

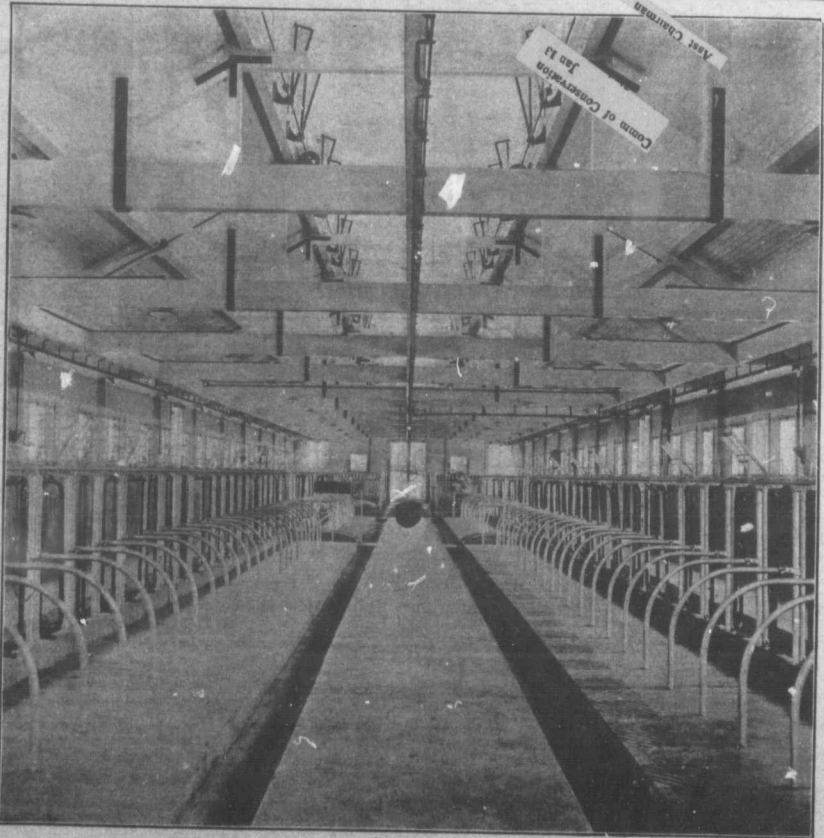
FARM AND DAIRY & RURAL HOME



DEVOTED TO
BETTER FARMING
AND CANADIAN
COUNTRY LIFE



Toronto, Ont. March 29, 1917



DAIRY STABLE CONSTRUCTION AT ITS BEST

—Colony Farm, Coquitlam, B.C.

ISSUED EACH WEEK.

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ONE DOLLAR A YEAR.

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FARM AND DAIRY & RURAL HOME

We Welcome Practical Progressing Ideals

The Recognized Exponent of Dairying in Canada

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

VOL. XXXVI

TORONTO, ONT., MARCH 29, 1917

No. 13

The Spring Sugar Harvest

An Optimist Visits His Friends' Sugar Bush—By F. M. Christianson

THERE are several red letter days on the farm each year. One is when we thresh; another the day we butcher, but the day of all days, to the farm boy and girl, is the day we "sugar-off." On these days the youngsters all want to stay at home from school, but especially on the latter occasion. The reason is no doubt that everybody has a sweet tooth and maple-sugar, like honey, is a sweet that never cloy and never makes one ill. Our physical economy is so constructed that we need sugar, and it is but another token of the wisdom of our Heavenly Father that sugar harvest comes just after the winter, when we have been eating fats (carbohydrates) and the system is growing tired of it, and so He provides us carbon—in a new form and of such a nature that we relish it.

The sap run comes with the first warm days of spring, because there is more sap in a tree in winter than in summer. Through all the long summer the sugar-making tree was accumulating sap, and during the winter, while the tree is apparently idle, it has nevertheless been very busy changing the sap through its cells and pores into sugar. The sap, with its large sugar-content, has greater density than and causes the air found in the interstices and cellular structures of the tree to expand under the warm sun's rays, and it is this pressure that gives sap a tendency to flow on the first warm days of spring.

Why Sap is Sweet.

