTRY LIFE

Peterboro, Ont., April 15, 1915

See
Contest
and
Critic
Score
The
15
Bible
Canadian



FOUR HORSE EFFICIENCY MAKES MAN LABOR CHEAP

ISSUED EACH WEEK

Rural Publishing Co., Ltd., Publishers

ONE DOLLAR A YEAR

Thirty Years of Continuous Experience

With Cream Separators of Leading Makes

And Eight Years' Experience

In manufacturing "SIMPLEX" Link-Bands Separators

RESULT



The "Simplex" of To-day

No expense or effort has been spared to incorporate in our Machine every possible advantageous feature. The principal aim has been to bring it to the highest degree of efficiency.

Every experienced dairyman knows that the larger the Hand Separator he can operate, even if he has but a few cows, the more profitable it is to him.

The most striking feature of the new "SIMPLEX" is its light running. The 1,000-lb. size, when at speed and skimming milk, takes no more power than the ordinary 500-lb. Hand Separator of other makes. It cuts the labor of skimming the milk more than in two, not only because it turns easier than most other Hand Separators, regardless of capacity, but because it does the work in half the time, and in these days, when labor is scarce and expensive, a saving in time is a direct saving in money to the dairyman.

Note the neat and pleasing appearance of the "SIMPLEX". Note the heavy, compact construction and convenient height of supply-can and discharge spout. The top of the supply-can is only 3/4 ft. from the floor, and is out of the way of the operator. The oil-trap, between base and body, catches all drainage.

Now, Mr. Dairyman, we know you want to start the season right. Drop us a card tonight for our literature telling all about the "SIMPLEX". Perhaps you already own a "SIMPLEX". In that case some of our other lines may interest you. We handle B-K Mechanical Milkers and all accessories. "Simplex" Combined Churn and Butter Maker, Testers, Vats, Dominant Cleanser, etc.

Write us NOW before the real rush commences.

D. Derbyshire Co., Ltd.

Head Office and Works: BROCKVILLE, ONT.

Branches: PETERBOROUGH, ONT. MONTREAL AND QUEBEC, P. Q.
WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

OUR

Farm Improvement Number

WILL BE OUT

MAY 6th

RESERVATIONS ARE NOW IN ORDER

SYDNEY BASIC SLAG

Our entire output of this Fertilizer for Spring, 1915, has now been sold and we cannot arrange further agencies unless for Fall delivery. Where we have no local agent we will supply farmers who wish to get an experience of Basic Slag this season with ton lots for \$20.00, delivered free at any Ontario station, cash with order.

Describe literature and all further particulars on application to

THE CROSS FERTILIZER CO., LIMITED
SYDNEY, NVA SCOTIA

Dairy Farming in Western Canada

Man, M.C.D., Alta.

WESTERN Canada is eminently suitable for dairying, and this industry is rapidly increasing in the three prairie provinces. This is so not only in the districts surrounding the large cities of the west, but in country places where they must be able to manufacture the product of their milk or cream themselves. In these centres the milk is either taken to a cheese factory, separated at home and butter made, or cream taken to a creamery.

The dairy industry has been, up to a few years ago, operated largely as a side line. After a day's work on the land, the farmer has not felt much like milking 10 or 20 cows. The low price of milk a few years ago was not encouraging to the mixed farmer. These conditions have changed, however, and many farmers are recognizing in the dairying industry the most important branch of the farming activity. For many years to come, the dairy farmer will be the man who will make the money.

Knowledge in Power

Canadian farmers have made money out of what because they understood the business of dairying, and they will make money dairying, because, with the valuable help given by the dairy branches of the Departments of Agriculture of the provinces and the demonstration and experimental farms, they will know how to handle their dairy cows and the milk after it has been taken from them. In Wisconsin and other states, in England, Scotland, Holland and Denmark, dairy farmers are making a good living off land ten times higher in price and not half as fertile as the Canadian West. Feed is made cheap, expensive, and with the application of labor, everything is more expensive, but they are making a good living because they understand the business.

The time was when Denmark bought the feed for their dairy cattle in America and shipped it 6,000 or 7,000 miles to feed her dairy herds, and now, with that expense, sold dairy products on the London market cheaper than the butter from Canada and the United States could be sold; and the dairymen of little Denmark grew rich.

The largest creamery in the world is located in the Missouri Valley, and it was made possible by conditions favorable to the development of the industry. In the rolling prairie states, the rich native grasses and immense fields of alfalfa have been the principal elements in the development of dairying on the western farms. The ease with which green fodder can be produced to supplement the pastures in late summer and fall, and provide for winter feeding, makes dairying very easy in western Canada. Its immense pastures, and the thousands of acres suitable for the growing of alfalfa compared with Missouri, reveals possibilities undreamed of by the most optimistic.

Progress to Date

Little has been done so far in winter dairying except by those catering for city milk supplies. This is the most profitable time of year to milk cows, and in some districts enough is done to keep the institutions that manufacture the raw product open the whole year instead of in summer only. Up to the present time land has been so cheap and farmers have made their money so easily, that there has been little need for much work in the winter, but closed settlement and the higher prices obtainable for dairy products will alter these conditions.

The influence of dairying on in-

terested farming has been a most important link in the chain of development. The success of farmers in the eastern provinces in bringing from their farms the returns and profits which were wanted for them has been accomplished to a degree of thoroughness by intensified agriculture, and dairying has filled the gap between a promise of what the land will provide and a complete fulfillment of its possibilities.

The demand for dairy produce is increasing faster than the supply, and there is in this industry the greatest opening for profitable and continuous farming for any number of settlers. In some districts farmers are beginning to realize the possibilities of dairying. The profits accruing from a careful handling of dairy stock may be seen in a few cases which have come under the writer's notice, one in each prairie province.

Success in Alberta

In Southern Alberta a Slav had been working in the mines. He had saved \$700, and with his wife and a family of small children he moved to a farm on the international boundary line, for which he paid \$15 an acre. The land was bought on time and the \$700 was put into cows and a few vehicles and implements for the farm. That was about years ago. To-day that farmer has 20 cows, and his receipts for cream at Cardston creamery in 1913 were \$850. In addition to this he sold calves and cow live stock amounting for \$1,500, and this is about his yearly turnover for his mixed farm. This man has paid for a half section of land, built a comfortable home and outbuilding, and has the best machinery and working equipment, and does not owe a dollar in the world. He attributes his success to dairying.

Another case is that of a hired man in Saskatchewan. Five years ago he had nothing but a homestead of 160 acres. Without any help he sold a carload of potatoes this year, shipped to the States, and he has threshed some 70 bushels of oats to the acre from 30 acres, had 16 acres of corn, besides other grain, and sufficient feed for a large stock of cattle, horses, and hogs.

Wonderful Success in Dairying
The outstanding example of the profits in dairying is, however, seen in the experience of two Belgians in Manitoba. They bought a dairyman on landed in Winnipeg without capital, and not being able to speak the English language. They worked three years as laborers and saved \$700. They bought a dairyman on and purchased his 28 cattle for \$1,600, making the \$700 as first payment, and rented his premises for \$25 a month.

The first year they paid off their debt of \$900 and purchased five acres of land of their own. The second year they built a modern house and stable to hold the 80 cows. All modern improvements, concrete floors, stanchions, individual water basins, and litter carriers were installed. Then the herd had been increased to 66. These cattle were tested on the service of the dairy, and 33 were found diseased and ordered out of the herd. This was a loss of half their cattle, but they were not discouraged, and steadily added to their herd. They had new cattle tested, and to-day, six years after their arrival in the country, they have a herd of 110 cows, a modern house and stable, and 60 acres of land worth \$100 a month for the milk, and are worth \$50,000 in property.



We Welcome

Trade increases the

Vol. XXXIV

Why are the to Purch

THERE is a growing number of Canadian farmers who are taking the advantages that them, due to the military purposes. As the number of horses the first of December head. The number erably augmented, that anywhere from 2 red perished. In cavalry horse in ac rated at only four m casualties have been mate has been placed. Even for such a con against the Boers, G horses from the An losses to horse flesh compared with the flected. And yet the has not been stimula for military purpose view of the evident few. Why?

Is This
In their annual Co United Farmers of passed a resolution t rect, would throw som resolution read:

"Whereas, the Do cently placed an em United States of her poses, and to preven ish and French mil making purchases in

"Whereas, the effe ing home producers to depress a branch o pressed already;

"Therefore, be it r spective upon the re move the restrictions duction be given its

The restrictions ap moved and the subje few days ago in the tion with the agricul tember for Humbolt member as to the exp of pure bred sires strongly commended eral hundred thousand questioned the wisdom duction of better hors the same time restri horses once the farm



FARM AND DAIRY & RURAL HOME



We Welcome Practical Progressive Ideas

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 APRIL 15, 1915

No. 15

Canadian Horses for Military Purposes

Why are they not Wanted in Greater Numbers? Are Agents of Great Britain and France Forbidden to Purchase Horses in Canada? If so, Why? The Subject Discussed in the Dominion House.

THERE is a growing feeling among the farmers of Canada that they are not reaping the advantages that should naturally accrue to them, due to the enormous demand for horses for military purposes. A conservative estimate placed the number of horses in active service in Europe the first of December last, at well over 1,000,000 head. The number must since have been considerably augmented. At that date it was estimated that anywhere from 250,000 to 300,000 horses had already perished. In previous wars the life of a cavalry horse in active warfare has been estimated at only four months, but in this war horse casualties have been much heavier, and the estimate has been placed down as low as four weeks. Even for such a comparatively small war as that against the Boers, Great Britain took over 100,000 horses from the American continent; and the losses to horse flesh in that war were as nothing compared with the losses in this worldwide conflict. And yet the horse market in Canada, depressed as a result of present trade conditions, has not been stimulated to any extent by demand for military purposes. In fact, purchases, in view of the evident need, have been comparatively few. Why?

Is This Charge True?

In their annual convention last February, the United Farmers of Ontario, made charges and passed a resolution that, if its premises are correct, would throw some light on the situation. The resolution read:

"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 purchases 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 in question to the end that production be given its greatest possible stimulus."

The restrictions apparently have not been removed and the subject came up for discussion a few days ago in the Dominion House in connection with the agricultural estimates. Mr. Neely, member for Humboldt, Sask., asked for information as to the expenditures for the distribution of pure bred sires throughout Canada. He strongly commended the policy of spending several hundred thousand dollars in this manner, but questioned the wisdom of encouraging the production of better horses and more horses, and at the same time restricting the market for the horses once the farmer has raised them. He

charged, "that not only had no special assistance been given by the government in securing markets for horses outside of Canada, but on the contrary, buyers of horses for foreign countries had actually been warned off Canadian soil.

British Purchasers in United States

"I am told that purchasers for the British government have been requested by those acting in authority for this government, to leave Canadian

they may purchase horses cheaper than they otherwise could."

In replying to the charge of Mr. Neely, Sir Robert Borden spoke in part as follows: "The allied powers, in regard to horses, as to which the wastage is enormous, had to look pretty far ahead in the early months of the war, and certain arrangements were made, which I am not free at the moment to disclose to the House, but which I would have no objection to mention to my honorable friend, or to any other honorable gentleman on the other side of the House. * * * Arrangements had to be made, as I understand, between the powers as to where the provision of horses that would be required, could be obtained, and with those arrangements, which were arrived at under a very distinct understanding, we could not very well presume to interfere. * * * The arrangements and conditions which have been brought to our attention, are not only of a confidential, but of a very complex character, and I hope my honorable friend will do us the justice of believing that it has been our greatest desire to bring about a condition of affairs under which the farmers of Canada, whether in the East or in the West, will have an opportunity to dispose of their horses at remunerative prices."

British Govt. Agents, But—

Mr. Neely was not inclined to take the Premier's reply as satisfactory. "My information," said he, "was that the British Government actually sent their agents to Canada to purchase horses and that the Canadian government wishing to retain the Canadian horses for itself, had requested the British buyers not to pursue the purchase of horses on Canadian soil, until the Canadian government had itself secured, at fair and reasonable prices, a sufficient number with which to equip the Canadian contingent."

Sir Robert Borden replied: "There is no doubt whatever that persons who have been commissioned to purchase a certain number of horses to provide for the needs of the first and second expeditionary forces, wished to be in a position in which they could be absolutely sure of securing a sufficient number of the requisite type, not only to supply the needs of the first contingent, but also to make good the enormous wastage that must necessarily take place as soon as these forces arrived at the front." The Premier went on to state again that there was another reason for the withdrawal of British buyers, which he was willing to communicate to Mr. Neely privately, but not publicly.

The discussion waxed vigorous at times. Mr. Robb of Huntington, Que., and Mr. Bennett, of Calgary, Alta., taking part. Mr. McMillan of Glengarry, told of an interview that he had had

(Concluded on page 21)

Why Are Our Horses Not in Greater Demand?

Some Questions that Farmers are Asking

MILLIONS of horses are needed for military purposes. And yet comparatively few have been purchased in Canada. Why?

Our weekly ago the United Farmers of Ontario charged that representatives of the horse buying departments of the British and French armies had been warned out of Canada by the Dominion Government and requested that such restrictions be removed. Some days ago the question was discussed in the Dominion House. The Government practically admitted that British buyers were not operating in Canada, due to "special confidential arrangements."

These arrangements may have been formulated on a broad imperial basis. Their actual effect in operation, however, has been to lower the price of horses below what it would be with free competition. The farmers of Canada are willing to make sacrifices for the Empire, but they may be pardoned if they asked this question, "Why should a product of the farm be singled out for special restriction?" If manufacturers may sell freely of their products to any of the allied powers why should not the farmer be permitted to do likewise? These are points on which the debate in the House does not throw any light.

sell and confine their purchases of horses to the United States and other countries. They were told to leave the Canadian horse market alone until the Canadian government had secured all the horses they required so that the price should not be advanced. * * * For some reason or other while French and English buyers are plentiful in the United States down as far as Texas, in Canada there is a woeful dearth in the demand for cavalry and artillery horses. If there is such an embargo placed on purchases from outside, it is up to this government to take that embargo off at once. * * * Surely the stock breeder and farmer are not to be deprived of this opportunity to get a good price for their surplus stock, simply because the Canadian government wishes to monopolise this market for themselves, so that

Planting Time Pointers by Practical Planters

Making the Most of Oats

C. L. Johnson, Huron Co., Ont.

THE oat is Ontario's greatest grain crop. We don't hear much of it, however, because as a general rule the grain is fed on the farm. If it were a cash crop, like wheat, it would receive more consideration. As usually grown it serves a double purpose—to yield a supply of grain and straw and also as a nurse crop to the clovers and grasses. On a well run stock farm oats are always seeded to clover and grass, and this modifies seeding practice very considerably.

Both clover and grass call for early seeding, the earlier the better. Hence for my grain crop I always fall plow the land, and wherever possible I get in some additional work as well. The best crops of oats I have ever had have been where the land was well worked in the fall and ribbed up for the winter. Where the land was ribbed the top of the ridges dried out quickly, and when they were harrowed down by dragging crosswise, there was a nice dry, warm bottom all ready for the grain. The success of these crops I attribute to the earliness of the seeding. In some cases, I believe in sacrificing tillage a little in order to get the seed in the ground early. I use the seed drill. Every grain is then in at a uniform depth, every grain is covered, and I believe that drilled grain permits of a freer passage of air through the crop, and as a result there is less rust.

The kind of seed to sow depends on the soil. I have heard it recommended that the richer the soil the heavier the seeding. I have found exactly the opposite to be the case. On one field that is almost sandy, I seed heavily, sometimes as high as two and one-half bushels to the acre. On heavier soil the oats stool more, and I consider six pecks to two bushels quite sufficient seeding, generally seeding the smaller amount. To sow more is waste of good seed. If those farmers who sow three bushels to the acre were to give their seed grain a thorough fanning and remove one and one-half bushels of the smaller or shrunken seeds and sow the best one and one-half bushels, they would get a larger crop, I am convinced.

Will We Plow Deeply?

"CULTIVATE deeply" was the advice freely tendered to each and all by the agricultural authorities early in the last century. The farmers of the Island of Jersey are reported to plow 14 inches deep. In England it is a common sight to see three big horses pulling a single furrow plow, running almost as deeply. Old farmers delighted to state that they plowed "right down to the beam." The correctness of this teaching was generally accepted until the late Wm. Rennie came out as an advocate of shallow plowing and the keeping of the plant food and humus as near to the surface as possible. Mr. Rennie soon had a host of disciples. The subject was opened up anew and the relative merits of shallow and deep plowing have been under fire ever since. In the course of a recent visit to Henry Glendinning, I sounded my last as to his views on this much-discussed topic.

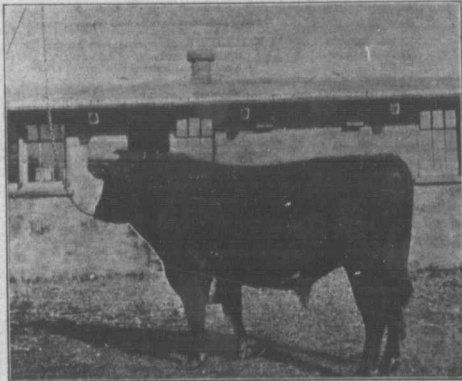
"I believe in doing things the easy way," responded Mr. Glendinning, who stands six feet three, and looks quite capable of doing things the hard way if he wanted to. "I could never see the sense of plowing deeply when clover and alfalfa will work up the subsoil for you and do it much more cheaply and easily than the plow or any other cultivating tool. I think that my friend Wm. Rennie was much misunderstood in

his advocacy of shallow plowing. Mr. Rennie believed in shallow plowing, but he believed also in deep cultivation. If you ever heard Wm. Rennie advocate shallow plowing, you also heard him at the same time advocate short rotations and lots of clover."

As we discussed the question further, I was interested to find that Mr. Glendinning started out as an advocate of shallow cultivation at almost the same time as did Mr. Rennie. He related to me the early experiences that opened his eyes to some principles in cultivation that greatly reduce labor.

"My first lesson," said Mr. Glendinning, pointing out the window, "was learned in that field where the orchard now is. We had the field in rows. I plowed part of it in the fall before the land froze up. In the spring I walked over the field, and so far as I could see the plowed portion was not any mellowier than the unplowed. I remarked to Mrs. Glendinning that I did not think I would plow the rest of that field that spring. The only thing that worried me was that people might see that I was putting in seed without plowing, and I did not want it to get around that Henry Glendinning was too lazy to plow his land. People, however, were busy on their own farms. They did not stop to look at the doings of their neighbors, and I was just as glad. I seeded the field down to wheat after disking only.

"The wheat came along nicely. One evening I took a neighbor out to look at it. I stood him



Fresh Air and Exercise Combined With Security and Safety. This illustration shows the device used at Macdonald College, and by several breeders of our acquaintance, to exercise the herd bull. The chain attached to the nose ring slips along a strong overhead cable stretched across the barnyard. All who have adopted this method report favorably on it.

Manure to Apply per Acre

J. W., Oxford Co., Ont.

"CANADA'S foremost farmer," Mr. J. H. Gradale, contends that manure should be spread in winter. I will admit that this method saves time during the spring rush, and there was a time when I would throw up my hat for it with a whoop. Now I am not so certain that it is the best plan, and the big objection to the winter spreading of manure is that it is only in exceptional cases that the manure spreader can be used. Not only is it difficult to pull a manure spreader through snow banks, but the gearing will freeze and refuse to work. The result is that the manure is cast about in big lumps from a sled, and even if the man were careful, the manure cannot be spread thinly enough. This I regard as important. Light applications of finely pulverized manure frequently applied will give much a better result than heavier applications at longer intervals.

This lesson I have learned from experience. Some four years ago I had one of my fields, bordering on the farm next to me, in corn. The same year the field on the other side of the fence was in corn. Both fields had received about the same treatment and were of equal fertility. We bought our seed together, so the seed must have been the same. I manured my field for corn at the rate of 14 loads to the acre. My neighbor applied only six loads to the acre with a manure spreader, and I am confident that he did not carry a bigger load on his spreader than I did in my cart.

His corn made a better start than mine, and all through the early part of the season it wasn't necessary to climb over the fence to see that my neighbor had the best corn. Mine did better later on, but when the crops were cut for the silo my corn was not one bit better than his in spite of its receiving more than twice as much manure. I bought a spreader, and have been applying less manure but more frequently for the past three years, and with excellent results.

I would like also to call attention to experimental evidence on the point. For this I am indebted to an article in Hoard's Dairyman:

At the Pennsylvania Experiment Station

they have been carrying on experiments for a long term of years to test the relative value of different amounts of manure. The manure is applied every other year at the rate of six, eight and ten tons per acre. The average value of the increased crop for every ton of manure applied has been as follows: Six tons applied every two years, \$9.16 per ton; eight tons applied every two years, \$1.66 per ton; 16 tons applied every two years, \$1.44 per ton.

Ohio Tests

A similar test has been carried on at the Ohio Experiment Station. Manure has been applied to the wheat crop in a rotation of potatoes, wheat

(Concluded on page 19)

"HE is right

man's way country we have referring to our s that they are "fig signify the attainm The expression son I once had with a one of the counties showed me over his of pure-bred cattle, for milking, and indicated the 250 ac the buildings, that not only in clover, I got there through I ever grew on my as few other crops time enriched my l

In these few words of the clover crop, gave the two big re popular in every d feed both the stock dairyman, I learned sow clover at every ing grain, he also to be plowed up th The resultant enrich clover he considers the cost of the seed At the time of my with clover seeding the corn, the growt plowing spring. I do with his experiment following the same cess. My host of neighbors, had star of impoverished so he always attributes

As a

The value of clo power to abstract ngen is the most e fertilizers. It, too, readily lost by leech it were not for nitro simple problem in enough nitrogen in to feed all crops for Of all common fert are the only ones th air, and of all legum portant. I have see by plowing down cl may be followed suc



The Buildings and Cattle of Avondale Farm, Brockville, Ont. A. C. Hardy is Properly Proud of His Fine Farm and Herd.

“Right in Clover” is a Good Place To Be

By E. L. McCASKEY

“HE is right on Easy Street,” is the city man’s way of expressing it. In the country we have an equally expressive way of referring to our successful neighbors: we say that they are “right in clover.” These words signify the attainment of comfort and prosperity. The expression sometimes reminds me of a talk I once had with a veteran dairy cattle breeder in one of the counties of south-western Ontario. He showed me over his fine buildings, his big herd of pure-bred cattle, which was then in the stable for milking, and then with a wave of his arm indicated the 250 acres of AI land, lying beyond the buildings, that comprised his farm. “I am not only in clover,” said he with a laugh, “but I got there through clover. It is the best crop I ever grew on my farm. While feeding my cows as few other crops would, it has at the same time enriched my land.”