Sap is a clear, colorless, slightly sweet liquid made up of water, sugar and mineral matter such as iron, potash, magnesia and lime, and the delightful flavor of maple-sugar is due to a combination of these various salts during the boiling process. As soon as we were in the bush we had a drink of sap from the spile. There is life in a spile! It seems to contain all the invigorating properties attributed to winter.

The flow of sap begins about the middle of March, and continues till the middle of April. It may even start in February, and has been as late as the first of April. The sap is not found inside of the tree, but in the sapwood, which is about two or three inches in from the outer wood. So it is a mistake to bore great deep holes in the trees to receive the spiles, for they do not readily heal over, and, besides, they yield the dark sap. All that is required is a hole having half an inch diameter, about one and a half to two inches deep, pointing the sugar slightly upward during the boring. The hole should be on the south side of the tree for the sun shines there first. East is next best. The earliest sap runs are sweetest.

Originally the boiling of sap was done in huge cauldrons, suspended over an open fire, out of doors, but my friends have just installed a modern, up-to-date equipment with evaporator and all. Thursday and Friday was ideal sap weather, and

it was to see the chrisening of the plant that I was invited over. It is a vast improvement over the old method. The evaporation consists of several open pans, three feet wide and from 15 to 18 feet long, with partitions from side to side placed at intervals and opening one into the other at alternate ends to give an increased evaporating surface. The pans have often corrugated bottoms, and this greatly increases the evaporating surface of the pans. The collected sap is poured into a large tank at one end of the evaporator, and runs its course around the partitions, and when it gets into the last compartment it is of the required thickness.

Automatic Regulation of Evaporation.

The evaporation is supplied with an automatic flow regulator, so that the flow of sap increases or diminishes according to the degree of heat under the pans. Quick evaporation of the sap as soon as gathered means little decomposition and the high-

est flavor. The best flavored syrup is made when the sap is not deeper than one and a half inches in the evaporating pans.

There is no flow of sap during the night, because the sun is absent, but the flow starts again on warm days, and will continue as long as heat and cold alternate. The sap runs best when it is raining and snowing, and that makes the work often hard and disagreeable, but every one is always happy and cheerful in the sugar bush. I think it must be working with nice things, and that affects the whole outlook and results in good cheer.

This evaporator is nicely located near the centre of the bush in a neat shanty with plenty of dry wood stored close by. The men were gathering the sap into huge hogheads placed on bob-sleighs and drawn by teams of horses through the bush in the shanty; some were cutting wood to feed the fire; others watched the white liquid in the evaporator take on a yellow tint as it gave up its water-content in its progress through the pans, and still others of the visitors were eating syrup.

Spring Sounds.

The woods were resonant with life; birds fitted through the trees; the whack of the axes and the tink tank of the sap into the buckets were delightful spring sounds in the ears of the laborers. There never was a syrup making without its "sugaring-off." Heat has varying effects on sugar and the secret of success lies in knowing just when to take it off the fire. Syrup will "thread" at 218 degs. F. If it is then poured into a pan full of clean, pure snow it immediately turns into a waxy mass, and each bit is a delicious caramel-like piece of confectionery.

The syrup was continued boiling and tested again for the "blow" state, 230 degs. F. A clean fresh-willow twig was bent into a circle to make the test, and dipped into the boiling syrup. On its removal a film formed in the loop, and this was the sign that it was ready to "sugar." The syrup was at once removed from the fire and stirred constantly for some time till it began to get granular, when it was poured into forms. These cakes thus formed are the maple sugar cakes offered for sale in the best candy stores. The only tree that yields sugar sap of any value is the hard, rock or sugar maple. These names all indicate the same tree. The hard maple is the most valuable tree in North America. Its hard wood is used for railway cars, shipbuilding, and in many kinds of construction work requiring a fine strong wood. The bird's-eye and curly woods so much prized in cabinet-making come from this tree. Much wood is used as fuel and gives an ash rich in potash. But we love the tree most for its maple sugar. A good healthy tree will yield from

(Concluded on page 15.)