In these few words are summed up the merits of the clover crop, and in them this dairy veteran gave the two big reasons why the clovers are so popular in every dairy district of Canada—they feed both the stock and the land. This particular dairyman, I learned, had made it his practice to sow clover at every opportunity. If he were seeding grain, he also seeded clover, even if it were to be plowed up that fall or the following spring. The resultant enrichment of the soil through the clover he considered splendid compensation for the cost of the seed and the trouble of sowing it. At the time of my visit he was experimenting with clover seeding after the last cultivation of the corn, the growth to be turned under the following spring. I do not know how he succeeded with his experiment, but I know that others are following the same practice with wonderful success. My host of that occasion, I learned from neighbors, had started originally with 50 acres of impoverished soil. Its present productivity he always attributes to clover and dairy cows.

As a Soil Builder

The value of clover as a soil builder is its power to abstract nitrogen from the air. Nitrogen is the most expensive element of all our fertilizers. It, too, is the element that is most readily lost by leaching or by fermentation. If it were not for nitrogen, fertilization would be a simple problem on any farm. And yet there is enough nitrogen in the air right above the soil to feed all crops for hundreds of years to come. Of all common field crops, however, the legumes are the only ones that can feed directly from the air, and of all legumes the clovers are most important. I have seen impoverished soils built up by plowing down clover, and this same method may be followed successfully in all cases where

nitrogen is the element lacking in the soil. Of course, where the clover crop is harvested and sold off the farm, the fertility of the soil will not be improved, although as far as nitrogen is concerned it will not be impoverished. The ideal system is either to plow under the whole crop or else feed it on the farm and return the manure to the land.

Clover does more than merely increase the available plant food of the soil. It improves its mechanical condition as well. Heavy clay land is not ordinarily regarded as ideal corn land, but where clover is grown frequently on a short rotation and a crop plowed under now and then, even heavy clay land may be made to produce the very finest of corn crops. This is due to the improvement in the mechanical condition of the soil. The rotting of the clover roots adds humus to the soil, which lightens it up, resulting in more thorough aeration and an increase in the moisture holding power of the soil. I believe there are more soils incapable of profitable crop production through impoverishment of humus than through impoverishment so far as natural plant food is concerned, nitrogen, phosphoric acid, and potash. The combination of clover and dairy cows will restore humus quicker than any other method of which I know.

The Greatest Stock Food

It is for its food value, however, that clover will appeal most strongly to the dairyman, as protein, in which clover is so rich, is also the main requirement in the ration of the dairy cow, and the one which in purchased feeds it is most expensive to put there. Let us say that an average field of alfalfa will yield 2.5 tons to the acre, red clover 1.25 tons, and timothy 1.25 tons. At this rate of cropping the acre yield of alfalfa contains 535 pounds of digestible protein, of red clover 167.5, and of timothy just 70 pounds. In other words, so far as protein is concerned, the red clover is almost two and one-half times as valuable as the timothy and the alfalfa almost eight times as valuable. These figures offer the most convincing argument for the clovers as a crop on the dairy farm that I know of. The man who grows timothy for cow feed is wasting his time.

Red clover has in the past been the most popular of all the clovers, and I believe still is. It is a biennial in its growth, producing its main crop the second year. I know that fields seeded to red clover will continue to produce some clover for several years, but this, I believe, is due to re-seeding rather than a continuance of life in the old roots.

Alsike clover makes a richer food than does red clover, but does not yield sufficient forage to be as profitable a crop. It has this advantage that it is not as dusty as the other clovers, and hence when mixed with timothy makes an admirable feed for horses. Even driving horses can eat it in quantity without injury. Where it is planned to lease a field in for several years, alsike has an advantage in that it is a perennial, and will continue to yield crops after common red clover will have died out. When several crops of hay or where pasturing is intended, I add a few pounds of alsike along with the common red to continue the clover crop from year to year. Alsike, too, has an advantage on wet lands where other clovers will not thrive.

Mammoth Red Clover

Mammoth Red Clover when first introduced was hailed as a wonder crop. It is not now so popular. The stems are heavy and dusty and the hay is not so nutritious as that from common red clover. If Mammoth Red is allowed to get too ripe the stems would almost make a substitute for kindling wood in starting the kitchen fire, so woody are they. It does produce a great top, however, and is the AI clover for turning under. It is not so objectionable for feed when grown on this soil, where it does not make as luxuriant a growth.

Red clover does not compare with alfalfa in nutritive value, or in returns per acre, but it has been grown where alfalfa has not so far been a success. It also fits in better with a short rotation than does the alfalfa crop. There is a place, and a big place, for alfalfa on every farm where it can be grown, but there is also a place for common red clover where much corn is grown and a short rotation followed.

I made the statement in the first of this article that clover will restore run-down soils. I do not wish it to be understood from this that an impoverished soil can be plowed, clover seeded, and a good stand secured. Clover requires an even better seed bed than the common grasses and with a certain amount of plant food available for its tiny rootlets. A stand can be secured on poor soil, however, by thorough after-harvest cultivation and enough working in the spring to give a firm but mellow seed bed. If a light top dressing of manure is then given or an application of complete fertilizer at seeding time, a good stand of clover may be secured. In soils so impoverished that even these measures will not give a stand of clover, and I have handled one such field, I would first seed to common rye and turn it under, then try again for a stand of clover.

(Concluded on page 7)

Costs less than repairing

A SET of Giant traces at \$400 means that you can outfit your heavy teams and save exactly \$150 per team. It would cost more to repair one or two of these traces.

Can't Get More Strength
You never saw anything stronger in leather than you get in these Giant traces. You never saw a leather trace that would wear longer—7 1/2 inch hard tested rope with malleable ends and electric welded heel chains. Remember the price—\$4.00 (all charges paid). You can sit out four teams for the usual price of one. (West of Fort William price is \$450 prepaid.)

Whole Draught for \$11.00
That includes clip or hook pines, Hame straps—wide leather paw pads. Belly bands and killes—and

Griffith's GIANT ROPE TRACE STRONGER THAN LEATHER

\$400
Per Set (4)

(\$4.50 West of Ft. William)
G. L. Griffith & Son
71 Waterloo St., Stratford your Horses.

SAVE ON ALL BUSINESS SPECIALTY

If you have trouble getting Griffith's Giant traces, Giant Hales, Handy Ties, or any of our famous harness specialties just drop us a line. We will see that you get what you want at regular prices, and charges paid. If you are interested in harness, write for our special booklet "Horse and Harness."



The New Potato Book.

There are ways of choosing seed, cutting it, and preparing it for planting—ways of cultivating—ways of preparing the soil and fertilizing—that add bushels to the total crop.

These points are gathered together in our new 48-page book, "Money in Potatoes." The third edition is just off the press.

Order your FREE copy to-day.



Made in CANADA

No. 25—100% O.K. Planter.
No. 22—Automatic O.K. Planter.

Who Will Grow Potatoes for Europe?

The big potato-growing countries are at war. Canada will sell potatoes to the world at big prices. Don't let the labor question scare you away from the crop that pays, even in times of peace, the biggest profits to the acre—Potatoes.

You can handle a big crop of potatoes. Other farmers are doing it with O. K. Potato Machines. From planting to harvest—every move is handled quickly by machines.

The crop goes in in quarter the time, and in straight regular rows. The O. K. Planter drops the seed on finely-worked soil. You get 100 per cent. stand and a field you can cultivate easily.

Bugs and blight are kept under easy control with an O. K. 4-row Horse Sprayer. Digging is done in one-half time and better with an O. K. Digger.

A big crop of potatoes will pay you the biggest average profit you ever earned. Get our FREE booklet, "Money in Potatoes," and learn how to increase the yield and cut the cost of handling. The new edition is just out. Send for it.

OK CANADIAN POTATO MACHINERY CO. Limited GALT, ONT.

Canadian Potato Machinery Co., Limited, Galt, Ont.
Send without cost to me, your 48-page Book, "Money in Potatoes."
What Potato Machinery Do You Own Now?

FARM MANAGEMENT

The Best Grain Mixture

FOR almost a score of years Prof. C. Zavits has been experimenting with grain mixtures on the experimental plots in connection with the Ontario Agricultural College. This work has brought Prof. Zavits and his assistants to the decision that oats and barley will give the best yield per acre, and that adding a third crop, such as spring wheat or peas, reduces the yield.

One and one-half bushels of each have given best results in the last two years over Ontario and in Experimental Union work. In the college experiments, however, one bushel of each by weight has been proving the best seeding in a series of experiments covering over 10 years.

One of the points which must be carefully attended to in sowing a grain mixture is to get an early maturing variety of oat to correspond with the early maturing barley. For this purpose Prof. Zavits recommends O.A.C. No. 3. This is one of the Professor's own productions. It is the finest quality oat grown at Guelph, having the thinnest hull, and is so early that it fits in nicely with barley.

Soy Beans in Oxford

ARE soy beans and soja beans the same? What time should they be sown? Can they be sown after hay crop and in the land in Oxford county adapted to the crop? Do they make good feed?

Soy and Soja beans are two names for the same crop. What time to plant soy beans about the first week in May. Most varieties are too late for Ontario. The Early Yellow variety is one of the earliest and one of the best. Even that variety, however, would not likely give satisfactory results after a hay crop. The land in Oxford county should be adapted to soy beans which are exceedingly rich in feed constituents. When ground, a small quantity of the meal improved the ration about the same as cotton seed meal. They are richer than any farm crop ordinarily grown in Ontario. They should be sown in rows about 23 inches apart. Two pecks or 30 pounds of the Early Yellow Soy beans is considered quite sufficient seed to use per acre. In Oxford county the average yield per acre would probably be about 15 bushels. As time advances some of the best farmers, especially those connected with the dairy industry, will grow a limited quantity of the soy beans, which are extensively grown in Japan and in North-eastern Asia.

Methods of Planting Corn

THE row or drill method of planting corn is still commonly followed in Ontario and Quebec. The investigation conducted by the Seed Branch shows that 966 farmers were planting in drills at an average rate of 2.14 pecks of seed per acre, and 320 planted in squares or hills at 117 pecks of seeds per acre. The average results of thirty-two separate tests conducted throughout Ontario for a five year period shows that the hill method gave one ton of green crop per acre more than the drills, and three-eighths of this ton was in the form of freshly-husked ears. A four year average of the Experimental Farm, Ottawa, shows two and three-quarter tons per acre in favour of the hill method. Hills should be three feet apart each way and contain three or four plants. Rows should be three feet apart and the plants nine inches apart in the row. Three and a half feet spacing might be preferable for large

Clover Seeds

Government Standard

| | | |
|---|----------|---------|
| No. 1 Red Clover | per bus. | \$12.50 |
| No. 2 Red Clover | | 11.50 |
| No. 1 Alsike Clover | | 12.00 |
| No. 2 Alsike Clover | | 11.00 |
| No. 1 Alfalfa (Northern) | | 12.00 |
| No. 2 Timothy | | 4.75 |
| (Grades No. 1 for purity and germination) | | |
| No. 3 Timothy | | \$4.25 |

Terms cash with order. Bags extra, at 25c each. On all orders east of Manitoba of \$25 or over we pay the freight. We guarantee seeds to satisfy or ship back at our expense.

Ask for samples if necessary.

TODD & COOK
Seed Merchants
STOUFFVILLE - ONTARIO



BOOK ON DOG-DISEASES

and how to feed
H. CLAY GLOVE, V.S.
116 West 31st St., N.Y.

COTTON SEED MEAL

Linseed Meal
Calf Meal
Poultry Foods, etc.
Write for Prices
H. FRALEIGH, Box 2, FOREST, Ont.

Peck, Kerr & McElderry

Barristers, Solicitors, etc.
415 Water St.; Peterborough
E. A. Peck F. D. Kerr V. J. McElderry

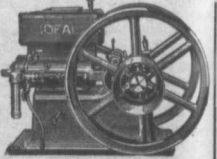


HAWK BICYCLES

An up-to-date High Grade Bicycle fitted with *Roller Chain, New Leptars Coaster Brake and Hub, Adjustable Tyre, High grade equipment including Mudguards, \$22.50* for *cash* and *books*. Send FREE 1915 Catalogue, 70 pages of Bicycles, Sundries, and Repair Material. You can buy your supplies from us at Wholesale Prices.
T. W. BROYD & SON,
37 Notre Dame St., West, Montreal.

GASOLINE ENGINES

11 to 20 H.P.
Stationary Heated and Tractor



WINDMILLS
Grain Grinders, Water Boses, Steel Saw Frames, Pumps, Tanks, Etc.
GOOLD, SHAPLEY & MUIR CO., LTD.
Banffford Winnipeg Regina Calgary

growing varieties hill method gives opportunity for cultivating, controlling weeds rather more difficult than that which is grown. One bushel, 70 lbs. of shelled 55 per cent., show plant five acres. One acre will give of seed a bush. Seed price planned a the drill method, acre—Seed Branch.

'Right in Clover' (Continued)

Clover will not or sour soil. Any produce a thrifty sorer is not in control. The removal of lime application of lime or land phosphate, either reason for clover on acid soil nodules, which abate from the air, to develop, and when develop, the self-of the clover is low harvested will not Most of our soils are already inoculated bacteria. Where-crowns for several would not take a or a few bushels from an old clover it in or else trace inoculation for red clipped from Guelph charge. Inoculation tant with red clover but artificial inocul necessary.

Clover seed, like greatly is vitally power, and the it is advisable to test even when I grow usually do. I looking seed that will 50 per cent. of have good seed. I liberal enough that call it extravagant. clover seed is one most mistakes to have seen fields was four pounds clover to the acre. T if every single seed they do not sit in the would not advise le to the acre, and clover that I ever 50 or 15 pounds of clover seeded too stems that are too good feed, and the humus or nitrogen Clover that is seen to a good start to grow better with regard as a method my farm than grain down I always put grain in rather than it is a grass seeder a drill, it may be use clover, but I have sults by mixing the along with the grain. The best results I have been from seeding y of peas, oats, and wing crop was taken in the season, thus catch the advantage ure and all the plant when seeded with crop I make a point spots in the field dency to lodge and clover. When grain i seed binder high carry the clover thro ther with a minimum

growing varieties or weedy land. The hill method gives a much better opportunity for cultivating the land and controlling weeds, but the corn is rather more difficult to harvest than that which is grown in drills.

One bushel, 70 lbs., on the ear, or 56 lbs. of shelled corn, germinating 95 per cent., should be sufficient to plant five acres by the hill method. One acre will require 60 cents worth of seed a bus. Seed corn of the same price planted at the average rate by the drill method, will cost \$1.60 an acre.—Seed Branch, Ottawa.

"Right in Clover" is a Good Place
(Continued from page 6)

Clover will not succeed on an acid or sour soil. Any soil that naturally produces a thrifty growth of sheep sorrel is not in condition to grow good clover. The remedy is a liberal application of lime, ground limestone, or lead phosphate. Perhaps the greatest reason for the non-success of clover on acid soils is that the root nodules, which abstract the nitrogen from the air in such a soil do not develop, and when the nodules do not develop, the self-fertilizing qualities of the clover is lost, and hay that is harvested will not be so nutritious.

Most of our soils in Ontario, at least, are already inoculated with clover bacteria. Where clover has not been grown for several years, however, I would not take a risk on it. I would sow a few hundred pounds of soil sown from an old clover field and harrow it in or else treat the seed for inoculation for red clover, which is supplied from Guelph at a nominal charge. Inoculation is just as important with red clover as with alfalfa, but artificial inoculation is not always so necessary.

Clover seed, like seed corn, varies greatly in vitality and germinating power, and for this reason I consider it advisable to test all the seed sown, even when I grow the seed myself, as I usually do. I want plump, live-looking seed that will germinate over 90 per cent. When I am sure that I have good seed, I sow in quantities liberal enough that some people would call it extravagant. Sowing too little clover seed is one of the most common mistakes in clover culture. I have seen fields where the seeding was four pounds of common red clover to the acre. That is not enough if every single seed were to grow, and they do not in the best of seasons. I would not advise less than 10 pounds to the acre, and the best field of clover that I ever saw had something over 15 pounds of seed to the acre. Clover seeded too thinly develops stems that are too coarse to make good feed, and there is not as much humus or nitrogen added to the soil.

Clover that is seeded early gets off to a good start before the hot, droughty weather sets in. Clover I regard as a more important crop on my farm than grain, and in seeding down I always put the nurse crop of grain in rather thinly. Where there is a grass seeder attachment to the drill it may be used for sowing the clover, but I have secured good results by mixing the clover seed right along with the grain in the seed drill. The best results I have ever got have been from seeding with sowing crops of peas, oats, and ratches. The sowing crop was taken off the field early in the season, thus giving the clover catch the advantage of all the moisture and all the plant food available. When seeded with the regular grain crop I make a point of cutting any spots in the field that show a tendency to lodge and smother out the clover. When grain harvest arrives I set the binder high to leave a long stubble that will hold the snow and carry the clover through its first winter with a minimum of killing.

The Effect of Meadow Weeds

WEEEDS growing in hay crops may actually increase the tonnage of cured hay. If farmers had parts of plants of wormseed musard, false flax, shepherd's purse, mayweed, etc., finely ground and mixed with their porridge, they would better appreciate why dairy cows or horses toss weedy hay out of their mangers. Some inconsiderate farmers chop weedy hay in a cutting box thus preventing their stock from picking it over and avoiding the weeds. They do not seem to realize, that many such weeds are unwholesome or even poisonous, and that when forced to eat them animals fail to make galls, or yield a small quantity of badly flavored milk, and become generally unthrifty. If forced to eat such feed they will consume only sufficient for their existence. The most economical gains are obtained from feeds which are not only highly nutritious from a chemical standpoint but are also relished by the stock.

This is a condensed item from the introduction to "Fodder and Pasture Plants," copies of which may be procured by Canadian farmers from the Government Printing Bureau, Ottawa, for the nominal price, 50c. This book has 26 full page illustrations, showing the principal grasses and clovers in their natural colors.

Make \$15.00 more per acre

Send for free litmus paper to test out if your soil is too acid. Also tell us to mail you explanatory booklet No. 85 on Lime as an Agricultural Profit-Maker.

Incidentally you will learn how Mr. L. J. Rounds, by investing \$3 per acre in Caledonia Marl (Nature's only soil-lime) increased his hay output to the amount of over \$15.00 per acre the first year. With Canada as the food farm of the warring allies, you should use lime to get the most out of your land this year.

ESPECIALLY THIS YEAR, CANADIAN FARMERS SHOULD USE CALEDONIA MARL WHICH IS NATURE'S BEST

LIME

INTERNATIONAL AGR'L CORP'N.
CALEDONIA MARL BRANCH - 510 MARINE BANK BLDG. DUFFALO, N.Y.



This photo was sent from Salisbury Plain by one of the ninety-odd boys who went from Preston, before he left for the firing line.

In the background are some of the barracks—he informs us that all of these buildings are covered with Government-tested corrugated iron. All Acorn Iron which we furnish to Canadian farmers must stand this British Government Acid Test.

Be sure to send the coupon, so that we can tell you about it.

They had to pass the British Government Acid Test

These are some of the Canadian soldiers who had to Prove Good before Kitchener sent them to the firing line.

They with thousands of other men—some from your home town—were housed in buildings which were covered with corrugated iron.

Corrugated iron, like all other supplies used by the British Government, must come up to a certain standard and pass the acid test.

ACORN IRON, which we have been selling to the farmers of Canada for the past twenty years, must pass this same Government test before it is sent out. When you buy Acorn Iron you buy guaranteed goods. You get a covering which will give you protection against the ravages of the weather and will stand the test of time.

Every dollar you spend for Acorn Iron returns to you one hundred cents' worth of wear—it also buys you a service from our building department which cannot be beaten. We maintain a service department where you can secure plans and building helps free of charge.

Send us the coupon to-day and let us show you how we can help you—we'll also tell you about Acorn Iron and what it will do for you.

ACORN IRON

The Metal Shingle & Siding Company, Limited, PRESTON

THE METAL SHINGLE & SIDING Co., Limited, Preston, Ont. Remodel your Roof with Acorn Iron and would like to have your free building service and also information about Acorn Iron.

.....
Farm and Dairy

The Importance of Bees to the Fruit Grower

(Wm. Gibbs, Middlesex, Co., Ont.)

POLLINATION is accomplished through two agencies. To a small extent by wind under favorable conditions, and to a large extent by pollinating insects. Of these the honey bee is the most important, because of its great numbers, owing to the many apiaries that are kept throughout the country.

The relatives of the honey bee, which also assist in pollinating fruit trees and flowers, include the bumble bee, which is almost the only medium by which red clover is pollinated. The balance of her relatives include ants, lonely wasps, digger wasps and colony wasps. These latter have little effect on the pollination of fruit blossoms on account of their not being present in sufficient numbers.

Investigations have shown that bees are an absolute necessity for the production of fruit and clover seed. They are also the only agencies by which cross-pollination takes place excepting that affected by wind, which is not considered to take place to any great extent. In some flowers the pistils are sterile to their own pollen. Thus they are dependent entirely on cross-pollination for their very existence. It is claimed that because of cross-pollination the apple is more vigorous and more resistant to disease, better able to withstand frost without killing, grows larger, and has more color.

Prof. F. A. Waugh, of the Massa-

chusetts Agricultural College, has frequently warned fruit growers against the danger of spraying fruit trees when in bloom because of the destruction of honey bees that results. Speaking at a convention last June he gave some convincing evidence, showing that the honey bee was the principal and almost the only agent in the pollination of fruit trees. He referred to the harm to the effect that there are other agencies besides for doing this work, principal among which is the wind. To determine the relative importance of these factors he stated that he had taken pieces of glass, coated them with vasoline, and secured them on the windward side of fruit trees in full bloom, at a distance that was about equal to the distance between trees. He found that these glasses, smeared as they were with grease, received almost no pollen dust, even when the wind blew through the trees in full bloom in the direction of the plates. He further stated that there are practically no insects except bees that are flying when fruit trees are in bloom, and that nearly all the cross-pollination that is effected is through the agency of the bees. There are some varieties of trees that are self-pollinating, but even these varieties have more and better fruit when bees are present. Prof. Waugh is not only a bee-keeper, but he is regarded as one of the greatest authorities on fruit culture in the United States.

Advertising Fruit the Producers' Duty

J. A. Riddick, Dairy and Cold Storage Commissioner, Ottawa

IT WAS very noticeable during the past season that although the growers were complaining of low prices in many instances the cost to the consumer was well maintained, except occasionally and in places where there was a glut of tender fruit on the market.

Apples of indifferent quality have been sold at retail, by count, for the same prices as oranges and in the same shops. It is highly important to the grower, especially in a year of heavy production, that the consumer should get the advantage of the lower price which the grower is compelled to accept to thus promote consumption and enlarge the market for the surplus fruit.

The Education of the Consumer

A great deal might be done to increase the consumption of apples by educating the consumer respecting the qualities and seasons of the different varieties. The average consumer cannot be expected to identify very many varieties, or to know when they are at their best, or whether a particular variety is best adapted for dessert or cooking purposes. A little information imparted along these lines would, it seems to me, bring good results. It would cost very little to put a printed slip in each package stating the sea-

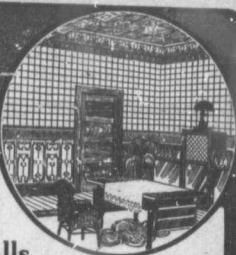
son when the variety which it contains should be at its best, and pointing out at the same time the use for which the variety is best adapted. We know by the records of other fruit inspectors that large quantities of late winter apples go forward to market in the early part of the season. If these apples are offered for sale at that time they cannot be expected to give good satisfaction.

If consumers were better advised on these points, they would not be so likely to purchase apples that were out of condition on account of being kept too long, and dealers would be more careful to see that they were placed on the market at the proper time. There can be no question that a large increase in the consumption of apples could be effected in this way, and the fruit growers' organizations would do well, it seems to me, to consider plans for giving effect to some such form of advertising. This matter of advertising is one which is commanding much attention these days. The citrus fruit growers spend large sums for such purposes, and those who are interested in the banana trade are also fully alive to the importance of publicity. The consumption of the banana is growing more rapidly than that of any other fruit which competes with apples today.

The Marketing of Immature Fruit

Another matter which deserves the attention of fruit growers as a whole is the increasing quantity of immature fruit which is very much being put on the markets both at home and abroad. Consumers are apt to attribute the unsatisfactory character of such fruit to inherent qualities rather than to the real cause, and being disappointed once are less inclined to purchase again. One basket of green, sour grapes, for instance, loses a customer for half a dozen later on, and the same is true of other fruits. Very green apples, other things being equal, do not keep as well as those of the same sort that are well matured. This applies particularly to the later a slow ripening varieties.

Beautiful Walls For Your Home
Sanitary, Fire-Proof, Inexpensive



Make your home more attractive, and protect it from fire with these beautiful, sanitary

"Metallic" Ceilings and Walls

They will out-last the building and are very inexpensive. They can be brightened from year to year with a little paint at a very cost. Made in immaculate beautiful designs suitable to all styles of rooms. Can be erected over old plaster as well as in new buildings. Write for catalogue.

We manufacture a complete line of Sheet Metal Building Materials.

THE METALLIC ROOFING CO., LIMITED
MANUFACTURERS King and Pacific Streets TORONTO

SEED CORN

Pricing when Wisconsin No. 7, the best for the soil.
Geo. R. West & Sons, Northwood, R.R. 5

McDonald's

TESTED

SEEDS

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

FREE CATALOGUE

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

Dept. 2
KENNETH McDONALD & SONS, Limited, Ottawa.

FOR SALE

A limited quantity of large, smooth, white, shallow-eyed, Canadian Standard Potatoes. Has yielded 50 bush per acre. Originated in Muskoka. Also some Irish Cobblers. Price, \$1.00 per bag, F.O.B. G.T.R. or G.P.R.

McGREGOR & PRITCHARD
Walkerton, Ont.

Sweet, Fresh Silage down to the last forkful.

THE-HYLO-SILO

is perfectly air-tight. No frozen or spoiled animals around the walls. Convenient and perfect fitting doors that you can adjust without hammer or wrench. Made of guaranteed long leaf yellow pine. Built to last a lifetime. Stands rigid when empty. You may pay more money, but you can't get a better silo.

Write for prices and catalogue

GILSON MFG. CO.
12 YORK ROAD GUELPH, CAN.

Rolls The Ground Better



No neck weight—Perfectly rigid frame—RUNS EASILY.

The Bissell

T. E. Bissell Company Limited
Ottawa, Can.

Send name and address for catalogue.

J.N.O. DEERE PLow CO., LTD., 77 Jarvis St., Toronto, Sole Agents for Ontario and Quebec.

GREATER RETURNS

"MAPLE LEAF" OIL CAKE

contains over 35% PROTEIN and CARBO-HYDRATES—PURITY 100%—It cleans the skin—opens the bowels—and keeps all livestock healthy. Write today for our free booklet "Facts to Farmers."

CANADA LINSOIL MILLS LTD.
TORONTO and MONTREAL



Get this LOUDEN Bird Proof

Barn Door Hanger

and have the barn door hang and run tight for all time. This is positively the best Barn Door Hanger on the market. As its name implies birds cannot build in the track. The track is hollow with closed ends. No ice or snow in winter or trash in summer can possibly get in to dog it. Runs on two strongly lined rollers which always smooth and easy running. Pinned so as to make it flexible and to allow the door to swing outwards and upwards if occasion requires.

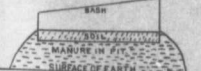
Ask for the Louden Line

—over 47 years of experience and practical experience go to make Louden Line reliable. We make

"Everything for the Barn"

Including Cow Stalls, Stanchions, Lites and Feed Cans, Hay Forks and Slips.

Write for our new Catalogue.
THE LOUDEN MACHINERY CO.
Dept. 41 - GUELPH, Ont.



1. The Above-Surface Hot-bed.



2. The Pit Style of Hot-bed.

The two diagrams herein make plain the construction of the two hot-bed models most commonly used. Those who have either style normally substitute a hot-bed as a necessary part of the equipment of a good farm garden.

In Union There is Strength

A Department Devoted to Cooperative Agriculture

Peterboro County Farmers Organizing

FOUR very successful meetings were held in Peterboro county, on Thursday and Friday of last week by Mr. J. J. Morrison, secretary of The United Farmers of Ontario, and of The United Farmers' Cooperative Co., Ltd. These meetings were held at Zion and Stewart's Hall on Thursday and at Selwyn and Central Smith on Friday. At all four points the farmers enthusiastically endorsed the new provincial movement among the farmers of Ontario, and organized branches of The United Farmers of Ontario. Mr. H. B. Cowan, of Farm and Dairy, accompanied Mr. Morrison to Zion, Selwyn and Central Smith, and Mr. F. E. Ellis to Stewart's Hall. Some indication of the interest taken in the meetings was very clearly evident at Central Smith, when the meeting lasted until after 12 o'clock. The organized farmers at Zion will be known as the Trewhin branch of The United Farmers of Ontario. The other three organizations will be known as the Stewart's Hall, Selwyn and Central Smith branches. The following officers were elected at the different points:

Trewhin Branch: Pres., J. H. Garbutt; Vice-Pres., Cecil Graham; Sec.-Treas., Wilbert Rosborough; Directors: A. Fitzgerald, Geo. Cockburn, Jos. Mann, Alb. Garbutt.

The Stewart's Hall Branch: Pres., Melville Stewart; Vice-Pres., O. Gibbs; Sec.-Treas., R. B. Nicholls; Directors: W. Reid, F. Driscoll, F. Stewart, Bruce Savigny, M. Smithson and W. Clifford.

Selwyn Branch: Pres., J. C. McCormy; Vice-Pres., E. Adams; Sec.-Treas., G. B. Nicholls; Directors: Wm. Elliott, Alb. McLinoye, John Jas. Northey, Herb. McLinoye.

Central Smith Branch: Pres., Alex. McGregor; Vice-Pres., T. H. Graham; Sec.-Treas., Chas. Moore; Directors: Clayton Telford, W. G. Telford, Melville Scott, Edw. Mahood, Robt. Deyell, Fowler's Corners.

Other Peterboro Branches
So much for the work in Peterboro county during the last week. Earlier Mr. Morrison organized a branch of the U. F. O. at Bush Point, the movement here originating in the article appearing in Farm and Dairy. Officers were elected as follows: Pres., Henry Melville; Vice-Pres., John Pollock; Sec.-Treas., John Rife; Directors: Wm. Yelland, J. H. Barton, Jas. Toms, Robt. Seney and Jas. Keating. Not far away an additional branch was organized at Old Havelock, with the following officers: Pres., W. H. Johnston (who is treasurer of the township); Vice-Pres., David Burgess; Sec.-Treas., A. A. Wyde; Directors: Geo. Smith, T. J. McConnell, O. Elliott and J. H. Scott. All of these are prominent men with a standing in their community, and under their management the Old Havelock branch of the U. F. O. should do good work.

From Peterboro county Mr. Morrison jumped to Nashville, in York county. There was no hall in the community, but a meeting was arranged in the waiting room of the station, the station agent cooperating with the farmers in the organization. For President John Kellam was elected; Vice-Pres., Frank McCluskie; Sec.-Treas., Albert Dick; Directors: Richard Agr. Brown, Henry Barrons and Archie Patterson.

Mr. Morrison next found vent for his activities as organizer in Victoria

county. The Blackwater branch is due chiefly to the initial work of Mr. Bert Herron, a young farmer just starting on his own account, and who was subsequently elected to the responsible position of secretary. Other officers are: Pres., David Wallace; Vice-Pres., John McCully; Treas., John McMillan; Directors: Stanley Reel, Thos. Yoo, Jas. Hadden, John Beaton and Roy Stanley.

Meetings have been held at Markham and Agincourt, where the matter of organization was left in the hands of a committee to decide. The meetings at both places were small, but attended by good men. Jas. T. Stewart arranged for both of these meetings, and at Markham, Wardley High and Mr. S. Scott spoke strongly in favor of organization.

A branch has been recently organ-



The Master of the Grange.

W. E. Wardell, St. Thomas, Ont., was selected for the chief executive of the Dominion Grange at its last annual session, held in Mr. Morrison's own county in Wellington, at Moorefield. The meeting was called by ex-Warden Robert McArthur, and the election of officers resulted as follows: Pres., Peter Boyer; Vice-Pres., Wm. Waters; Sec.-Treas., Robt. McArthur. Among the men who took part in the meeting were H. Morgan and Jas. Melville, of Wallace township, and John C. Dixon, W. H. Perkins, Robt. McNeill and others of Maryboro.

Mr. J. J. Morrison addressed a representative meeting of the Central Caran Farmers' Club, and the Falls Line Farmers' Club, at Millbrook, Saturday afternoon, April 10. Between fifty and sixty were present. Those who took part in the speaking were the chairman, Mr. A. J. Fallis, who gave an able address. Mr. T. H. Aiken spoke of conditions in the west and what the Grain Growers' Grain Company had accomplished for the farmers there. Mr. Aiken spoke from experience. The other speakers were Messrs. W. T. Belch, A. Brown, H. C. Argue and H. Russell. Mr. Morrison's address was well received. Although no stock was bought at this meeting, it is expected that a share at least will be taken at a meeting of the Central Caran Club, which is to be held early this week.

Progressive Business Clubs

AM pleased to report that our organization has a paid up membership of 43," writes the secre-

tary of the Maple Leaf Farmers' Club, Embro, Ont. "We have never had a meeting without some new members coming in. Every member seems very much interested in the work, and unless something unforeseen happens we will have a big organization here within a year.

"We have done some business in buying, we have paid for over \$2,000 worth of goods, have over \$1,300 more on order and we have just sold a car of wheat for \$1.40 per bushel, F.O.B. here, which is 10 cents a bushel above what the local miller was paying on the same day.

"We have had all kinds of opposition to our club, and we expect more. Even our local paper deplored the fact that we had organized, taking the stand that we were going to close all places of business in the village."

Here is an extract of a letter received from the Autliffe Farmers' Club:

"We organized on December 10th, 1913, and in one year we handled 23 cars of mixed feed amounting to \$17,000. I look as president, Mr. W. B. Heagle as secretary and Mr. R. J. Dafoe as buyer, and a membership of 155 members."

The club also handled 25 cwt. of binder twine. It was one of the first clubs to see the possibilities of co-operation and affiliated and took stock with the United Farmers' Cooperative Co., Ltd.

Ontario Farmers Cooperating

AT the meeting of the shareholders of the United Farmers' Cooperative Co., Ltd., held recently in Toronto, the shareholders were invited to ask all manner of questions. Very few did so. They seemed to be satisfied with the reports presented. Such discussions as did take place centered mainly around the work of the local organizations. Mr. H. W. Monk, the secretary of the North

West United Farmers' Cooperative Association, in Bruce County, presented an interesting report. His branch was the first one organized by The United Farmers of Ontario. The members meet in a hall, the bottom floor of which is used as a storeroom and the upper part for meeting purposes. Their local banker has financed them without requiring a guarantee bond, but they have always been prompt in settling with the bank for shipments. Mr. Monk advocated the starting of a warehouse in Toronto by the central company to which the locals could consign produce for sale.

Peter Porter of Burford Grange, reported in settling with the bank over \$7,000 worth of business. Secretary Morrison described two methods of financing which might be used by local organizations. The members of branch might get a loan for \$1,500 or \$2,000, and authorize the secretary to sign cheques up to that amount. If necessary the secretary could be bonded. Their bond or book of credit with a copy of the resolution authorizing the secretary to sign cheques to that amount, could be handed over to the local bank. This system would enable the secretary to settle for consignments of goods when

Where members of branch organizations do not care to personally become responsible, even with the other members of their branch, for such a large sum as \$1,500 or \$2,000, it was possible for them to give the individual notes for sums of \$40 or \$50 or whatever amount they cared to. The secretary could then be authorized by resolution to draw cheques on the bank for a sum equal to the total amount of the notes. These notes, and a copy of the resolution, could be given to the banker. In this way no member was responsible for the amount of his or her individual note.

Experiments in Weed Eradication

COOPERATIVE experiments in weed eradication have now been conducted for three years in Ontario through the Experimental Union, whose members live in all parts of the province. The object of this work is to have carried on by men on their own farms experiments in the eradication of weeds, the results of which will furnish data from which definite statements may be made regarding the best methods of controlling the various bad weeds. At the present time we have very little reliable information concerning the best methods of dealing with our various bad weeds on different kinds of soils and under various conditions of cultivation and cropping, and hence the necessity for such experiments.

This work has progressed rather slowly, it has been hard to get men to cooperate in it for various reasons, and even harder to get them to carry out the directions for the experiments and make satisfactory reports of the results they obtain. However, sufficient experiments have been successfully carried out and reported upon during the past three years to furnish considerable valuable information about the control of many of the various weeds experimented with.

The reports received of these cooperative experiments indicate: First, That good results have followed by rape sown in drills provides a means of eradicating both Perennial Sow Thistle and Twitch Grass. Second, That rape is a more satisfactory crop to use in a hot field of Twitch Grass than buckwheat. Third, That rape gives much better results in the eradication of Twitch Grass and Perennial Sow Thistle when sown in drills and cultivated than it does when sown broadcast. Fourth, That thorough deep cultivation in fall and spring,

followed by a well cared for hoed crop will destroy Bladder Campion. Fifth, That mustard may be prevented from seeding in oats, wheat and barley by spraying with a 20 per cent solution of iron sulphate without any serious injury to the standing crop or to fresh seedlings of clover.

Points on Mustard Spraying

Points of interest brought out by the experiments in spraying with iron sulphate to destroy mustard were:

1. The necessity of spraying early, just when the plants are coming into bloom. If the spraying is left too late, the seeds of the plants will be destroyed by the solution, and will form seed, and hence the experiment will not be entirely satisfactory.

2. To spray thoroughly, and with a good pressure. In order to spray thoroughly with an ordinary broadcast attachment, it is necessary to keep the horses walking very slowly. If an attempt is made to cover the ground quickly, some of the plants will be missed, and the results will not be satisfactory.

3. In regard to the cost of spraying with iron sulphate it was found that the cost of spraying the plants varied from \$1 to \$2.40. If the iron sulphate is bought wholesale, it can be purchased at \$1 a cwt., so that \$1.50 to \$2.50 an acre should cover the entire cost of spraying.

These cooperative weed experiments will be continued this year. The weeds to be experimented with are Perennial Sow Thistle, Twitch Grass, Bladder Campion, and Yellow Bird Mustard, and Ox-eye Daisy. All who have any of these weeds on their farms are invited to write to the Director of Cooperative Experiments in Weed Eradication, O. J. Gibson, who will gladly furnish information concerning this experimental work.

Pointers

R. H. Hard
It is a crowd
top of
know when
still getting
profitable to
the population of

The stand
judge their
enough. Let
and third cl

I believe a
small flock
They are the
If you are n
good judge
stock. Don't
between you
Sheep should
marked in the
The wool ne
but remember
always bring
care, too, imp

wool. The
able thing
good care, dip
improvement
that war will
wool.

The small f
tars for the
one.

Ten men ha
business for v
one that goes
The estimate
use of bells, o
enclosed yar
ing the sheep
are ways of o
cutly.—Extra

Docking

—These
place wh
six to 10 day
lamb gets
and dangerou
In both case
ary, absolute
struments and

In order to
wooden mallet
necessary. An
of a log or b
back against
bring along
tendant grips
and pulls the
dage toward
operator then
is between 2
and webstae,
and thereon,
detaache
sharp part of
skin of the tail
to the operation
ing released, an
end of the bone
stump to heal

Preventive

With lambs th
of ice, it is w
twine tightly
at the point
made. This m
hours after t
to stop bleed
use a red hot
prevents bleed
the tail shou
to an inch and
two to two th
nothing more u

Notes for the Shepherd

Pointers for the Shepherd

R. H. Harding, Middlesex Co., Ont.
 It is a good plan to run with a crowd when you know when to stop. A lot of us, however, don't know when to stop. Hence we are still getting out of sheep when it is profitable to stay with them. We estimate a decrease of \$5.00 in the sheep population of Ontario in the last year.

The standard by which farmers judge their sheep is not nearly high enough. Let us get rid of all second and third class breeding stock.

I believe every farmer should have a small flock of sheep on his farm. They are the greatest scavengers. If you are not a good judge, get a good judge to pick your foundation stock. Don't let a few dollars stand between you and a good sire.

Sheep should be better cared for and marketed in a finished condition. This will necessitate feeding grain, but remember that finished animals always bring the top price. Good care, too, improves the quality of the wool.

Little things count. In addition to good care, dipping is necessary for improvement of wool; and remember that war will cause a shortage of wool.

The small flock will give better returns for the beginner than a large one.

Ten men have gone out of the sheep business for various reasons for the one that goes out because of dogs. The enforcement of the dog tax, the enclosure of the dog, the building of a small enclosed yard near the barn and training the sheep to come there at night, are ways of overcoming the dog difficulty.—Extracts from an address.

Docking and Castration

DOCKING and castration of lambs.—These should take place when the lamb is from six to 10 days old. The older a lamb gets the more severe, serious and dangerous these operations are. In both cases three things are necessary, absolute cleanliness, sharp instruments and common sense.

In order to dock a lamb properly a wooden mallet and sharp chisel are necessary. An attendant sits astride of a lot or bench with the lamb's back against his breast and its tail held along the solid wood. The attendant grips the tail close to the body and pulls the skin of that appendage toward the lamb's body. The operator then locates a point, which is between two protuberances of the vertebrae, and placing the chisel thereon, detaches the tail with a sharp tap of the mallet. When the skin of the tail is drawn up previous to the operation, it slips back on being released and not only affords some protection and covering for the end of the bone, but also enables the stump to heal more quickly.

Prevention of Bleeding.
 With lambs that are over two weeks of age, it is well to tie a piece of twine tightly around the tail above the point where the cut is to be made. This may be left on for a few hours after the operation and helps ease a red hot chisel which effectively prevents bleeding. For male lambs the tail should be left from an inch and a half long, and ewes from two to three inches. There is nothing more unsightly than a flock

of mature sheep with long tails and there is nothing betrays carelessness on the part of the shepherd as quickly as this neglect. Docked animals look neater and more uniform and have a rounder, fuller appearance of hind-quarters, besides being more cleanly.

Castration is usually performed at the same time as docking and this, too, is all important. On no account let the grade male go unattended and even with pure breeds keep only the best and strongest if you wish to establish or maintain your reputation as a shepherd. There is a special lamb emasculator which may be procured, but as the average beginner does not usually possess such an instrument, we will describe the common method.

Common Method of Castration

An attendant is necessary to hold the lamb, much in the same position as for docking. With a sharp knife as for the operation—about one-third of the scrotum or bag is cut off. The testicles are then skinned out, withdrawn one at a time, and the cord severed. In older lambs over three weeks of age, it is well to tie the cord with a piece of silk or fine twine which has been dipped in some disinfecting solution, ere severing the testicle. Late lambs which can be placed on grass usually heal up quickly and without trouble. Where the lambs come earlier it is imperative that the pen be kept clean and dry, and not too warm. Abundance of bedding and ample room for exercise are two very necessary adjuncts to health after castration.

If there is any soreness or swelling the second day after the operation the wound should be bathed with carbolic acid and hot water and again anointed with vaseline. The ewes should not be fed very heavily at this time and care should be taken not to change their feed until the lambs have recovered from the effects of the operation.—Bulletin 37, Sask. Dept. of Agri.

Ensilage for Ewes

OUR hay is timothy with a little clover mixed, and as it is very coarse with our 42 ewes not more than one-half the usual amount with daily (Jan. 20). How much oats should they have each and half bushels of ensilage in order to have them in good condition for lambing time, which will begin about the middle of March? Would you advise feeding more ensilage. When on full feed that amount of hay would 42 ewes require for five months?—Subscriber, Arden, Ont.

Ensilage can be fed at the rate of 2 to three pounds a day. If "Subscriber" feeds two pounds a day it would be quite sufficient, with about three pounds of roots. It is difficult to say just how much grain he should feed, simply because we do not know the condition that the sheep are in at the present time. If they are rather on the thin order, it would not be bad practice to start them with about three-quarters of a pound a day, and gradually increase up to lambing time until he is feeding about a pound and a half a day; if they are in fair condition this will not be necessary just yet. He could afford to feed more ensilage up to the amount I have stated. The amount of hay required for five months for the ordinary sheep would be from 10 to 12 tons. This will vary with the kind of hay and the relish with which the sheep handle it.

EUREKA HARNESS OIL

is manufactured expressly for harness. That's why it prevents cracking and makes the leather soft and pliable. One rubbing with Eureka makes an old set of harness look like new.

Dealers Everywhere

The
IMPERIAL OIL COMPANY
 Limited

Made in Canada

What You Want In a Spraying Outfit!

•The first essential is thorough spraying efficiency, then freedom from odors, durability, service and dollar-for-dollar value. Alkalis, and more, you get in the

Spramotor

It isn't a SPRAMOTOR unless you mean it! The supremacy of the SPRAMOTOR in every class is unquestionable. Every machine bearing the name is built to endure. Its exclusive patented features will compel you to pronounce it the best you ever saw. Write for free booklet to-day.

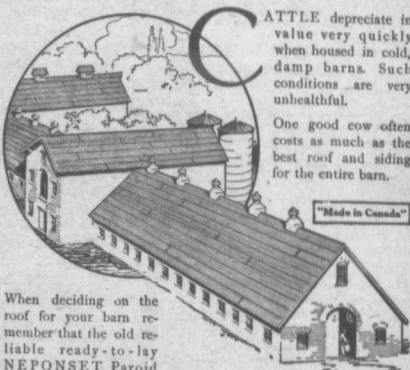
Made in Canada
 No Duty to Pay

SPRAMOTOR CO.
 2224 King St.
 LONDON, Can.

O. A. G. No. 72 OATS FOR SALE

Grown on land that won first prize in Standing Field Crop Competition from Eldon Agricultural Society. Good clean seeds, true to name. For price and other information write
GEORGE McRAGUE, WOODVILLE P.O., ONT.

Does your roofing save you money?



ATTN depreciate in value very quickly when housed in cold, damp barns. Such conditions are very unhealthy.

One good cow often costs as much as the best roof and siding for the entire barn.

When deciding on the roof for your barn remember that the old reliable ready-to-lay **NEPONSET PAROID**

Roofing costs less per year than other roofs. As a siding it is less expensive than other good sidings and it will make your barn a comfortable and healthful quarters for your live stock.

NEPONSET PAROID ROOFING

can't rust. It affords fire protection and can easily be laid by anyone.

Paroid is only one of the NEPONSET Roofings. There are others meeting every requirement and pocketbook. Granulated Shingles for pitch roofs; Proslate, the colored roofing, and other roofings for all kinds of buildings, from temporary sheds to the largest railroad buildings.

A SUBSTITUTE FOR LATHS AND PLASTER—NEPONSET Wall Board in different finishes may be applied directly to studding or over old plaster. Made in Canada and sold by dealers everywhere.

Booklet, "Repairing and Building," Free

If you do not know the NEPONSET Dealer in your town write for his name. If there is no dealer there we have a special proposition to make you. We pay the freight!

BIRD & SON Estab'd 1892 162 Heintzman Bldg., Hamilton, Ont.
 Warehouses in all Principal Cities

FARM AND DAIRY

AND RURAL HOME
PUBLISHED EVERY THURSDAY

SUBSCRIPTION PRICE, \$1.00 a year. Great Britain, \$1.50 a year. For all countries, except Canada and Great Britain, add 50c for postage.
ADVERTISING RATES. 15 cents a line per week, \$1.50 an inch an insertion. One page of 10 lines, one column 15 lines. Copy received up to Saturday preceding the following week's issue.

UNITED STATES REPRESENTATIVES
STOCKWELL'S SPECIAL AGENCY
Chicago Office—People's Gas Building.
New York Office—Tribune Building.

CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed 10,000. The actual circulation of each issue, including copies of the paper sent subscribers who are not slightly in arrears and sample copies, varies from 15,000 to 15,000 copies. No subscriptions are accepted at less than the full subscription rates.
Savers 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 our readers, we turn away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with you in any one of our paid-advertisements, 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 the contract that in writing to advertisers you state: "I saw your advertisement in Farm and Dairy."

Business shall not ply their trade at the expense of our subscribers, who are our friends, through the means 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 confute, nor to believe and take for granted, but to weigh and consider."—Bacon.

Unfair Taxation

THE inquiry conducted by the Dominion Grange a year or more ago into the assessments of Ontario townships, revealed a wide variation in the relationship of assessed value to real value. The township of Artemesia in Grey county, for instance, assesses improvements at thirty-three and one-third per cent. of their value and land at sixty per cent. of its value, while the township of Carlow in Hastings county assesses both improvements and land at one hundred per cent. of their value. So long as local assessments were made for municipal taxation only, it did not matter greatly whether assessments were at full value or at only a percentage of full value. Now that the local assessment has been made the basis for provincial taxation, however, there is a danger that grave injustice may be done to those townships assessed at full or nearly full value. We can best illustrate the point by examples.

Beverly township, in the county of Wentworth, assesses both improvements and land at one hundred per cent. of their value. The township of Binbrook in the same county assesses improvements at twenty-five per cent. and land at seventy-five per cent. of their value. Let us assume that of \$150,000 of assessable property in both, \$50,000 is represented in improvements and \$100,000 in land. Beverly would assess this value at \$150,000 for taxation purposes; Binbrook at only \$87,500. On the new provincial tax of one mill on the dollar, property in Beverly to the value of \$150,000 would pay a tax of \$150, while property in Binbrook to the value of \$150,000 would pay only \$87.50 in provincial taxes, while under a just system of taxation both should pay the same amount.

It has been our observation that the poorer townships are assessed most highly.—It is evident, therefore, that with present assessments as

a basis of taxation the weight of the provincial tax will fall most heavily on the townships least able to pay it. This matter of variation in assessment should come up for further consideration at the next session of the Ontario Legislature. The best way of getting around the difficulty that has yet come to our attention is the suggestion of the Tax Reform League that the tax for each township be apportioned according to the population of the township and raised by a tax on land values. Townships with a low assessment would then pay a higher rate than townships assessed at or near their full value, and justice would be done to all.

Too Many Irons

"KEN" we called him; short for Kenneth, his baptismal name. "Ken" was born on a farm, learned the trade of painter and paper-hanger, was always speculating in this and that, and finally he bought a farm. "Just farming" proved too slow an occupation for a stirring man like "Ken." Soon he added a large tract of standing timber to his other possessions and started into lumbering on the side. Soon his neighbors began to find out that he had been a painter. Good painters were scarce in the community, and his services were soon in demand. There was joy in the homes of the women folk when they found that they had a skilled paper-hanger right in their midst. "Ken" was certainly kept busy.

He was kept too busy. He found that he didn't have time to look after his stock, and soon practically the whole farm was in hay. The crops got shorter and shorter each year. The decreasing revenue of his farm needn't have worried "Ken" much had his other lines of endeavor been going well. But little attention as the farm got (along with the painting and paperhanging) it prevented the thorough attention to the lumber business that it demanded, and it, too, began to show a balance on the wrong side.

The farm is now for sale, and it is rumored that "Ken" won't have much left for himself when he squares with his creditors. During the years that we have known him, he has been the hardest working man in his community. His mistake lay in scattering his interest too thinly. He had too many irons in the fire. Concentration of purpose is needed to make a success of any business—and particularly farming.

Mutual Fire Insurance

INSURANCE against fire affords a fine field for cooperative enterprise. Practically every province in Canada has its rural insurance companies, the most of them very successful. As is usual, too, in cooperative enterprise, these mutual companies are confined almost altogether to the rural districts. One of the strongest of these is located in Ontario Co., Ont. There is a very successful organization in the Annapolis Valley of Nova Scotia, and there are many small concerns in between. The foundations have been well laid for future development in Canada, but the state of Minnesota offers an example just to the extent to which this form of cooperative enterprise may be carried. Their work should be an inspiration to rural organizations here in Canada.

Commissioner Works of Minnesota issues the statement that the one hundred and fifty-seven farmers' Mutual Insurance Companies of that state had under force at the end of 1914, \$360,219,389.15 of insurance, comprising 164,307 policies, amounting to one-quarter of all the fire insurance carried in the state. The average value of a policy was \$2,241. The gain in assets for the year was \$5,816.37 and the gain in insurance

\$36,905,840.30. Who said that farmers could not cooperate? It certainly cannot be said of the farmers of Minnesota, and we in Canada are rapidly proving that it does not apply to us.

Late Breeding Again

WORDS of wisdom were spoken by Mr. R. F. Hicks at the last annual convention of the Canadian Holstein-Friesian Association when he sounded a word of warning against breeding heifers too young. The effects of such a breeding policy may be partially mitigated by liberal feeding, but as Mr. Hicks contended, a combination of liberal feeding and later breeding than is common will alone maintain the substance and vigor of the breed.

The same is true of all breeds of dairy cattle; and some have suffered even more than the Holstein by the over-anxiety of their fanciers to quickly increase the number of their herds. One of the great lessons that should be deducted from the record recently made by Lass 66th of Hood Farm is the wisdom of deferred breeding. This young cow, which recently made a world's record for yearly butter fat production as a senior three-year-old over all breeds, did not freshen for first time until twenty-nine months old. Her record was made in her second lactation period. Thus from a Jersey source has come additional evidence to substantiate the correctness of the claims of the past president of the Canadian Holstein Association, Mr. Hicks.

Is Your Family Safe?

"WHEN a young man slips the wedding ring on the finger of his bride, he should slip into her hand a life insurance policy. He who is not willing to do so has no moral right to assume the responsibility of establishing a home."

These are not the words of a life insurance agent. They were spoken by a noted evangelist now campaigning through Eastern Canada in the interests of Christian Citizenship. Farm and Dairy ventures the assertion that among the 179,598 widows in Canada at the time of the last census, many thousands would be happier to-day had a substantial life insurance policy accompanied the wedding ring. We wonder just how many of these 179,598 widows have been left to actual want because of the failure of their husbands to provide for them in the surest and cheapest way—by an insurance policy substantial enough to guarantee independence for a few years at least. We hold no brief for the life insurance companies, but like the evangelist we have quoted, we see it as the plain duty of the husband to provide for his wife and little ones in the case of the untimely death of the breadwinner. In no case is life insurance more needed than by the farmer whose property is mortgaged or insufficient to support his family in comfort were he to be removed.

Discredit to "Made-in-Canada"

THE "Made-in-Canada" propaganda has been effective all over Canada. It presents its appealing message every day:

"One of the most patriotic services Canadian people can render the Empire is to insist on purchasing products made in Canada." But what a sad comment on that justly patriotic maxim is this trailing record of shoddy materials, of exorbitant prices, and of middlemen's insolent and unrestricted graft!—Toronto Globe.

"What a clean heaven some of us are getting ready for! No vacuum cleaners, no running water, no music, nothing but dye! And we expect to be entrusted with golden pavements, harps, etc. Enter tune up a bit here below."—Farm, Stock and Home.

Fertilizer

In One Case the
Tons
A/

ABOUT a year ago suits of some fertilizers. This was not a favorable crops went wrong turnips, where the made a dead set in the of the destroyed, however, last set year." and we view one of the be grew, and along with that success vtilizers that we have

Before detailing self, I may be per some reasons why farmers say that the filters and the water good, got a better crop and so on. Six fairly careful experie a yearly increasing fertility fertilizers, but a shadow of doubt supplying plant to ingly profitable one play a very importa culture of Ontario of anyone failing know the reason a explanation is that not visible to the eye—increase of six tons kels, and should nee it had I not us also know a case of the yield of a crop e would never have not be kept careful ings.

Poor Experiments

A real reason why tilizers sometimes do crop is that they are only made in a minute. I make their trials in while I use fertilizer. I am free to confess any particular benef to a dose-year anyway, and I ficial article to no doubtly sure." I notice that the richer ured the land is, the from the use of ferti that if 20 tons of per acre is applied, the use of the artificial smaller than if only ure were used. We may ed that the poorer, more profitable we s of fertilizers, and t the subject of my le the nature of pro tions.

The crop was Sw the soil a rather li The previous crop h grown with fertilize only had one modern barnyard manure in as far back as I hav of it. The stubble and a light dressing to be loads an acre) was ing the winter. A after seeding and smooth with harrow then rolled. Five di were used, ready m from the city, purch by one of the Toron to pounds of each, cent for six rows, s application being at pous an acre. O in without any ferti The fertilizer was pl planter that has an that purpose, and mure with a doubly plow. In this way

Fertilizers Increase Turnip Yields

In One Case the Increased Yield by Commercial Fertilizer was 12 Tons an Acre at a Cost of 37½ cts a Ton

Alfred A. Hutchinson, Wellington Co., Ont.

ABOUT a year ago I reported results of some tests we made of fertilizers. The season of 1912 was not a favorable one, and some crops went wrong altogether, as in turnips, where the lice seemed to have made a dead set at the plants and completely destroyed their usefulness. However, last season was a "turnip year," and we were favored in having one of the best crops ever ever, and along with that the most distinct success with artificial fertilizers that we have yet achieved.

Before detailing the experiment itself, I may be permitted to remark on some reasons why we sometimes hear farmers say that they have tried fertilizers and they are no use, did no good, got a better crop without them, and so on. Six or seven years of fairly careful experimental work, and a yearly increasing actual use of artificial fertilizers, have proved beyond a shadow of doubt that this form of supplying plant food is an exceedingly profitable one and destined to play a very important part in the agriculture of Ontario; so when I hear of anyone failing to get results, I know there is a reason. One possible explanation is that the increase is not visible to the eye. I have had an average of six tons per acre of manure, and should never have suspected it had I not used the scales. I also know a case of a man doubling the yield of a crop of sweet corn, but would never have known it had he not kept careful tally of his pickings.

Poor Experimental Ground

A real reason why commercial fertilizers sometimes do not increase the crop may be that the soil is already full of manure. I have known some make their trials in the garden, now, while I use fertilizers in my garden, I am free to confess that I never see any particular benefit, but then it is treated to a dose of manure every year anyway, and I only use the artificial article to make "assurance doubly sure." I notice, too, in practice that the richer and better manured the land is, the less the return from the use of fertilizers. It follows that if 20 tons of barnyard manure per acre is applied, the returns from the use of the artificial will be much smaller than if only half the quantity were used. Were I to ask it for grass-land, the poorer our land is, the more profitable we shall find the use of fertilizers, and that brings me to the subject of my letter, which is in the nature of proof of these assertions.

The crop was Swede turnips and the soil a rather light sandy loam. The previous crop had been fall wheat grown with fertilizer; the field had only had one moderate application of barnyard manure in 15 years, which is as far back as I have any knowledge of it. The stubble was fall plowed and a light dressing of manure (about 10 loads an acre) was spread on during the winter. We plowed again after seeding and worked down smooth with harrows and cultivator, then rolled. Five different fertilizers were used, ready mixed as supplied by one of the Toronto packing houses, 100 pounds of each, which was sufficient for six rows, 38 rods long, the application being at the rate of 400 pounds an acre. One row was put in without any fertilizer as a check. The fertilizer was put in with a potato planter that has an attachment for that purpose, and the drills were plowed with a double mould board plow. In this way all the fertilizer

was right under the row of turnips, and there was no possibility of the different kinds getting mixed. To further guard against any possibility of mixing, through the hopper not being quite empty when a fresh lot was put in, only the two middle rows in each plot of six were weighed.

Figures That Talk

| Plot | Composition | Yield per acre | Cost of Fertilizer |
|------|-------------|----------------|--------------------|
| 1 | — | 25½ tons | 86.50 |
| 2 | 2-8-6 | 24½ tons | 7.50 |
| 3 | 2-10-10 | 25½ tons | 9.50 |
| 4 | Nothing | 19½ tons | 0.00 |
| 5 | 3½-8-6 | 26½ tons | 8.65 |
| 6 | 2-10-10 | 22½ tons | 4.50 |

* Acid phosphate.

The figures in the first column represent the per cent. of nitrogen, the second column the phosphoric acid, and the third the potash. There are here three fertilizers containing the same per cent. of phosphoric acid and varying quantities of potash. One contains nearly twice as much nitrogen as another, and the same at all. Plot 3, with double potash, but no nitrogen, gives a little the lowest yield, and No. 5, with nearly double nitrogen and a little more potash than No. 2, gives no larger increase. Nitrogen is of doubtful value, and an increase from 2 to 3½ per cent. is apparently useless. Neither does the increase in potash give any result (see plots three and five, with 10 and six per cent. respectively). But an increase in phosphoric acid shows plainly (see plot one). That some potash is of benefit can be clearly seen by comparing plot six, which received none, with plot one, which, while not having so much phosphoric acid, received a five per cent. dressing of potash.

What Increased Yield Cost

Not the least interesting part of this test is the cost of the increases in yield by the use of the various mixtures. The cheapest gain was made by the acid phosphate on plot six, 12 tons at a cost of 37½ cts. a ton. But this is followed very closely by the 10-6 on plot one. Fifteen tons, costing 42 cts. a ton, or comparing it with No. six, the extra three tons an acre cost just 40 cts. a ton. This was certainly well worth while.

The increase of—14 tons on plot two cost about 63 cts. a ton; 13 tons on plot three cost 61 cts. a ton.

Any of these show a most economical increase in production. When it is considered that not over one-half of the value of these fertilizers has been used yet; that probably one-third will be available for the year's crop, and there will still be some left for use next season, we must admit that artificial fertilizers are a paying proposition, and that we are acting in a most unbusinesslike and shortsighted manner if we refuse or neglect to avail ourselves of their use.

Losses from Smut

It is estimated that the losses from smuts in Ontario grain crops amount to \$2,750,000 annually, about two-thirds of which occur in oats, wheat being the next greatest sufferer. To cope with this danger Bulletin 229, entitled "Smuts and Rusts of Grain Crops," prepared by L. E. Howie and R. A. Stone, has been issued by the Ontario Department of Agriculture, for free distribution to those who may apply for it. This very practical bulletin goes fully into the cause and cure of smuts and rusts, and gives a number of ways of treating seed grain in order to avoid or lessen injury to grain crops from these causes.

Here is a chance to get a Silo Free

The winner in the Ideal Green Feed Silo competition gets a silo free of all cost.

Open to every farm owner. Costs nothing to enter.



MADE IN CANADA

The competition is open to any Canadian farm owner or to any member of his family living on the farm with him.

It isn't necessary to spend a cent to enter this contest. There are no entrance fees. The prize will be awarded to the one who gives the most and best reasons why there should be a silo on every farm.

The "reasons" should be written plainly in pen and ink, or typewriter, on one side of the paper only, and sent to our Peterboro address, as given below.

The prize will be one of our 10 x 20 Ideal Green Feed Silos, complete, with roof, having a silage capacity sufficient for 7 or 8 cows.

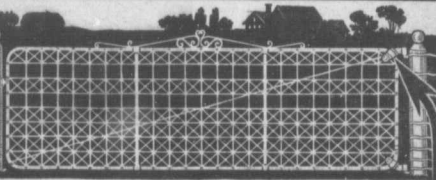
DE LAVAL DAIRY SUPPLY CO., Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA.

Sole distributors in Canada of the famous De Laval Cream Separators and Alpius Line Engines; manufacturers of creamery, dairy, cheese, factory and milk dealer supplies. Catalogues mailed upon request.

114 Park Street, Peterboro, Ont.

50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER



The Improved "Ideal" Farm and Stock Gates Possess Features That No Other Gates Have

Should the BRACE WIRE in an ordinary gate become slackened or broken, you know from experience that it cannot be tightened or replaced so as to make the gate as serviceable as when you bought it.

OUR PATENT HINGE-CLIP

with attached BRACE TIGHTENER overcomes this disadvantage. In "IDEAL" GATES the brace wire can be adjusted or replaced in less than two minutes with an ordinary wrench and then you practically have a new gate. Our new Hinge Clip also saves the weight of the gate direct from the top hinge bolt, thus relieving the frame from any unnecessary strain.

OUR PATENT LATCH

is supplied with all "IDEAL" GATES. It is positive and can be opened either way. Raise the thumb latch and push the gate open; when through, swing it shut—it always locks.

These new features are all covered

by patents and "IDEAL" GATES are

the only gates sold in Canada with

these improvements which make the gate more

serviceable and add many years to its life.

A postal card will bring you our catalogue 5

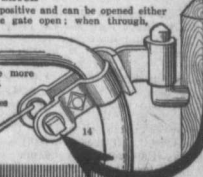
which describes in detail the many advantages

of "IDEAL" GATES.

The McGregor Ban well Fence

Company, Limited.

Walkerville - Ontario



OUR FARM HOMES



Do not give up trying to succeed, for one who fails is worth a great many of those who never try.

The Gentle Liar

By ANNA C. CHAMBERLAIN

(Continued from last week)

"NOT often," returned Uncle Ephriam with precision. "I was rather slow to be trusted so far but I remember I went one afternoon when pa was away an' my two brothers had the chores to do. It was war time then, an' everybody had to have the paper every day same as they had to have breakfast. Ma called me in 'bout three o'clock in the afternoon an' said I'd promise to go straight there, an' not loiter an' look for pretty things in the woods as I always liked to do, I might go to the post office for the mail. Promise? Guess I would. 'This was a mighty big promotion from feedin' the pigs, throwin' down hay for the horses, an' all such things, just whatever the big boys hollered for me to do. Big boys an' easy losses for the little ones, so I was glad to get off, let alone the honor of being trusted.

"So Ma she wrapped me up warm, an' I took my skates an' set out. That winter the snow had fallen before the hard frost, an' the ice was as clear and smooth as glass. The wind was straight in my face, an' cut pretty sharp, besides hinderin' me a good deal, but I could see my way by the ground. I would be a help in gettin' back, an' it was not long before I was across the little lake an' takin' off my skates at the edge of the wood."

"At this moment Aunt Martha's knitting needles clicked warningly, but Uncle Eph. was under the spell of the intent look on the school teacher's face and did not heed. He went on:

"This was to me the most adventurous part of the journey, I had never before been allowed to go through this bit of forest, as wild animals had been seen there, an' it was considered dangerous. But I had often thought it over an' planned how I would drive off any wild critters I might meet there. I was no cowardly youngster; but now that I was on the spot, I forgot all about my schemes for outwittin' an' catchin' wild beasts, an' I walked slowly along, cautiously lookin' from side to side, expectin' an' almost hopin' to see some hairy form an' gleamin' eyes through the tree trunks, yet all the while sort o' prayin' inside of me that I wouldn't. Then all of a sudden I stopped short, an' my heart came into my throat with such a jump that I had to shut my mouth tight to keep it inside. There just before me, in the very path I was followin', I saw enormous bear tracks. I knew they was bear tracks, 'cause bears had more than once wintered around our sheep pen in the winter time when the snow made it hard for them to get food. But these was the largest tracks I'd ever set eyes on. They weren't less than fourteen inches, an' mebbe more'n that. Of course I was

scared enough to take to my heels, with my face towards home, but then I knew I wouldn't have a chance to go three miles to the post office every winter's day, an' I didn't want to turn back. So I went on, treadin' softly as I went, lookin' on all sides at once, an' tryin' my best not to breathe any at all."



Where the Animals Are Pets as Well as Money-Makers.

It is evident that on this farm the children treat the live stock as pets. The little "barback rider" illustrated herewith appears to be perfectly at home and the young animal does not seem to object to its burden in the least. The photograph which this illustration is reproduced was taken on the farm of Thos. Morrow, Huron Co., Ont.

At the mention of bear tracks Aunt Martha's needles began to rattle like a pair of castanets. The teacher's round eyes and expression of sympathy had, however, temporarily destroyed Uncle Eph.'s hearing, and his tale went on:

"Then all at once I saw the bear, an' it was a good thing that my teeth was tight shut or this time my heart would have jumped clear out of my mouth for sure.

"There in the crotch of a large tree the bear sat, a monster an' no mistake. He saw me, too, an' appeared to admire the looks of me, for after grinnin' once or twice he started to back down out of the tree, evidently to make a nearer acquaintance with me.

"This wasn't to my notion at all, so I made a bee line for the shore, where in less than half a minute I got on my skates an' was off on the ice.

"I didn't get there any too quick either, for I was no sooner off the bear came lumbering down. Away I went, but he was handy on the ice, too, an' followed me ' good deal faster than I had been expectin', so that he was almost on my heels when, to escape him, I made a sudden sharp turn to the right.

"This was a lucky move, for the bear, weighin' about twenty times as much as I did, an' bein' in no ways as supple, rolled clumsily on his huge back as he turned, an' in the time it took him to get up again I had a chance to get away.

"I thought this was a good joke on the bear, an' tried it again an' again, managin' to gain a little with every turn. But by and by I found I was gettin' tired, an' then I began to wonder how I should ever get away from the hungry beast. I just couldn't keep skatin' an' dodgin' all night, an' as the best I could do now was to keep well away from his hungry jaws, how in the world was I to gain a margin of safety in which to get my skates off? An when we reached the other side an' make a run for the house?"

By this time the teacher was completely under the spell of the tale and the thrilling situation was bringing a mist before her eyes. Even Aunt Martha was beginning to succumb to

a sail. This helped me a lot, an' the old bear stopped a-gainin' on me; but as I couldn't get on my feet, an' as we both was runnin' an even race, an' a steep bank to be climbed an' all the twenty rods to be run before I could reach safety.

"I was gettin' mighty tired, too, so I gave a sudden dodge to gain a little advantage, if I could; an' in doing this I turned directly towards the great hole in the lake where we had been cutting the supple ice for the icehouse. This hole was, I guess, about twenty feet long an' eight feet across. As I saw this, a wonderful idea came into my head, an' I give another dodge an' thought hard.

"I could see, even if I was a little feller, that this new idea gave me a desperate chance; but it was a chance anyhow, an' there wasn't another that I could see. I was sure that I couldn't get my skates off an' up to the house before the bear would have his teeth into me, an' I was so tired I couldn't run much longer. So I dodged under the spell of the tale, an' then set out on a steady skim towards the dark open-hole. When I was almost to the edge I rocked on my skates, easy like, to slow my pace, an' then I made a great jump which landed me on all fours an' panting on the ice at the other side of the hole. As I was scrambling to my feet I heard a mighty snort an' growl, all in one, a crash of thin ice, an' then a most tremendous puffin' and splashin' in'. The old bear was in the water, an' I felt sure enough that he would never get out again. But I wasn't takin' any chances, an' I didn't let any grass grow under my feet as I made for the shore—if grass can grow on the ice in the dead of winter.

"Almost as fast as if the old bear was still behind me I scurried to the landing place, pulled my skates, an' scrambled up the bank. Then I tried to catch my breath easy and put on an indifferent air as I went into the house; but it wasn't good actin'. Ma says out right away, 'For pity's sake! what ails the boy?' 'Oh, nothin', says I. 'I've just been killin' a bear. That's all.' The big boys 'ive a hoot at this, but they more'n half believe it, an' they had to becalm the rest in the mornin' when I took them out on the lake an' showed them the old fellow frozen fast in the ice.

"They got axes an' chopped him loose, an' then we tied ropes around him an' hitched big teams on an' hauled the carcass up to the house, an' we had bear steaks night about all winter. That bear must have weighed about two thousand pounds, I should judge," ended Uncle Ephriam in a reminiscent tone.

The school teacher had been so intensely interested in this thrilling tale that she had her eyes for nothing but Uncle Ephriam's glowing face and his expressive gestures, and did not perceive the dark shadow which had slowly grown an Aunt Martha's face, and having no ears for anything but the story she had heard, she rattled the castanets. So she was quite startled when that good lady, dropping near a needleful of stitches in her agitation, asked with stern and blood-curdin' emphasis, "Ephriam Willetts, just how much of that story is true?"

"Why—why—Marty, he hesitated, "it's all true—or—that is—all—but that—that about the bear."

"You see," he went on precariously, urged to speech by her air of stony disapproval, "we had a lake back of our house up there, an' we used to cut ice from it, an' one time when I did send it for the mail, an' I remember thinkin' that it might be a bear; an', anyhow," added Uncle Eph. resentfully, "there ain't any sense in spoilin' a good story by leavin' out everythin' that didn't happen."

The Upwa

The Unruly

"A WHOLESO

tree of

It is amazing how serious misundertandings are done by many of the teachers through inattention the time a certain through three people. One of them may often this is quite. Some celebrity has been said he looked out when he really looked he should be punishable.

Exaggeration is a much harm. It is a little or change a fact into the truth. Wrong is not always a gain. A little girl did, in making New Year resolutions. An older member of the club happened to be called upon, and not a man," said the child not going to tell any of a shock of realization answered, "Yes, that is a leading periodical, lately that as many serious outrages and this time of dreadfulness, pressed, and not humane deeds be circled.

If one never repeats an evil one, it goes any further. Every one to be very guarded and never help circulate rumors to another. A rumor in a certain spread of a very certain man who was out. There was no one to blame. A explanation of a certain

In the presence of one ought to be very very courageous about one's disapproval of an expressive look, or. With many people, old dream of repeating their presence. Such many would be sorrow and suffering."

The Gravity of

Walter G. S.

Few persons attend to the importance to the country and seriousness of grippe. By the majority is regarded as nothing but bad cold, and no further are taken to prevent its local or continental spread is observed in the early. While the disease, its ordinarily fatal in young men, especially in the mind and body. It is the way for American resulting in pneumonia gangrene of the lungs and emphysema.

The death rate is largely in persons past 50 years of age. In 1913, there were 7,722 a gripe in the register of the United States which approximately two-thirds of this number, or 70 per cent, were persons. Infection is direct from and follows intimate person affected. The entrance to the respiratory and nasal passages is a very suitable point and toxin production in great numbers, and during a

The Upward Look

The Unruly Member

"A WHOLESOME tongue is a tree of life." — Proverbs xv, 4.

It is amazing how much mischief, serious misunderstanding, and great wrong are done by this very small member, the tongue. Much harm is done through inaccuracy. Notice by the time a certain report has passed through three people, how different the last one may be from the first. Often this is quite unintentional. Some celebrity has said that if a child said he looked out of a right window when he really looked out of the left, he should be punished.

Exaggeration is also another cause of much harm. It is so easy to add a little or change a little to the story told, to make it more effective. This wrong is not always regarded as a certain little girl did, but it should be. In making New Year resolutions, an older member of the family said one of hers was to tell everything, just as it happened, and not exaggerate. "You mean," said the child, "that you are not going to tell any more lies." With a shock of realization, the older one answered, "Yes, that is it."

A leading periodical has suggested lately, that as much as possible, stories of outrages and wrong done at the time of dramatic warfare be suppressed, and those of kindly and humane deeds be circulated.

If one never repeated an unkind tale or an evil one, they would never go any further. Every Christian ought to be very guarded in this respect, and never help circulate anything injurious to another. Very lately an evil rumor in a certain village was spread of a wrong committed by a certain man who was entirely innocent. There was no ground for this, except that it seemed the only explanation of a certain deed.

In the presence of harmful talk, one ought to be very determined and very courageous about expressing one's disapproval, by a decided word, an expressive look, or meaning silence. With many people, others would never dream of repeating any idle gossip in their presence. If there were more such, many would be spared great sorrow and suffering.—I. H. N.

The Gravity of "Grippe"

Walter G. Sackett

FEW persons attach sufficient importance to the contagious nature and seriousness of influenza or grippe. By the mortality of people it is regarded as nothing more than a bad cold, and no further precautions are taken to prevent its spread in the household or community than would be observed in the case of a cold. While the disease, itself, is not necessarily fatal in young people, it almost invariably leaves the patient extremely weak and depressed in both mind and body. It frequently opens the way for numerous complications resulting in pneumonia, bronchitis, gastritis of the lungs and even tuberculosis.

The death rate is particularly high in persons past 50 years of age, due largely to complications. In the year 1913, there were 7,725 deaths from a grippe in the registration area of the United States which includes approximately two-thirds of the population of this country, or nearly 70 per cent. were past 50.

Infection is direct for the most part and follows intimate contact with a person affected. The bacterium gains entrance to the body through the mouth and nasal passages where it finds a very suitable soil for development and toxin production. It is present in great numbers in the sputum, and during coughing, sneez-

ing and speaking the germs are ejected into the air. Persons suffering with the disease, and during convalescence as well, should remember this and protect the nose and mouth with a handkerchief while coughing or sneezing, in order to reduce the danger of infecting those with whom they are associated.—Colorado Experiment Station.

OUR HOME CLUB

Letters from Old Members

"COUSIN Nell," your plea for suggestions on solving the community problem is meeting with a hearty response. Your letter has already stirred up two of our old members, "Aunt Sue," from whom we have not heard for some months, and "Nephew Frank," who contributes to the Home Club quite frequently. No doubt the suggestions contained in these two letters will suggest ideas to other members. Perhaps, too, there are interested readers of the Home Club who would like to become members. If so, don't fail to send us a letter, and we will give all a hearty welcome.

"Sister Mac" has also dropped in this week, airing his view on the subject of thriftiness. What do your members think of this question?

A Suggestion for Cousin Nell

I WAS interested in "Cousin Nell's" request for suggestions on rural recreation. A community tennis grounds, a general athletic club, or something along that line might be recommended as a method of giving the young people of the community wholesome recreation and keeping associations of the unwholesome sort that generally flourish around our village stores. I believe, however, that in most cases the trouble lies deeper. I don't believe that any normal young man goes to the hotel by choice. They go there because they crave human companionship and that is the only place they can find it. I think most of them would rather gather at some place for a pleasant good time. The question is, how many homes are there in their community at which they would be welcome.

My mind goes back to the stories mother used to tell of the old pioneering days. She always contended that they had more social life then than now. It was quite the usual thing for a group to gather together at an evening, and go to some home in the community. No warning was given the hostess, and no warning was required. They were at liberty anywhere, to remove the stove out of the big kitchen in winter and indulge in a good old-fashioned dance. In summer a picnic could be arranged for the following week in ten minutes after church. No intricate programmes were necessary and everyone took their own basket. Then there were the barn raisings, the logging bees, and the quilting parties.

"Cousin Nell," don't you think the trouble lies just here,—that social life in our rural communities has been allowed to decline. We don't see enough of each other in the country nowadays. Hasn't there been a tendency for the "caste system" to develop? In the old days one person was as good as another. Nowadays the richer land owners have a social set of their own. The new people who come into our communities are not received as they used to be. In short, we have become too self-centred. A wholesome democratic community life—"Cousin Nell," is the kind that they had in the good old days, and if we could, bring it back to life-to-day, it would solve your problem.—"Nephew Frank."

HOUSE CLEANING

Is a Small Task to Those Who Use



Large Sifter Can with Full Directions, 10c

\$1.50 Rapid Vacuum Washer \$1.00

The real, original vacuum washer. The washer that will wash anything—shirts, collars, dirty cuffs, bands, anything in three minutes. That is what the RAPID does. For a short time only, we will send the RAPID post-free along with this advertisement along with the dollar. Don't miss this chance—it won't be repeated. Send \$1.50 today with this ad. If not satisfactory, your money will be returned.



DEPT. 1 TORONTO, ONT.

RIDER AGENTS WANTED

everywhere to ride and exhibit a sample 1915 Hyslop bicycle, with all latest improvements.

We ship on approval to every address in Canada, without any deposit and allow 10 DAYS TRIAL. It will not cost you one cent unless satisfied after using bicycle to days.

DO NOT BUY any machine of any price until you get our latest 1915 Hyslop and compare. The low price will amaze you. **ONE CENT** write us a postal note and we will send you a 1915 Hyslop to you **Free, Postpaid, Write it now. Do not wait.**

HYSLOP BROTHERS, Limited
Dept. 4 TORONTO, Canada



CANADA'S GREATEST SEED HOUSE

STEEL BRICK SEEDS

THE BEST BY EVERY TEST

FOR SALE BY RELIABLE MERCHANTS EVERYWHERE THROUGHOUT CANADA

PEERLESS EXTRA LONG GATE

Our gates are built for strength and endurance. Braced like a steel bridge. It is the gate that serves you best. Easily built, quickly adjusted, convenient and in every way serviceable. The Peerless is braced like a steel bridge, just as the engineer strengthens the points of strain in a big, mighty bridge, so we have designed braces, stronger than was necessary, to make our gates stiff and rigid. They can't sag—they can't twist—they are great improvements over gates made the old way.

Peerless Gates

are made of first-class material. Frame-work of 1½ inch steel tubing electrically welded together. Peerless pipe braced gates are all fitted with heavy No. 9 Open Herringbone riveted steel wire—built for strength, and durability—weather proof and stock proof.

Send for free catalog. Ask about our farm and poultry fencing, also our ornamental fence and gates, made and sold everywhere. Agents wanted in open territory.

The Danwell-Hoxie Wire Fence Co., LIMITED
Winnipeg, Man., Hamilton, Ont.



More Assistance for "Cousin Nell"

WHEN Farm and Dairy comes in I first turn to read "Our Home Club," and I must confess I always look for the writer's name. After reading the article written, to find out if some of our older members have returned. Where is "Aunt Faithful"? I will not nor do I soon wish to forget her.

In reference to "Cousin Nell's" request for suggestions for recreations for the young people from our own experience, let me suggest that we make our home surroundings so attractive that there will be no desire on the young people's part to congregate on the village street corners in summer nor sit around the village store stove in the winter evenings.

Give the young folk a piece of land near the home. Let the boys have lawn to level it down. Don't be stingy with the length and breadth of it—give them some lawn seed, ten tennis sets, or whatever game they prefer. Or tell them "There's the ground, here's the cash to get your games," and see how quickly they will "set at it." Encourage them to invite their neighbor friends in to take part in games. Maybe some of those young folk who hang around the village corners would be glad to come in and take part.

My dear young folks have all grown up and are nearly as fat as the nose next, but none of them hung around street corners. Hired men? Yes, ask them to take part in games too. They doubtless are feeling hungry. Invite them to take part and see how quickly they will remember they have a second-best suit upstairs they can put on in evenings so they can be like the rest.

I fully agree with "Doctor's Wife" that the farmer has an important part to play through this war. The eyes of the world will be turned to him for provisions, as eagerly as they look to the manufacturer for clothing and ammunition.

But my letters may be too long already, so I will close "Aunt Sue."

The Question of Thrift

THE subjects discussed by Home Club members recently have been many and varied. The subject of thrift, so far as I have noticed, has not been dealt with. I would like to know if Home Club readers think the boys and girls of to-day are receiving the home training in thriftiness to the extent that they did, say a score of years ago. There is so much written nowadays about the high cost of living, that we are led to wonder at times if some of this advice might not be induced by making the most of the small things. I have in mind particularly the waste that is allowed in some homes around the family board. Here is an illustration.

A little girl of five years had finished her dinner, when her eye was attracted to the meat plate, and she called for a piece of chicken. Instead of denying her by serving her with but a small portion, the mother gave the child a helping that had been more than enough were she but commencing the meal. It was wasted, of course. Even then the little girl was not satisfied, and called for a piece of pie. She fished a few pieces of fruit from the pastry and called for another piece. We can see how much that child would waste at a meal. And her parents were hard-working people, evidently having difficulty to make ends meet.

A child receiving such training, or lack of training, in this one particular could not be expected to grow up thrifty and careful of the small things. We must remember that "it's the little things in life that

count." I think, also, that too often people have a false idea about the question of thrift. Thriftiness and niggardliness are too often confused, and people fear that if they seek to make the most of the small things that they will be considered miserly. It seems to me that we should endeavor to get a true conception of the meaning of thriftiness, and then seek to train ourselves and our families "to train woe should go,—" "Sister Mac."

Starting and Care of a Garden

Alice A. Ferguson, York Co., Ont.
REMOVE all rubbish and clean up the yard or place to be used. Select a plot in a sunny location. Do not spoil the beauty of a green lawn by planting a garden in the middle of it. Let a boundary of the yard or the fence, form a background, and place the garden in front, or place the garden near the wall of the house, allowing care to avoid the dripping from the roof.

Examine the soil. A clay soil is too heavy, cold and bakes. A sandy soil is too loose, contains too little of the food elements, and does not retain moisture. The best garden soil is sand loam. To improve the clay soil, add sand to loosen and lime to sweeten it. To improve sandy soil mix it with clay, which will hold the particles of sand together. To improve clay or sand soil add at least two inches of humus in the form of well rotted manure. Humus contains the food element necessary for plant life, and retains moisture.

Do not make the garden plot too large. Long, narrow beds are best, and easiest to cultivate. Spade or dig from eight to 12 inches deep. Avoid turning soil too deep. Turn up, as this will leave the poor soil on top and the best soil at the bottom of the spade cut. Turn the soil at an angle of 60 degrees to the original surface. Break all lumps; spade, rake and rake again. Make the soil fine. The finer the soil the more quickly the young plants can get food.

Make the bed shallow, a little higher in the centre than at the edges, to give proper drainage. Use climbing or tall plants for a background, and grade down to the shortest variety in front.

Plant in rows, making the rows run north and south if possible, so that every row will have the morning sun on one side and the afternoon sun on the other side. The distance between the rows depends upon the kind of plants to be grown. Use stakes and line for measuring. Measure carefully for the first row. Place stakes and stretch the line. Be sure it is straight, as all the other rows will depend upon this one.

Plant seed at a depth of "two to four times the diameter of the seed, the long way." Cover the seed, and firm the soil by passing with the hand or board or by rolling.

Begin thinning out the plants when they have two pairs of leaves. Remember that each plant must have plenty of room for growing. Weed often and work the soil. Keep the soil level over the surface of the garden. The dust mulch conserves moisture. Don't draw the soil in ridges about the plants when cultivating. Level cultivation is considered best.

In watering the garden, soak the soil to a depth of four inches. A mere sprinkling of the surface does more harm than good. Sprinkle late in the afternoon or evening to avoid the direct heat of the sun's rays on the plants.

Transplant on a moist or cloudy day and water roots thoroughly. Cover to protect them from the sun during the first day, and shade at night that the plants may have air.



The Poppy Land Limited Express

The first train leaves at six p.m. For the land where the poppy blows; The mother dear is the engineer, And the passenger laughs and crows.

The palace car is the mother's arm; The whistle, a low, sweet strain, The passenger winks and nods and blinks, And goes to sleep in the train.

At eight p.m. the next train starts For the poppy land afar.



"Tabby" and "Teddy" Photo taken in Wentworth Co., Ont., at the home of D. Davidson.

The summons clear falls on the ear "All aboard for the sleeping car."

But what is the fare to poppy land? I hope it is not too dear; The fare is this, a hug and a kiss, And it's paid to the engineer!

So I ask of Him who children took On His knee in kindness great, "Take charge, I pray, of the trains each day, That leave at six and eight."

"Keep watch of the passengers," thus I pray, "For to me they are very dear, And special ward, O gracious Lord, O'er the gentle engineer."

The Wet Day

KITTY was very cross because it was so wet and she couldn't go out. She was a little girl who grumbled at rainy weather. She said she couldn't see any use in it, except to stop all fun, and she wished there was no such thing! And so she rolled herself up in a ball on the sofa, and made things wetter than ever by crying bitterly over the state of affairs.

But if Kitty had looked out of the window she might have noticed how the flowers in the garden were crying with joy over the rain, great big fat tears of delight, because rain makes the flowers grow, and washes all the dust off their tender petals.

And things were awfully lively over at the pond, too; the ducks were as jolly as possible over the weather. "Fine weather for ducks!" they were all quacking.

Father had just come in, too, and tossed up his umbrella in the stand, and I haven't a shadow of doubt what the umbrella thought about the rain. "Lovely!" it sighed, "so refreshing! I'm wet through to my very wires, just as I was afraid I should rust to death watching the walking-stick go so gaily off for a walk every single dry day for the last fortnight. How I wish it would rain every day!"

So, you see, it's only fair that those who like wet weather should have it sometimes. It would be selfish to want fine weather always, wouldn't it?"

Think of this, chicks; next time there's a wet day Every kind of weather is liked by someone.

That Dog "Tiz"

By E. Y. Benedict
HE was just a plain yellow dog, without any pedigree, but he was our dog, and we thought all the world of him just the same.

As to his name, well a neighbor had croaked us one, and when we called for it he threw open the woodshed door and pointing to where a half-dozen little beauties were playing about said, while a broad grin lit up his face, "Tiz."

"Well, here 'tis, boys! You can take your pick!"

That was in the halcyon days of youth, when brother Life and I were just school kids, and like most other boys of our age, not content without a dog. We thought we must have one at any cost. Why, at that time we would have given all our earthly possessions, consisting of a dollar watch, two jack-knives, a fish-hook or two, and a gimlet, just for a dog of most any age, size, or color, even if 'twas nothing but a pup.

When I was a boy we had been promised a dog only to find that promises like pie crust were easily broken. There was always one excuse or another. It is so easy to invent excuses for broken promises, wrong as it may be. So the winter wore itself away and melted into spring. The April showers had brought the May flowers in abundance. The little dog-house that we had taken such pains to build snug and warm for the winter months was still empty. All winter it had been hidden from sight under the great white drift. Now its little door stood invitingly open, letting in the sunshine, while the south winds played for it, but no little doggie came in or out; there was none to take possession.

Then one bright morning in May, when the blossoms were falling like snow from the fruit trees, a very pleasant surprise came—something unexpected. We were busy about our chores as usual when dad fairly gave us a thrill by saying:

"Now, boys, you can have that dog you've been teasing me so long about."



"Jock" at Attention. This collie is the property of Mr. Chas. A. Brink, Oxford Co., Ont., who values him highly as his canine friend. You would almost think that "Jock" had gone to the "vacation, wouldn't you?"

"Oh, dad! Is that so?" we both cried in chorus as we danced around him for very joy. "Do tell us all about it."

"I said dad in reply, 'I've only been waiting till the little fellow was old enough to take from his mammy. Here is a half-dozen in the bunch, and neighbor Brown says you boys can have the first pick.' So you better call on your way home from school and bring him with you."

We did, of course, and the strangest part of it all was that we should pick out the homeliest one of the whole bunch.

And, lugging him home in a basket, we both shouted gleefully as we turned him loose, "Here 'tis, dad! Here 'tis!"—Our Dumb Animals.

AMUSE
Conducted by M
A Bird
D O YOU know
who'll be the month
birds come home

ue guests arrive
with the bird on
in that way part

Questions relat
be pinned about
will prove an in
for an hour or so
with card and pen
write the answers
Some of the follo
be used.
(1) There's a fl
if he flies fast or

I BELIEVE I
and no one
to make my qu
to believe that
that I should
and joy into
(4) believe the
free air and su
are intended
to work with
now the seed
has some work
I believe in
of wind and r
beautiful and d

(2) There is one
though he can't
(3) And one wh
held by a string—
(4) There is on
one letter is spo
(5) There's an
harvest would u
(6) And one yo
you will—Ans.
(7) What bird
of lung of old.
(8) What bird
sk in its dress.
(9) There is on
London the pride.
(10) What bird
an island breeze.
(11) Which of
and silly—Ans.
(12) And which
punish poor Billy
W.

(13) Which bird
works at his trade
(14) And which
flags are made—
(15) One, who
heaven's a singing
(16) And we're
land the new
Stork.
(17) What bird
eating or drink
(18) Guess all
as Minerva's own

Hunting
This is a good
"Hunt" such go
baskets, either of
These make prett
party. White bet

AMUSEMENTS

Conducted by MARION DALLAS

A Bird Carnival

DO YOU know the birds? If you do, you will know that April is the month when all the little birds come home to make their nests and you will realize that a "Bird Carnival" can be made one of the prettiest and most delightful of parties.

Decorate the invitations with 14 birds, two of the same kind, one for a lady and the other to be sent to a gentleman. When the guests arrive each one is labelled with the bird on their invitation, so in that way partners are easily found.

Bird Puzzles—Questions relating to birds should be pinned about the room. These will prove an interesting diversion for an hour or so. Provide each guest with card and pencil, and let them write the answers to the questions. Some of the following questions could be used:

- (1) There's a bird whose name tells if he flies fast or slow.—Ans., Swift.

A Country Girl's Creed

By Flora Butlock

I BELIEVE that country life is a better place for me to live, than the city, because it is cleaner, quieter and more beautiful. I believe that I can find no nobler work than to use all the knowledge and skill I can obtain to make my country home a place of happiness for my family and friends.

I believe that in a community in which I live is a part of my home and that I should work earnestly with my neighbors to bring more happiness and joy into the community life.

I believe that God did not mean to shut me in a house, away from the free air and sunshine. I believe that all the blessings of the great outdoors are intended for me. I believe that for best results, it is an ennobling privilege to work with Nature—to care for the life-giving soil with my own hands, to sow the seed and help it grow. I believe that all my life I should plan to have some work to do on every day into the open air.

I believe in learning to enjoy good books, good music and good pictures. But most of my reading should be Nature's unwritten books: the wonderful stories of plants and animals; in listening to the music of birds and insects; in watching the ever-changing pictures of earth and sky. For I believe that God has given all these things to make my country home beautiful and dear to me.—Selected.

- (2) There is one that tells tales although he can't sing.—Ans., Tattler.
 - (3) And one who flies high, but is held by a string.—Ans., Kite.
 - (4) There is one whose name with one letter is spelled.—Ans., Jay.
 - (5) There's another a farmer in harvest would use.—Ans., Thrasher.
 - (6) And one you can easily fool if you will.—Ans., Gull.
 - (7) What bird in the chimney place of lung of old.—Ans., Crane.
 - (8) What bird wears a bit of the sky in its dress.—Ans., Bluebird.
 - (9) There is one built a church, of London the pride.—Ans., Wren.
 - (10) What bird the same name as an island bears.—Ans., Canary.
 - (11) Which bird called foolish and silly.—Ans., Loon.
 - (12) And which, always wanting to punish poor Billy.—Ans., Whip-poor-will.
 - (13) Which bird is an artisan and works at his trade.—Ans., Weaver.
 - (14) And which is the stuff of which flags are made.—Ans., Bunting.
 - (15) One, we're told by the poet at heaven's gate sings.—Ans., Lark.
 - (16) And there's one which in Holland the new baby brings.—Ans., Stork.
 - (17) What bird have we with us in eating or drinking.—Ans., Swallow.
 - (18) Guess all these, you're as wise as Minerva's own bird.—Owl.
- Hunting For Eggs**
This is a good game. For the "basket" each guest is given a small basket, either of paper or straw. These make pretty souvenirs of the party. White beans can be used for

eggs, and they are hidden in all sort of places. As a given signal, the "Hunt" begins, and the one who finds the most is the winner.

Jack Horner Pie

The supper table is always an important feature. For this party the table decorations could be a "Jack Horner Pie." This is a large pie containing small favors. It is made by covering the largest tin with ordinary manila paper. To make it real, scorch the paper a little. Have four and twenty black birds perched on top, instead of inside, as the old rhyme used to say. The birds are made of black crepe paper, twisted to resemble little birds with outstretched wings. They are fastened on wire hair pins that can be stuck through the top of the pie so they will stand upright.

In Shakespeare's Honor

April the 23rd is generally conceded to be the birthday of the illustrious bard of Avon. The day affords an opportunity to the alert hostess to entertain in his honor. Purple and gold were the colors the poet was especially fond of, and no combination makes more effective decorations. Postals may be obtained with pictures of Stratford, and these may be used as place cards or for puzzle games, or matching partners.

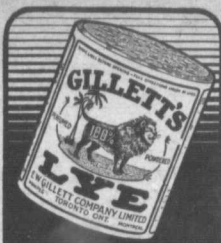
Shakespeare Romance

Write the following questions on slips of paper and pin them around the room. Every answer is the title of one of Shakespeare's plays.

- (1) Who were the lovers? — Ans., Romeo and Juliet.
- (2) Where did they meet? — Ans., In a Hamlet.
- (3) What answer did she make to his proposal?—Ans., As You Like It.
- (4) What was their courtship like?—Ans., A Midsummer Night Dream.
- (5) From whom did he buy the ring?—Ans., The Merchant of Venice.
- (6) Who were their best man and bridesmaid?—Ans., Antony and Cleopatra.
- (7) Who were the ushers?—Ans., Two Gentlemen of Verona.
- (8) Who entertained them on their wedding trip?—Ans., The Merry Wives of Windsor.
- (9) Who was the chef? — Ans., Othello.
- (10) What was their first quarrel about? — Ans., Much Ado About Nothing.
- (11) What was her disposition like?—Ans., The Tempest.
- (12) What was his chief occupation after marriage?—Ans., Taming the Shrew.
- (13) What Roman General effected a reconciliation?—Ans., Julius Caesar.
- (14) What did the world say? — Ans., All's Well that Ends Well.

The use of sored cotton instead of white for tacking, white material makes it much easier to follow the seams accurately on the machine. The tackings are also more easily and quickly removed.

The more joy that gets in the life of the farm wife, the better will be the farm home, the life, and the happier the husband and children.



THE STANDARD ARTICLE SOLD EVERYWHERE REFUSE SUBSTITUTES

Feed Your Land

and you will get Bigger and Better Crops.

Stone's Fertilizers

are rich in available Plant Foods—Ammonia, Phosphoric Acid and Potash. They will give you maximum yields at lowest cost.

Write or call for complete information.

William Stone Sons, Ltd.

(Established by Years)
Head Office: — WOODSTOCK, ONT.
Branches: Ingersoll and Stratford Agents Wanted

The Sanitary Milker

LIVE AGENTS WANTED



MILKS TWO COWS IN 15 MINUTES
Simple, Reliable, Easily cleaned. Cannot injure the cow. Works on Nature's own principle. Hand power or electric. Price of \$85 Hand Power Machine Guaranteed. Write today for Illustrated Folder. BROWN ENGINEERING CO., Dept. D 410 King St. W., Toronto

WHY not sell your Surplus Stock now? Write out your Ad. for Farm and Dairy to-night. Tell our 15,000 readers what you have for sale

Made in Canada



Windsor Table Salt should be in every Canadian home

STRAWBERRY PLANTS

Strong, healthy plants, guaranteed. Sonator Dunlop, Havriand, Parsons Beasts at \$3.50, M. \$2.00 for 500 and \$1.25 for 250.

LEAVENS ORCHARDS
Howard Leavens — Bloomfield, Ont.

SWEET PEAS

You remember their fragrance and want more and better ones this year. This you are sure to get, if you order from our, true to color, perfect germinating seed. All 100% production and raised on our own grounds.

Send postal NOW, for list of latest varieties, many being not yet on the Ontario market. Our competition closes shortly.

HILLSIDE FRUIT FARM, Dept. 5 SIMCOE ONT.

FORD STARTER



Exclusive agents wanted to sell the "Sando" Two Compression Starter. Differs from all others. Every Ford owner a live proposition. Get my proposition today. Write Dept. F. GEO. J. MACNEILL CO. 85 Richmond W., Toronto

A PERFECT TOMATO

has been produced by us, and one which we want you to test. It is acknowledged, by all who have tasted the fruit, to be the finest in flavor they have eaten.

It is a great drought resister, a heavy yielder and does not revert to type. You want to try a packet, so drop a postal SLIGHT AWA, and for particulars of premium offer, to: HILLSIDE FRUIT FARM, Dept. 5 SIMCOE ONT.

Chiclets

REALLY DELIGHTFUL
THE DAINTY MINT-COVERED CANDY-COATED CHEWING GUM

SEEDS

RENNIE'S ALWAYS GROW THE BEST IN THE LAND.
Catalogue FREE. Sold by best dealers.
WM. RENNIE CO. LIMITED
ADELAIDE and JARVIS STS., TORONTO, ONT.
Also at Montreal, Winnipeg, Vancouver.

CREAM

Cheese is high: You bet. Butter is just as high: Bet again: It's safe. Grain foods are very high. Skim-milk will save your grain. Skim-milk will make real calves.

Ship us your cream. We furnish cans and pay express. A post card will bring you further information. Write us.

Belleville Creamery Ltd.

BELLEVILLE, ONT.

FOR SALE

1 No. 1 Mollette Cream Separator, new for sale. Cost \$75.00. Will sell for \$60.00 or best offer.

1 Fleury No. 1 Grinder, second-hand, for sale. Cost \$35.00. Will sell for \$15.00.

1 2 h.p. Gasoline Engine. Cost \$350.00. Will sell for \$125.00 or best offer.

1 Outling Box (Banford & Ben, England), with Dust Extractor and Slinger Attachments. Cost \$300.00. Will sell for \$100.00 or best offer.

Apply

BOX 1098, FARM AND DAIRY, PETERBORO, ONT.

EGGS, BUTTER LIVE POULTRY

Bill your shipments to us by freight. Advise us by postal and we will attend to the rest promptly.

Egg Cases and Poultry Coops supplied free.

The **DAVIES** Co. Ltd.
Established 1854 TORONTO, ONT.

WANTED

Our prices have shown a steady advance for Good Quality

CREAM

We are prepared to meet ANY condition. You should write us.

Toronto Creamery Co., Ltd.

CHURCH ST., TORONTO, ONT.



DON'T FEED BUTTER FAT TO THE HOGS

THAT is what you are doing if the bowl of your cream separator does not spin smoothly and swiftly. And it will not, unless you use an oil really suitable for the separator's finely adjusted bearings.

Standard Hand Separator Oil

is made expressly for lubricating the delicate mechanism of cream separators. If you trust to ordinary farm oils you'll have trouble sooner or later; and if a better separator oil than Standard could be made—we would make it.

Dealers Everywhere

The **IMPERIAL OIL COMPANY**
Limited



CREAM WANTED

Patrons of Summer Creameries and Cheese Factories, we want your Cream during the winter months. Highest prices paid for good cream.

One year's contract for **Archerdale Guelph Creamery Co., Guelph, Ont.**



In the Dairy

Use Panshine to thoroughly clean and shine all the cans, pails, shelves, etc. Leaves everything sweet-smelling and sanitary. Cleanliness pays—especially in the dairy. Use



PANSHINE

It's a pure, white, clean powder—doesn't scratch—can't harm the hands—odorless.

Sold in Large Sifter Top Tins **10c.** At all Grocers.

P-4

The Makers' Corner

Butter and Cheese Makers are invited to send contributions to this department, to ask questions on factory matters, to give suggestions and to suggest subjects for discussion.

Maker's Control of Quality

Alex. H. Constable, Victoria Co., Ont.

I THINK it is possible for makers to control the quality of milk received into their factories. I would sooner lose my position and a certain amount of trade, than have the name of making inferior cheese through handling dirty milk. Any other cheesemaker cares to take in milk that I reject, he is welcome to it and the name he gets. I would sooner make some milk, than a dozen with dirty, inferior milk. In the first place you are sure of the name of a good cheesemaker, and in the second place you are not sure of anything. A good name is better than riches; to me anyway.

Here is one of my experiences in handling dirty milk. I had had some trouble with a man sending inferior milk. First I tried writing to him, but this did not make much difference. Then I threatened to make him keep milk at home, and now that man sends as clean a can of milk as any that comes into the factory. That man had the option of sending his milk to another cheese factory or to a creamery, but whether they would have accepted it is not for me to say.

I believe that until makers cooperate to reject all dirty milk, that it will still exist, and that the great dairy industry of Canada will never be what we desire it to be. If I have to take in any old stuff that comes along, then here is one that will quit the business, for, as I said before, "A good name is better than riches."

Why a Sediment Test?

F. Herra, Chief Dairy Inspector for W. Ontario

1. The presence of sediment in milk indicates careless methods in milking and, therefore, the probability is, that the milk is seeded with a large number of undesirable organisms.

2. The sediment test is a simple method of accumulating in one spot where it may be seen, the amount of sediment contained in a pint of milk, and thus enable the operator to judge approximately, from the appearance of the "disk," the total sediment in the can of milk.

3. If the milk is not sufficiently cooled this condition will usually be indicated by the appearance of little clots of dried cream on the "disk." This means loss of cheese-making material.

4. Used in connection with the curd test it makes a combination more effective than the curd test alone.

5. It places the responsibility on the individual patron and leaves little chance for argument on his part.

6. The patrons, with few exceptions, take a reasonable view of the test as it is something they can see and understand. They look upon it as a test that indicates not only the better methods of the careful patron but reveals the shortcomings of his careless neighbor. Personal pride in the clean, satisfactory condition of the milk, when delivered, is awakened.

7. Good judgment must be exercised by the operator in making use of the test, offensive comments withheld and an effort made to get the patron to understand that, all that is intended, is to point out the facts, with the desire of getting his cooperation. Simply let the appearance of the

*Summary of an address at the Eastern Ontario Dairymen's Convention.

"disk" do most of the talking at first, as it will eventually appeal to the patron from a logical standpoint.

8. Improvements have been secured through cooling of the milk, the installation of cool curing rooms, the pasteurization of whey, in better methods of manufacture and in more sanitary factories. The milk sediment test I believe to be worth trying out in order to see if it is not possible to promote further and continued progress in sanitary methods of milk production.

Our ideal is, "Clean milk," "Well cooled milk" and "Every cheese a fancy cheese."

Fifteen Years by Test

J. C. Maker, Oxford Co., Ont.

WE have paid by test for the past 15 years and I think it is the better way when it is properly done. One reason, I believe, that it has lost favor where it has been tried, is that the work has not been done properly. I know of one or two cases where the work was not done at all. One or two tests were made and an average taken from that. One cannot work on that principle long before



For Better Milk.

This contrivance covers a flowing spring where milk is kept on hot nights and over Sunday. It also protects the cans from rain water. Photo in Hastings Co. On the patrons become suspicious and lose confidence.

The reason my patrons adopted this system was because they thought it the proper way; at least enough of them thought so to carry the vote. The reason some oppose paying by test is, I believe, because they do not think it is fair unless you test both the fat and the solids. Others think the Babcock won't tell the right percent of fat in the milk and they say our authorities are not unanimous on the point by a long way.

I believe the patrons take better care of the milk when it is paid for by test, and they are not so apt to water or skim the milk. The big reason that factories are slow to adopt this system is, as I said before, on account of the work not being properly done. And let me tell you a secret. You can't get the best results from using unless you have some disinterested party to do the work. And another secret is that if you have a lot of good patrons, whose milk tests low and they can reach some other factory, you will lose every one of them and probably lose half of what you make. A maker is in a pretty tight corner when he is trying to pay by test all alone.

As we acquit ourselves at this crisis, so will be our prosperity and pride in the years to come.

Swiss Cows in

The Rural Public Limited

THE annual meeting of the Rural Public Limited, which publishes Dairy, was held in the company, Peterborough. Reports presented a picture of war conditions and during the latter part of the receipts of the company during 1914 the previous year in the past. The circulation of Dairy also had increased for over 19,000, a new record.

A number of improvements in Dairy were decided to be carried into effect during the year. The following were elected: President, Lawrence, Stratford; Vice, G. A. Gillespie, M. I. C. Managing Director, Treasurer, H. B. Cowdell; J. R. Dargatzis; A. C. Hallman, Scott; Henry Scott; Manilla; Harold Jones; A. J. Reynolds, Solina.

A Cheap Sap Bo

F. Whiteside, Victo

I WOULD like to m

marks with regard

ing house of Mr. F.

ed in the March 25th

and Dairy. Such a

back to us old timers

troughs, long cedar

conges and two or thr

on a pole in a rude st

I admire economy in

Lumber and it has occu

one might build a sap l

shed more economical

Payne has done. If

were built just out of

the wind would blow

would dry the wood mu

ly. The wood shoul

August or September,

shed were also built

longer, allowing shelte

the freman and the fu

allowed to come under

the remainder of the in

covered with inch

metal cover, which is

cheaper than the meth

Mr. Payne. As the

gathering sap the big

time if he has a larg

or bolts deep enough

to be done not require

a which to sit.

Manure to Apply

(Continued from

and clover once in thr

results for 10 years at

Manure, four tons p



Swiss Cows in the Stable of the Dairy Institute at Liebfeld.

—Photo courtesy J. A. Ruddick.

The Rural Publishing Co., Limited

three tons, \$3.48; manure, eight tons per acre every three years, \$2.70; manure, 16 tons per acre every three years, \$2.24.

"These results indicate conclusively," says the writer, "that manure on the general farm should be applied lightly and frequently. Constant and light applications keep a supply of freshly decaying organic matter in the soil. The losses from evaporation and leaching are proportionately less and the growth of bacteria are promoted to best advantage. It is much better to apply eight tons per acre every four years than 16 tons per acre every eight years. Where manure is cheap and the prices of products are high, as in the case of a market garden near a large city, manure may profitably be applied in larger amounts."

The average member of a cooperative association expects too much profit from his society. Greater profits must come from economies effected from cooperation, not so much from higher prices realized. The profits should go to those who effect these economies.—F. C. Hart, Cooperation Branch, Toronto.

THE annual meeting of The Rural Publishing Company, Ltd., which publishes Farm and Dairy, was held in the head office of the company, Peterboro, March 30. Reports presented showed that in spite of war conditions which prevailed during the latter part of last year the receipts of the company had been greater during 1914 than during any previous year in the company's history. The circulation of Farm and Dairy also had increased during the year to over 19,000, establishing a new record.

A number of improvements in Farm and Dairy were decided upon and will be carried into effect during the coming year. The following directors were elected: President, W. W. Ballantyne, Stratford; 1st Vice-President, G. A. Gillespie, M. L. A., Peterboro; Managing Director and Secretary, Treasurer, H. B. Cowan, Peterboro; Directors: J. R. Dargavel, M. L. A., Elgin; A. C. Hallman, Breslau; J. H. Scott, Exeter; Henry Glessingdin, Manilla; Harold Jones, Prescott; and A. J. Reynolds, Solina.

A Cheap Sap Boiling House
F. Whiteide, Victoria Co., Ont.

I WOULD like to make a few remarks with regard to the sap boiling house of Mr. Payne, illustrated in the March 26th issue of Farm and Dairy. Such a scene brings back to us old timers the pine sap troughs, long cedar spiles, tapping augers and two or three kettles hung on a pole in a rude stone arch.

I admire economy in time and in lumber and it has occurred to me that one might build a sap house and wood shed more economically than Mr. Payne has done. If the woodshed were built just out of the bush where the wind would blow through, it would dry the wood much more quickly. The wood should be gathered in August or September. If this woodshed were also built about two feet longer, allowing shelter from rain to the fireman and the furnace door also allowed to come under this roof, then the remainder of the evaporator might be covered with inch boards or a metal cover, which would be much cheaper than the method followed by Mr. Payne. As the fireman is out gathering sap the biggest part of the time, he has a reliable regulator or bolts deep enough to avoid danger, he does not require a warm house in which to sit.

Manure to Apply per Acre

(Continued from page 4)
and clover once in three years. The results for 10 years are as follows: Manure, four tons per acre every



SIMPLICITY
DEPENDABILITY
DURABILITY
ECONOMY

Alpha Gas Engines are ideal for farm use

WHILE THE "ALPHA" IS A good engine for any purpose, it is an ideal engine for farm use because there is no "mystery" either in its construction or operation.

SAW YOUR WOOD, CUT your fodder, grind your corn, pump your water, run your separator or your washing machine, and do it better than you can do it any other way.

IT IS SO SIMPLE THAT A boy can run it. Either gasoline or kerosene can be used, and it starts on the magneto and does not stop until you want it to.

IT HAS NO BATTERIES TO fuss with or get run down or out of order.

THE "ALPHA" WORKS well and wears well. It is made from the very best material and its workmanship and design are high-grade in every particular.

ALL AN "ALPHA" NEEDS is to give it a supply of gasoline or kerosene, oil it up and give it a pull, and away it goes and will run as long as you want it to.

JUST THINK OF THE WORK an "Alpha" will do for you!

AN "ALPHA" WOULD BE A big labor-saver on your farm, and a money-maker, too.

Eleven sizes, 2 to 25 horse-power. Each furnished in stationary, semi-portable, or portable style, and with either hopper or tank cooled cylinder. Send for catalogue.

DE LAVAL DAIRY SUPPLY CO., Ltd.

Largest Manufacturers of Dairy Supplies in Canada. Sole distributors in Canada of the famous De Laval Cream Separators, Manufacturers of Ideal Green Feed Silos. Catalogues of any of our lines mailed upon request.

MONTREAL PETERBORO WINNIPEG VANCOUVER

"PAGE FENCES WEAR BEST"

Always Worth More

You get PAGE FENCE at the lowest price for which high-grade fence can be sold. Because you deal DIRECT with PAGE. You cut out the middlemen's profits—and get the benefit of highest quality at lowest cost.

MADE IN CANADA

IF PAGE FENCE were sold like "ordinary" fence, we'd have to charge you more. And even then it would still be worth a great deal more.

Because PAGE FENCE outwears any "ordinary" fence. Many miles of PAGE FENCE have been up for 20 years. Much of it still looks good for 20 years more.

| No of bars. | Height, inches. | HEAVY FENCE | Price in Old Ontario |
|-------------|-----------------|-----------------------|----------------------|
| 6 | 22 | 4 1/2, 5, 6, 8, 8 1/2 | \$9.75 |
| 6 | 27 | 4 1/2, 5, 6, 8, 8 1/2 | \$11.25 |
| 7 | 27 | 4 1/2, 5, 6, 8, 8 1/2 | \$12.75 |
| 8 | 27 | 4 1/2, 5, 6, 8, 8 1/2 | \$14.25 |
| 8 | 42 | 4 1/2, 5, 6, 8, 8 1/2 | \$18.00 |
| 8 | 42 | 4 1/2, 5, 6, 8, 8 1/2 | \$18.00 |
| 8 | 47 | 4 1/2, 5, 6, 8, 8 1/2 | \$19.50 |
| 8 | 47 | 4 1/2, 5, 6, 8, 8 1/2 | \$19.50 |
| 9 | 42 | 4 1/2, 5, 6, 8, 8 1/2 | \$21.00 |
| 9 | 47 | 4 1/2, 5, 6, 8, 8 1/2 | \$22.50 |
| 9 | 47 | 4 1/2, 5, 6, 8, 8 1/2 | \$22.50 |
| 9 | 52 | 4 1/2, 5, 6, 8, 8 1/2 | \$24.00 |
| 10 | 42 | 4 1/2, 5, 6, 8, 8 1/2 | \$25.50 |
| 10 | 47 | 4 1/2, 5, 6, 8, 8 1/2 | \$27.00 |
| 11 | 52 | 4 1/2, 5, 6, 8, 8 1/2 | \$28.50 |
| 11 | 55 | 4 1/2, 5, 6, 8, 8 1/2 | \$30.00 |

| No. 9 top and bottom, Balance No. 13, Upright 8 inches apart. | SPECIAL FENCE. | Price |
|---|-------------------------|--------|
| 16-bar, 48-inch | 16-ft. Gate | \$4.00 |
| 20-bar, 48-inch | 16-ft. Gate | \$4.50 |
| | Set tools | \$1.00 |
| 3-ft. Gate | 2-20 25 lbs. Brac. Wire | \$1.75 |
| 15-ft. Gate | 4-25 25 lbs. Staples | \$1.50 |

FREIGHT PAID ON ORDERS OF \$10.00 OR OVER.

When you buy PAGE FENCE you buy LIFETIME Service. You don't have to buy new fencing every few years. Yet PAGE FENCE costs but a trifle more than the "cheapest" kind of fence. And it outlasts such "cheap" fence two to one.

If you want Lifetimes Service—the best fence at the lowest price—and full PAGE-VALUE for your money—mail your next fence order to PAGE. Enclose cash, cheque, money or express order or bank draft. Get IMMEDIATE SHIPMENT of Canada's FIRST and FINEST FENCE—FREIGHT PAID on shipments of \$10 or over.

PAGE WIRE FENCE COMPANY, LIMITED (Dept. 12) 1137 King Street West, TORONTO 87 Church Street, WALKERVILLE

Write for FREE copy of big PAGE General Merchandise Catalogue.

HARDY ALFALFA SEED

Grimm Alfalfa Seed Grown in Alberta. The hardest known Alfalfa. Practically no danger of winter killing with this seed. Write for our book on Alfalfa and prices and sample.

SOUTHERN ALBERTA LAND CO., Ltd., SUFFIELD, ALBERTA
W. A. MCGREGOR, Superintendent of Farms

Progressive Jones says:

"Grow Bigger Crops During the War"

THIS is the Canadian farmer's golden harvest-time. With wheat selling over the dollar mark, and other grains and vegetables bringing war-time prices, farmers should do their utmost to grow as big crops as possible this year. This, friends, is the time of all times to enrich your soil with

Harab Fertilizers

DAVIES' Fertilizers

If you've been in the habit of using Davies' Fertilizers, keep on using them. They are excellent fertilizers. It's merely a matter of choice between Harab and Davies'. The Ontario Fertilizers Limited supply both.

It is the sure way to make your soil yield bumper crops and make more money for you. By using the proper fertilizers you can greatly increase your yield at no extra cost of labor or seed. Would it not pay you to grow the maximum from your soil?

If Harab Fertilizers were not exceptionally profitable to use, I don't think there would be such a great and growing demand for them, do you? But perhaps you would like to read the new fertilizer booklet that describes them fully. If so, just drop a card to The Ontario Fertilizers Limited, and say "Please send me your Harab Fertilizer booklet." They have promised me to send my friends this booklet promptly without charge.



*Plans for bumper crops,
Progressive Jones*

The Ontario Fertilizers Limited, West Toronto, Canada

Field Root and Vegetable Seed Situation

FOR three months after the outbreak of war much anxiety was felt throughout North America as to supplies of field, root and vegetable seeds that come principally from the warring countries of Europe. The field officers of the Seed Branch devoted much of this time to a study of the possibilities of creating a supply of Canadian-grown seeds for 1915 planting. It was advisable in the autumn to select and specially store any biennial roots to be transplanted this spring for seed production. Fortunately the European seed crop of 1913 was much above the average for practically all kinds. Owing to previous shortage in supplies most

their serious consideration. The soil and climatic conditions in different parts of Canada are equally favorable. If not superior, to those of Europe. The growing of these seeds in quantity for commerce has been limited in Canada by the higher price of labor and because few farmers had experience with biennial seed crops. A few dozen or a few hundred sound shapely roots set out this spring may give valuable experience which may be needed as well as some good seed. A bulletin on field root and vegetable seed production may be had on application to the Publications Branch, Ottawa. -- Seed Branch, Ottawa.

A Choice of Varieties Experimental Union Test

| EXPERIMENTS | VARIETIES | Compar. Value | Yield per acre (tons) |
|--|---|---------------|-----------------------|
| Mangel (8 tests) | Yellow Leviathan (Ferry) | 100 | 26.11 |
| | Ideal (Ontario Seed Co.) | 93 | 25.12 |
| | Sutton's Mammoth Long Red | 53 | 23.12 |
| Sugar Beets (6 tests) | Bruce's Giant White Feeding | 100 | 24.82 |
| | Bruce's Tankard Cream | 90 | 24.12 |
| Swede Turnips (3 tests) | American Purple Top | 100 | 19.29 |
| | Garion's Model | 77 | 17.57 |
| Fall Turnips (2 tests) | Sutton's Imperial Green Globe | 100 | 26.56 |
| Carrots (7 tests) | Top White | 92 | 26.56 |
| | Bruce's Mammoth Intermediate Smooth White | 100 | 18.72 |
| | Steel's Briggs Improved Short White | 90 | 18.72 |
| Fodder Corn (4 tests) | Late White Cap Yellow Dent | 100 | 14.17 |
| | Wisconsin No. 7 | 98 | 13.72 |
| | Early White Cap Yellow Dent | 89 | 12.06 |
| Grass Peas and Vetches (2 tests) | Common Vetches | 100 | 7.70 |
| | Grass Peas | 57 | 6.78 |
| | Common Vetches | 64 | 5.12 |
| Hairy Vetches and Winter Rye (4 tests) | Common Winter Rye | 100 | 11.32 |
| | Hairy Vetches | 62 | 4.88 |
| Millet (3 tests) | Japanese Panicle | 100 | 7.70 |
| | O. A. G. No. 71 | 72 | 6.69 |
| | Hungarian | 72 | 6.69 |
| Rape, Kale and Cabbage (2 tests) | Sutton's Earliest Drumhead Cabbage | 100 | 10.62 |
| | Thousand Headed Kale | 71 | 10.62 |
| | Drarf Essex Rape | 71 | 10.62 |

Canadian seed houses had increased their orders by 50 per cent or more and had received full delivery. The excellent seed crop of 1914 was also harvested in spite of war conditions and, although deliveries have been delayed and transportation expensive, greater part, if not all, of their contract orders. Canadian seed houses of good financial standing are thus in a position to carry over sufficient supplies to meet a very considerable part of 1916 requirements.

Future Supply Considered
The quantity of field root and vegetable seeds that may be produced in Europe during the present year or the next is highly speculative. This work requires much skilled labor, of which there must be a marked shortage here as well as a few planters here and there are a few planters here and there and the harrow may be used to a large extent in thinning.

Canadian farmers and gardeners should give this unstable situation

Points on Mangel Seeding

TEN tests with mangels at Guelph show that the larger the seed was secured when the mangels were seeded four inches apart in the row; but this is not the best distance to which to single the mangels. Handling them would then be too expensive. Ten inches apart is better.

Experiments at the same institution indicate that two-thirds of a ton more per acre may be expected from land as compared with ridge cultivation. Home-grown seed is the best seed. It is also the cheapest as a supply of seed for home use can be produced very cheaply.

Do not be too economical of the seed. With heavy seeding you are sure of a full stand, flies cannot play havoc with it as in the case where there are a few plants here and there and the harrow may be used to a large extent in thinning.

Items of Interest

ABRAHAM Scheiner, a butter dealer in Montreal, appeared in court recently to answer a charge of selling one pound blocks of butter which were under weight, and was fined \$50, or two months in jail. The information was laid by inspector Eouchar, of the Dairy and Cold Storage Commissioner's Staff. This is the first conviction for this offence under the Dairy Industry Act, 1914.

By way of supplementing the patriotic and production movement, the Ontario Department of Agriculture has issued bulletin 228, "Farm Crops, prepared by Fred A. Zavits. The reading of this bulletin will assist in material improvement in quality as well as quantity of farm products in Ontario. It may be had on application to the Department of Agriculture, Toronto.

Sore Sho

THIS sore should be horse world is a majority of farmers not been worked during and their shoulders are soft. They sweat sweat become mixed the shoulders; the of this mixture, irritation result is sore and shoulders, we estimate with sore shoulders, swelling, is worth 25 cent feeding time than suffering such discomfort. We at one time try this difficulty by was water twice a day salt and water. It helped cure. We stumbled or inadvertently. One stepped the horses a couple of spring work began ed even sorer shoulders all but there were no sore all. The cause of sore removed—the mixed that accumulates under still bath the abdominal caution, but the m trouble is removed.

I take second place my condemnation of clipping horses in the h, however, as a merc before starting the spro horses work better and

Concrete

Farm Side

Mrs. Angus Fleming,
I WOULD like to see Dairy roads about we have made in spring that has given satisfaction this last m have laid a concrete house to the barn. Our barnyard has a most other barnyards in the spring of the year, with mud and so could not come from without leaving track

The Gibraltar of the Canadian Farmstead

—enduring for all time, guarding the feeding profits of the Canadian farmer through storms, fire, heat and cold—impregnable, imperishable. Such is the Natco Everlasting Silo. It is built of vitrified hollow clay tile which are impervious to air, moisture and frost, and reinforced by bars of steel laid in the mortar. Once up always up. No expenses, no repairs, no maintenance or resurfacing on base. No adjusting. Made in Canada for Canada. The silo is the most important of all business buildings on the farm, and subject to more strain. Build carefully. Build for permanence—its economy. Erect a

Natco Everlasting Silo

"The Silo That Lasts For Generations"

This silo costs the only cost and it builds up feeding profits to the highest point. It preserves summer gains for winter and summer feeding, and does away with great portions. It preserves silage from rotting, and all sorts, through forest weathers and storm seasons. No drying season. No winter loss. No mould. No rot. No waste. No shrinkage. No shivering—when a taller silo with smaller diameter can store more today for a list of silo weights in your province and for our valuable silo book. Ask for catalog #

National Fire Proofing Company of Canada, Ltd., Toronto, Ont.



"Made in Canada"

Construction
Forms of old timber, or concrete foundations for a similar form might be

Sore Shoulders and their Prevention

JAS. ARMSTRONG, WELLINGTON CO., ONT.

THE sore shoulder season in the horse world is approaching. The majority of farm horses have not been worked during the winter, and their shoulders are supposed to be soft. They sweat easily; dust and sweat become mixed in the hair over the shoulders; the collar rubs over this mixture, irritation is caused; the result is sore and sometimes raw shoulders, we estimate that a horse with sore shoulders, no matter how willing, is worth 25 per cent. less at seedling time than the horse not suffering such discomfort.

We at one time tried to overcome this difficulty by washing with cold water twice a day. Then we tried salt and water. It helped, but did not cure. We stumbled on the right cure inadvertently. One spring we clipped the horses a couple of weeks before spring work began. We expected even sorer shoulders than usual, but there were no sore shoulders at all. The cause of sore shoulders was removed—the mixed dust and sweat that accumulates under the collar. We still bathe the shoulders as a precaution, but the main source of trouble is removed.

I take second place to no man in my condemnation of the practice of clipping horses in the fall. I regard it, however, as a merciful thing to do before starting the spring work. The horses work better and are more com-

fortable. I would not, however, clip their legs from the knee or the hock down. The lower limbs need more protection from spring mud. Also it is necessary to be ready to rug the horses when left standing, even if only for a few minutes.

Canadian Horses for Military Purposes

(Continued from page 8)

with a buyer of the British army, who had been paying \$185 each for army remounts, but who was going to withdraw from Canada the next week. "He explained to me," said Mr. Millan, "that the Dominion Government required horses for their own military purposes in Canada," and pointed out that the price of horses would naturally be increased by competition. Mr. Oliver, of Edmonton, Alta., asked why the farmers had been singled out for special restrictive legislation. Why not to nickle, which is just as much a necessity of war as horses and very much more exclusively a product of war than horses.

No definite conclusions were arrived at as a result of the debate, the government re-affirming their interest in saving the farmer as good a market as possible and adhering to the previous declaration that the reasons leading to the withdrawal of British and French army horse buyers were of a confidential character that could not be disclosed.

Concrete Work on the Farm

Farm Sidewalks

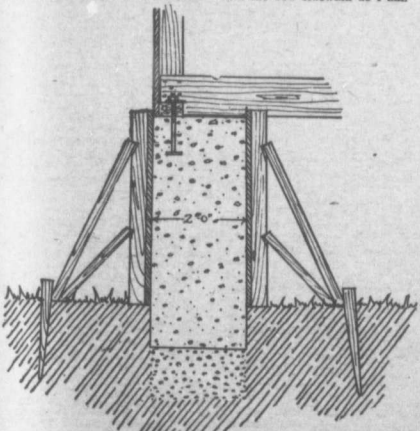
Mr. Angus Fleming, Elgin Co., Ont.

I WOULD like to tell Farm and Dairy readers about a change that we have made in our yard this spring that has given me no end of satisfaction this last month or so. We have laid a concrete walk from the house to the barn.

Our barnyard has always been like most other barnyards in Elgin county in the spring of the year, that is, running with mud and so dirty that one could not come from it to the house without leaving tracks behind them

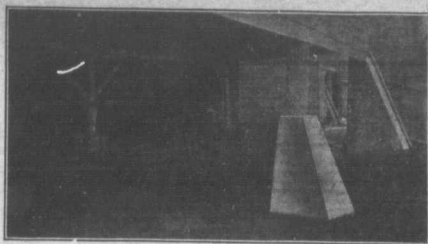
on the floors. Little as I like to do it, I have always had to insist that the men and boys live in the kitchens during the muddy months of the year.

Now this is changed. Last fall the men made concrete slabs two feet wide, four feet long, and four inches thick. The concrete was mixed with one part of cement, two parts of sharp sand, and four parts of gravel. First thing this spring these slabs were laid in the yard between the house and the barn, and the labor of keeping my house clean has decreased proportionately. The men are just as delighted with the new sidewalk as I am.



Construction of Forms for Laying Concrete Foundations

Forms of old lumber, constructed as in this diagram, may be used in making concrete foundations for buildings that are being constructed without basements. A similar form might be used in substituting concrete for rotting posts as in the illustration above.



A Practical Method for Strengthening Foundation Posts

Many otherwise good barns can hardly be considered safe because the wooden posts on which they rest have started to decay at the base. Why not substitute concrete as in the illustration?

Concrete Work is Easy

By Frederick O. Doan

FOR the best part of a score of years the best of the fertilizer made on our farm was allowed to seep away through the cracks in the plank floor of the stable and was lost so far as crop production was concerned. The loss of fertilizer was no mean item. The floors had to be replaced every few years. We had thought of cement, but it was not convenient to bring masons from town, and it never occurred to us that without experience we could lay cement floors ourselves. The time came when our plank floors had to be replaced again. Lumber was considerably higher than it had been on previous occasions. With many doubts and fears we decided to try our hand at concrete work.

The cement floor that we laid has now been down seven years. It has given perfect satisfaction and is as good to-day as the day it was laid. Anyone who can lay plank can also

do concrete work. First we graded the floor, digging out the gutters and elevating the passageway between the cattle as we had planned. Over the cement bottom we spread two inches of sharp gravel and tamped it down thoroughly. Over this again we spread three and one-half inches of concrete mixed in the proportion of one part cement to eight parts of gravel. The method that we followed was to lay a piece of studding on edge three inches from the wall. The studding was four inches wide. We then filled in the three and one-half inches of concrete, and immediately finished off the top with a half-inch of sand and cement mixed in the proportion of one to four. When the first three-foot stretch was done we moved the scantling out, and so continued across the stable. The gutters were easily handled. The cement was laid in the bottom first, and then the sides built in against temporary moulds. Our conclusion is that no one need hesitate over concrete work because of lack of experience.

FOR SALE

Five head of excellent Ayrshires (Red), a mature cow, has milked over 60 lbs. and is a beauty, a 3-yr-old heifer, both to freshen before May 1st, bred to an imported bull. Also 2 excellent yearling heifers and the imported bull. Bull is 3 yrs. old, quiet, an excellent handler and sure stock getter. Will price very reasonable as I am anxious to sell.

J. T. WARNOCK - MAYNOOTH, ONT.

Burnside Ayrshires

Winners in the show ring and dairy tests. Animals of both sexes. Imported or Canadian bred, for sale. Long Distance Phone in home. R. E. NESS, HOWICK, OUE.

MISCELLANEOUS

LARGE Improved Yorkshire

Borns and Sows, from 8 weeks to 8 months old, sows in pig. Prices reasonable. Write R. J. DAVIS - WOODSTOCK, ONT. L. D. PHONE

4 HOLSTEIN BULLS

From 3 weeks to 11 mos. old. One, a son of Pontiac Korudko. Dams, all but one have A. H. O. records, one 19 1/2 lbs. at 2 yrs. 2 mos. others good. Priced right for immediate sale. Write or come and see. J. H. TAYLOR & SON BRANT COUNTY - SCOTLAND, ONT.

CORN THAT WILL GROW

Money back not satisfied. Send for Price List. J. O. DURE, RUTHVEN, Ont.

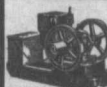
GUERNSEY BULLS

A few choice young animals for sale. Buff Orpington Eggs for hatching. Write for prices. R. E. BLACK Highland View Dairy, Amherst, N. S.

KORNGOLD IMPROVED ENGLISH YORKSHIRES

Young Bows to farrow in April and May. Young Bows and Bows, three months old. Will book orders for younger stock. F. J. McALPIN, Korngold Stock Farm, GANANOQUE, ONT.

Run on Coal Oil—6c for 10 Hours




ELLS ENGINES

Ellis Engines develop more power on cheap lamp oil than other engines do on high-priced gasoline. Will also operate successfully on distillate, kerosene, alcohol or gasoline. Strongest, simplest, most portable engine made; only three working parts. No cranking, no excessive weight, no carbonizing, no vibration, easy to operate.

Have patent throttle, giving three engines in one; have feed roller; automobile type mounting; ball-bearing governor adjustable to wide ranging and other exclusive features. Every machine sent out on the approved plan with freight and duty paid. 15-year guarantee. Write for this catalog, "Engine Facts," showing New Models with special prices. Shipment made from Windsor, Ont. **ELLS ENGINE CO., 207 E. Bloor St. W., Toronto, Ont.** Vertical Engines

MARKET REVIEW AND FORECAST

TORONTO, April 13.—The people of Canada have been... property, that they refuse to allow their business spirit to remain long on a shadow...

ers were looking for higher prices in Montreal... receipts at Montreal... 3,077 packages for the same week last year...

THE WM. SLIGHT SALE The following are some of the best prices realized at the sale of Wm. Slight, Beaton, Ont.: Dalesy Abbecker Duchess, 510; Helbon Schilling...

Ontario... Three-Year-Old Class... Bonnie Red, 2535; 10,883 lbs. milk, 44 lbs. fat, 4.15 per cent fat, 3.66 per cent butter...

Farm and Dairy... Dear Sirs—Last year I received from you a copy of the Dairy Review which I have only got to thank you for.

Foreign markets seem to have purchased ahead of their requirements and demand for wheat is now quieter. It is noticeable, however, that on every continent...

LIVE STOCK Heavy weights seem to be in disfavour here and the market is taken readily. However, all here found a market, and stock to carry over.

AVYRSHIRES IN RECORD OF PERFORMANCE TEST The following cows were qualified during February and March, 1915: White Rose, 154; 5.79 per cent fat, 365 days...

Two-Year-Old Class Princess of the Beaver, 2889; 12.50 lbs. milk, 5.16 per cent fat, 3.89 per cent butter, 43 days...

OUR FARMER Correspondence PRINCE EDWARD PRINCE OF KENSINGTON, April 13.—A storm on Monday covered with snow...

COARSE GRAINS Oats are firm. Markets in other lines of coarse grains have been to lower levels. This may be due to the season of the year...

FEEDS The market trends in psychology. Bran is now quoted at 35¢ and 35¢. Feed is quoted at 33¢ to 34¢. Feed is quoted at 33¢ to 34¢.

SEEDS Prices on red clover and timothy have declined 6¢ to 8¢. Quotations as follows: Red clover, No. 1, \$3.00 to \$3.25; No. 2, \$2.75 to \$3.00...

ONTARIO NORTHWICH, April 13.—Cold and foggy weather is causing fall wheat to be in poor condition. The market is now paying for milk at 11¢ per gallon...

WATERLOO, March 31.—But slowly so far. We are getting weather this which were last winter getting in late stage, and almost wintering through the season...

POTATOES AND BEANS A contemporary remarks that it is a fine thing that potatoes are so plentiful in this section, affording some relief in a very one from the consumers viewpoint...

EGGS AND POULTRY The consumption of eggs continues to increase to a very satisfactory degree, and the market holds firm. The prices throughout the country run from 18¢ to 19¢...

THE BREEDING OF A YOUNG SIAM This young bull is bred by Postle Norman, a brother to the dam of King of the Crown, and is a very fine specimen...

ANOTHER 30-POUND COW AT AVONDALE This is the first of a Dairy-1 at Avondale of interest some of your readers to know that we have just had another daughter of the Princess of the Beaver...

From Manitoba... Dear Sirs—The West Broom, Thurlow, and I have had the pleasure to deal with you. The bull is as representative as any I have ever seen.

Prices on red clover and timothy have declined 6¢ to 8¢. Quotations as follows: Red clover, No. 1, \$3.00 to \$3.25; No. 2, \$2.75 to \$3.00...

These fine six month old calves were bred by Queen. They are a product of the best of the best, high production rather than breeding and a light run. Prices were set slightly on the final market of the week but on the whole stayed higher than on the final market of the week previous...

and are owned at Macdonald College, St. James, Ontario. The phenotypical records are aimed at as a ideal. N. Dymond, Brantford; Princess of Tangleyville, 2nd, 3758; 10,990 lbs. milk, 4.61 per cent fat, 4.23 per cent fat, 365 days...

Princess of the Beaver, 2889; 12.50 lbs. milk, 5.16 per cent fat, 3.89 per cent butter, 43 days. W. C. Tully, Avonham, Ont. Scotch Thistle, 4172; 10.46 lbs. milk, 4.01 lbs. fat, 3.88 per cent fat, 365 days...

Dear Sirs—The West Broom, Thurlow, and I have had the pleasure to deal with you. The bull is as representative as any I have ever seen.

Shipping steers, \$7.40 to \$7.75; handy choice steers, \$7.15 to \$7.40; cow to med., \$6 to \$7.00; calves, \$6.75 to \$7.00; good, \$4.75 to \$5.25; 37 calves, \$5.75 to \$6.75; cowboys and cutters, \$4.75 to \$4.75.

and are owned at Macdonald College, St. James, Ontario. The phenotypical records are aimed at as a ideal. N. Dymond, Brantford; Princess of Tangleyville, 2nd, 3758; 10,990 lbs. milk, 4.61 per cent fat, 4.23 per cent fat, 365 days...

Princess of the Beaver, 2889; 12.50 lbs. milk, 5.16 per cent fat, 3.89 per cent butter, 43 days. W. C. Tully, Avonham, Ont. Scotch Thistle, 4172; 10.46 lbs. milk, 4.01 lbs. fat, 3.88 per cent fat, 365 days...

Dear Sirs—The West Broom, Thurlow, and I have had the pleasure to deal with you. The bull is as representative as any I have ever seen.

Dear Sirs—The West Broom, Thurlow, and I have had the pleasure to deal with you. The bull is as representative as any I have ever seen.

Wm. Slight, Beaton, Ont.: Dalesy Abbecker Duchess, 510; Helbon Schilling, 510; Pansy Abbecker Pouch, 510; James, 510; King, 510; 365 lbs. fat, 4.78 per cent fat, 3.34 days. Tangleyville Pouch, 5632; 9,054 lbs. milk, 39 lbs. fat, 4.53 per cent fat, 346 days...

Princess of the Beaver, 2889; 12.50 lbs. milk, 5.16 per cent fat, 3.89 per cent butter, 43 days. W. C. Tully, Avonham, Ont. Scotch Thistle, 4172; 10.46 lbs. milk, 4.01 lbs. fat, 3.88 per cent fat, 365 days...

Dear Sirs—The West Broom, Thurlow, and I have had the pleasure to deal with you. The bull is as representative as any I have ever seen.

Dear Sirs—The West Broom, Thurlow, and I have had the pleasure to deal with you. The bull is as representative as any I have ever seen.

Dear Sirs—The West Broom, Thurlow, and I have had the pleasure to deal with you. The bull is as representative as any I have ever seen.

Wm. Slight, Beaton, Ont.: Dalesy Abbecker Duchess, 510; Helbon Schilling, 510; Pansy Abbecker Pouch, 510; James, 510; King, 510; 365 lbs. fat, 4.78 per cent fat, 3.34 days. Tangleyville Pouch, 5632; 9,054 lbs. milk, 39 lbs. fat, 4.53 per cent fat, 346 days...

Princess of the Beaver, 2889; 12.50 lbs. milk, 5.16 per cent fat, 3.89 per cent butter, 43 days. W. C. Tully, Avonham, Ont. Scotch Thistle, 4172; 10.46 lbs. milk, 4.01 lbs. fat, 3.88 per cent fat, 365 days...

Dear Sirs—The West Broom, Thurlow, and I have had the pleasure to deal with you. The bull is as representative as any I have ever seen.

Dear Sirs—The West Broom, Thurlow, and I have had the pleasure to deal with you. The bull is as representative as any I have ever seen.

Dear Sirs—The West Broom, Thurlow, and I have had the pleasure to deal with you. The bull is as representative as any I have ever seen.

This is the Season

Guelph, Apr. 12, 1914.

Farm and Dairy, Peterboro, Ont.

Dear Sirs— I find an ad in your advertising columns a handy success. Last year I received more orders than I could fill, and this year I have also had more orders than I could supply. Up to date, I have sold 200 eggs, and as I have only one dozen, you will see that they have been tending to build up. Thanking you for your kindness, I am, yours truly,

(Signed) J. P. HALE.

Such are the results that our poultry advertisers are receiving through Farm and Dairy. Poultry keeping is throwing a goodly margin of profit. The incentives on our farms are not satisfied with a moderate flock. This spring there will be a demand for thousands of dozens of purchased eggs for hatching. If you are in the supply part of the industry, you will want to get a line to-behold. There is no reason why your returns should not be almost as good as those secured by Mr. Hales with his broody-lay Barred Rocks. Let us help you.

FARM AND DAIRY, PETERBORO, ONT.

Keep Your Farm Free of Disease

Disease must be prevented as well as cured. Zenoleum does both. Used according to directions it cures most animal diseases and destroys lice, mites, and maggots. It is a powerful germicide for disinfecting barns, pens, henhouses and stables. Used by 50 Canadian and United States Agricultural Colleges and by Experimental Farms. You will find Zenoleum reliable, safe; will not burn or poison; always the same and as sure as a shot every time. The greatest breeders and live stock authorities on the American continent are continual users of Zenoleum.



What Zenoleum Does It cures scours, calf cholera, cuts, galls, ring worm, stomach and intestinal wormicants, hogs and sheep and kills lice and fleas and cures ring diarrhoea, hen cholera, gapes, pip in poultry. The International Live Stock Exhibition at Chicago and the Canadian Live Stock Exhibition at Guelph, Ottawa and Toronto have used Zenoleum as the only disinfectant with this result: "No trace of disease." Stockmen and breeders pronounce it "absolutely reliable" and cheaper than home-made mixtures. Ask your dealer for order direct. It is good enough for 80 gallons of "dip," express prepaid for \$1.50. Shipped in a gallon can and barrel lots. Write for prices. LIVE STOCK LIFE INSURANCE POLICY FREE if you mention seeing our advertisement in this paper.

ZENNER DISINFECTANT CO. 318 Sandwich Street East - Windsor, Ont.

OUR FARMERS' CLUB

Correspondence Invited

PRINCE EDWARD ISLAND PRINCE CO. P. E. I.

KENSINGTON, April 5.—There was quite a storm Easter Sunday, the ground is covered with snow and ice, but for the last two weeks. The port market has been rather dull, but the highest price paid since early last fall. The stock was all wintered. Feed is not scarce, although high priced, and is not as high as usual, and are selling at 30¢. The egg circle—C. P. E. I.

KING'S CO. P. E. I.

MONTAIGU, April 5.—We had a big snowfall today. Wind out of the west. Nearly all the hauling is done and people are preparing their stock for the spring. Butter is scarce; fruit of the season is very dear. Butter, 50¢ to 50¢; oats, 60¢ to 60¢; bran, 11.50 a cwt.; corn meal, 12.50 a cwt.; oatmeal, 12.30 a cwt.; beef, 12.00 a cwt.; dressed, 10.75 a cwt. to be dressed; hax, 24 to 24 a ton.—C. P. E. I.

ONTARIO

OXFORD CO., ONT.

NORWICH, April 5.—The weather keeps cold and freezing, and last nights, which is causing a halt to look very brown. The weather is clearing, but the ground is now paying for milk by the straight, but the price is low. Cows, 1.25; pigs, 2.50; calves, 2.00; cotton seed meal, 1.25; eggs, 30¢ and butter, 30¢. Live pork, 6.00.—M. K.

WOODSTOCK, April 7.—The weather is ice but cold and it is poor sap weather.

Waterloo, March 30.—Sap is running but slowly so far. We have had very nice spring weather till the last few days, which were like winter. The roads are getting in fair shape for bugsies and wagons, and already motorists are venturing through the snow out into the country. Fall wheat came through the winter all right, but since the ground is

From Manitoba to Quebec

Suttons, Mar. 13, 1914. Arborg Bros., Schrippingville, Ont. Dear Sirs—The bull arrived at West Bros. Thursday night, in the morning and conditions were so pleasant to deal with men like you. The bull is as represented in every way. Respectfully,
W. J. BAILEY

OGDEN SWEE'S

Schrippingville, Mar. 15, 1915. Ferns and Dairy, Peterboro, Ont. Dear Sirs—We are enclosing a card which was just received from Mr. G. Sweet, of Quebec, whom we shipped a bull last week. This sale was the first through your paper, as also was the Manitoba and Michigan ones. Don't be in a hurry to get in the FARM AND DAIRY as a satisfactory advertiser of our organ.

Yours very truly,
WALTER BROS.

Such results as Arborg Bros. are securing are open to every breeder of purchased dairy stock in the Dominion. If you are an over-crowded farmer if you have some especially valuable pure-bred dairy animals for sale, get in touch with us to-behold. We shall be glad to lend you our assistance in arranging your advertisement or in any way that will make sales for you. Write us about what you have to sell.

have the present cold snap may work havoc with it. The horse market seems to be picking up a little bit. Hog prices are improving, being 14.50 a cwt. Eggs have taken a drop to 16¢ to 20¢.—C. H. B.

HURON CO., ONT.

CLINTON, April 12.—Our 1914 Annual Spring Fair in Huron county has come and gone. We had a large display of horses and cattle, the horses being particularly fine. The most interesting class was the competition for the best three yearlings put up and the winner of this year went to Tuckersmith. The judges were Light Horsemen, including, Exeter; heavy horses, J. McDermit, Lucknow, and John McLeary, Carleton Place; cattle, John Higgins, Clinton.

THORNHURST, ONT.

April 7.—The snow will soon be gone. Sap is running nicely; frosty nights and April days are needed for a good flow. A lot of stock and hogs were shipped from here last Tuesday. Hogs sold for \$2.20 a cwt. Butter is at 26¢, while eggs are only 18¢. On the Collingwood brand butter is from 20¢ to 22¢, while eggs are only 18¢. The ladies of Thornhurst are still knitting socks for the soldiers. The large number of articles, such as socks, shirts, mufflers of articles, which have been sent away.—C. P.

BRITISH COLUMBIA

NEW WESTMINSTER DIST., B.C.

ORILLIAC, March 3.—The weather is ideal. I went out of my barn by a defective lantern and was nearly hit by a car of this place. A fine team of horses and a quantity of hay, and a cow, are now consumed by the hungry flames. The loss is partially covered by insurance. The weather being very dry, it enabled a settler on the foothills to burn their brush to good advantage.—H. C.

A FOUR-YEAR-OLD RECORD

EDITOR Farm and Dairy:—An ad advised by preliminary reports that the record for fat production in the junior four-year class of the thirty-day division, by producing in thirty consecutive days the fat from six cows, has been broken. She freshened at the age of four years two months 15 days. Her sire is King Seta De Kol, bred by J. P. Hales, near his dam is Cassie Koungia Pieterte De Kol, 6154. She was bred by Mr. E. S. Hatch, Danbury, Connecticut; and she is now owned by Mr. E. C. Hill, Riverdale, New Jersey. She displaced Fairview Egg Apple De Kol, 16696, whose record for 30 days is 117.87 lbs. fat from 232.8 lbs. milk. Malcolm H. Gardner, Supt. A. B.

W. J. BAILEY'S HOLSTEINS

There is not a weak constitutioned, underbred cow in the herd of any of them are daughters of Gae Falorai Bull Terborbo the sire of Netherlands 30-day record for ten years with 29.56 lbs. butter. This record is at present held by Lorraine Colman, one of the above ten cows. She has produced her sisters for 10 years. One of our Falorai Gano made 19.91 lbs. in spite of the fact that she almost died at the time of calving. The next her milk sister, Lynwood Queen, are large strong heifers of much promise. The next, Daisy Pouch, did not freshen in time to have a chance at the sweepstakes this year. She is a long set cow with plenty of depth and capacity. She was the first of the 10 lbs. milkers. Her sisters and has averaged 90 lbs. a day for 30 days. After finishing a 75-lb. record last year she was landed in Ontario. From two o'clock Monday to six o'clock Tuesday she was on the scale, her temperature ranging around 100 degrees below but in the last immediately following she was the champion milk cow of the district and 2 1/2 per cent of butter fat. Helena of Nebel is also a fine milker and capacity, as well as a producer. She lost the championship at Ottawa. Daisy Pouch last year, and stood third in the test, giving 34 lbs. of milk, three pounds more than the champion at the show this winter. Heneveval Falorai and Ideal Dairy Falorai also stood second and third in the two-year-old class last January. The latter is a sister of Daisy Pouch. W. J. Bailey's calves, cows and heifers are a large, vigorous lot, and will make splendid sire and females for the best blood that has ever been put on the soil, both in private and public test.

HOLSTEINS

BULL CALVES

Fit for Service

AVONDALE FARM offers a number of young bulls from 10 months up to one year and six months, several others from 23 and 25 lbs. dams.

We have also 23 young ones from dams over 100 lbs., something extra good. All bred by our great son of KING OF THE POINTS. We want to clear them out of our place. Everything guaranteed just right.

A. C. HARDY - Proprietor BROCKVILLE, ONT.

REGISTERED HOLSTEINS

FOR SALE Seven Bulls from 10 to 14 months old, at bargain prices. Also four grand-daughters of Postice Kornlyke, 2 years old, due to freshen shortly, and this year's entire crop of Bull and Heifer Calves.

WM. HIGGINSON - INKERMAN, ONT.

Advertise

in these Reliable, Proven Publications. It'll pay you well.

BANOSTINE BELLE DE KOL

World's Champion Holstein Cow—2740 lbs. milk, 1 1/2 lbs. butter. A full detail on greater herd sire, WAJALE CRUIER DE KOL CHAMPION. We have a few of his choice ones from the Dutchland Colony at Alkmaar, Netherland Angles De Kol and Angie Mercede strains for sale. Will also sell 100 lbs. Golden Glow Early Enlarge Seed Cows.

J. M. VanPatter & Sons, Woodland Farm, R.R. 1, Dunboyne, Ont. (Ayrshire Station)

THE MAPLES HOLSTEIN HERD

All closely related to the R.O.P. 23-year-old champion, May now 19-year-old Calamity 22-16.74 lbs. milk and 946 lbs. butter—29.36 lbs. as a 4-yr.-old—3 bull calves—1 yr.-old sister to Dutchman and a closely related 20-cow Dutch bred for better breeding. They are all splendid chaps. Write or come and look them over.

WALBURN RIVERS R. R. 2, INGERSOLL, ONT.

HET LOO FARMS VAUDEVILLE, QUE.

HOLSTEINS

Let us quote you prices on Heifer Calves from 4 to 8 months old, also high bred good individual Bull Calves. Dams with records from 25 lbs. to 30 lbs. in 7 days. We sell at times and will price them low if taken. Write or come and see them.

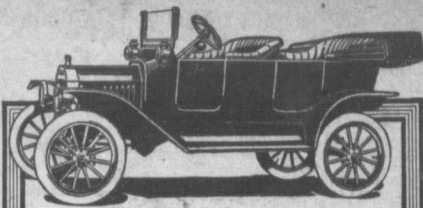
DR. L. de L. HARWOOD, Proprietor. GORDON H. MANNING, Mgr.

There is vast difference between keeping Holsteins and just keeping cows. Our Holstein Cow will do the Work of Two or three ordinary cows. You can save money, holding, risk and labor. Holstein Cows milk longer, more per year, and more per life than any other breed of cow.

W. A. CLAYTON, Sec'y-H.E. Association ST. GEORGE, ONT.

THE LYNDEN HERD

High Testing Holsteins. I am offering 15-yr.-old Cows with records as follows: 1st, a 1914-15, 22.43 lbs. 2-yr.-old, fresh and is a 26.56-lb. 3-yr.-old, 1 gr. 2nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 3rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 4th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 5th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 6th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 7th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 8th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 9th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 10th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 11th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 12th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 13th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 14th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 15th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 16th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 17th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 18th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 19th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 20th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 21st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 22nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 23rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 24th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 25th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 26th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 27th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 28th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 29th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 30th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 31st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 32nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 33rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 34th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 35th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 36th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 37th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 38th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 39th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 40th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 41st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 42nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 43rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 44th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 45th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 46th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 47th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 48th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 49th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 50th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 51st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 52nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 53rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 54th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 55th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 56th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 57th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 58th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 59th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 60th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 61st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 62nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 63rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 64th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 65th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 66th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 67th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 68th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 69th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 70th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 71st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 72nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 73rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 74th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 75th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 76th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 77th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 78th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 79th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 80th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 81st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 82nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 83rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 84th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 85th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 86th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 87th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 88th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 89th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 90th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 91st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 92nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 93rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 94th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 95th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 96th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 97th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 98th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 99th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 100th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 101st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 102nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 103rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 104th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 105th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 106th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 107th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 108th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 109th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 110th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 111th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 112th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 113th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 114th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 115th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 116th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 117th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 118th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 119th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 120th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 121st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 122nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 123rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 124th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 125th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 126th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 127th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 128th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 129th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 130th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 131st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 132nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 133rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 134th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 135th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 136th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 137th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 138th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 139th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 140th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 141st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 142nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 143rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 144th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 145th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 146th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 147th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 148th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 149th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 150th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 151st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 152nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 153rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 154th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 155th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 156th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 157th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 158th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 159th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 160th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 161st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 162nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 163rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 164th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 165th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 166th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 167th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 168th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 169th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 170th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 171st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 172nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 173rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 174th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 175th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 176th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 177th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 178th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 179th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 180th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 181st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 182nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 183rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 184th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 185th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 186th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 187th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 188th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 189th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 190th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 191st, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 192nd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 193rd, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 194th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 195th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 196th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 197th, a 1914-15, 22.43 lbs. 2-yr.-old, 1 gr. 198th, a 19



"MADE IN CANADA"

Ford Touring Car Price \$590

No advance in the price of the "Made in Canada" Ford will be made because of the additional 7½% War Tariff. We as loyal Canadians will gladly absorb whatever increased duty we are forced to pay on such raw materials as cannot be obtained at home. The Ford is manufactured in Canada—not assembled in Canada.

The Ford Runabout is \$540; the Town car \$840;—all fully equipped, f. o. b. Ford, Ont. Ford buyers 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 horses, 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.
Ottawa, Ont.

London, Ont.
Quebec, P. Q.

Montreal, Que.
St. John, N. B.

These machines are built at Hamilton, Ont.



More than Three Hundred Given Away Last Year



Farm and Dairy's Sensational Pig Offer

Arrangements Made for Several Hundred This Spring

A POPULAR PREMIUM is a pure bred pig. Since the first time that we announced them as premiums we have had large demands for them. At times these demands were so great that we had difficulty in filling them. In the past three or four years we have given away nearly a thousand pigs of pure bred stock.

The pigs given away by Farm and Dairy are secured from well known breeders of pure bred stock. They are all good types in the particular breed that you desire (Yorkshire, Berkshire, Tamworth, Chester White, Poland China). You are at liberty to choose the breed and the sex of the pig that you win.

Circulation Manager,
Farm and Dairy, Peterboro

Dear Sir,—I want one of the pure bred pigs you are giving away. Please send me supplies and I will win one.

Name

Address



Pigs are all Pure-bred, and are of the very finest types

Hundreds of boys and girls have won pigs by securing subscriptions to Farm and Dairy. If they can do so can you. We supply you with subscription blanks and sample copies. All you have to do is to call on a few of your neighbors and explain to them the reasons that your father likes Farm and Dairy, secure from them a dollar each for their subscriptions, and forward these to

CIRCULATION MANAGER
FARM AND DAIRY
PETERBORO, ONT.

A PAYING PREMIUM is a pure bred pig. You receive it at a cost, which is very little, just a little of your spare time. It grows into a full grown pig at very little expense, and is then worth considerable money either to sell or to use for breeding purposes. In most cases we find our pigs used, with paying results, for the latter purpose.

The centre illustration shows a sow that was given to one of our boys some time ago. You see this boy has now quite a small fortune in pork. We believe this is the second litter that this sow has raised, and the boy is now getting to be quite an independent stock raiser. Many other boys might do as well as this boy were they to try.

In order to secure one of these pure bred pigs free, it is necessary that you send us nine new yearly subscriptions to Farm and Dairy, together with the payment of seven and nine dollars. On receiving the subscriptions arrangements are made to have the pig shipped direct to you from the breeder.