\$20,000 From a Brood Mare

AT a county fair one sometimes runs onto startling object lessons, which usually carry their inspiration. In one of the stalls at the La Salle County Fair in Illinois stood an American-bred Percheron mare. Above her stall a banner was hung, with this inscription:

"Beauty of Highland 18611. A Percheron mare 21 years old on April 12, 1914. The produce of this mare and her daughters sold by us amount to \$13,697.50. The descendants now owned by us, conservatively valued amount to \$6,500. Total \$20,197.50. She has had fifteen foals; three have died. Will a good Percheron mare pay? If properly handled, yes.—W. E. Prichard, & Sons."

We understand that this firm has in its barns two aged Percheron mares which have produced some \$30,000 worth of stock. There is a story here worth telling, and our readers will be privileged to learn it.—Breeder's Gazette.

Advertising Dairy Products

ADVERTISING is a wonderful power. The dairymen of the United States propose to get it to work for their benefit; and, incidentally, the benefit of the consuming public of that country. Our brethren across the line are not slow to observe "at through advertising people can be induced to eat the most indigestible breakfast foods and purchase most expensive and unwholesome lines of canned goods, in quantities sufficient to make millionaires of the manufacturers. If people can be induced to spend their money so unwisely, might they not also be induced in the same way to buy more largely of the best and most efficient of all foods, dairy products. Dairy farmers thought so. The leaders of their organizations were sure of it. Accordingly, some months ago the National Dairy Council of the United States started in to raise a fund of at least \$750,000, and to expend practically \$20,000 a month for 96 months in advertising, general publicity and organization work. The money is being contributed by 280,000 dairy farmers in the United States. Their slogans are: "Drink and use more Milk." "Eat and cook with more Butter." "Cheese is the Staff of life of many nations; why not in U.S.A.?" "Ice Cream is not alone an Excellent Dessert, but a Real Food."

If he believes this statement at all, will say, "Look at the feed and care they get." To him I would say they have had no better care nor feed than any herd should get, be they grade or pure bred, to make them a paying proposition. I may also add this herd had been in the care of hired help at least three-quarters of the time.

I have neighbors who have been in the same business, and I believe they can make an equally good showing, and there are numbers throughout Ontario who can do the same. I am, therefore, convinced that there is no better paying invest-

Dirty Oats To Be Used For Seed

T. G. RAYNOR, Seed Branch, Ottawa.

THE farm presents many perplexing problems. In a season like last year, when the supply of good seed is limited in certain areas, the farmers of those localities desire all sorts of plans to meet their wants. Often some man with capital steps in and undertakes to finance the situation, but he is not doing it for the love of the farmer or for the cause of agriculture as a rule. He has some prospect of gain in view.

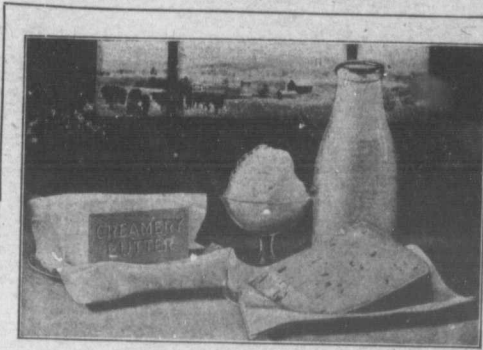
Notwithstanding the fact that the Dominion Government has made considerable provision in collecting together No. 1 Canadian Western oats, which will germinate 95 per cent. and more, and are offering them at a reasonable figure at Fort William, viz. 80c. f.o.b., dealers say the farmers will not pay the 95c. or \$1.00 per bushel they would ask for them, but will take chances on a cheaper oat, No. 2 C. W.'s, at 80c. to 85c. per bushel. There seems to be some truth in the argument, yet I believe farmers would buy the better class of oats if they had them side by side to make comparisons.

Recently at a central Ontario village an inspector of seeds called and learned that a dealer had sold at public auction some No. 2 C. W.'s, which had been represented as fit for seed. There were some bids as high as \$1 a bushel for seed purposes. A farmer who had a number of bags on his sleigh was asked if he had seed oats. He replied in the affirmative. Permission was asked to see them, and then an official sample was taken. It was pointed out that there were likely to be more than 100 wild oats to the pound. As a matter of fact, the analysis showed 260 wild oats and three other noxious weed seeds, making 263 per pound.

Think what this means to farms in the vicinity of that village, in using only one and a half bushels of this seed per acre, and that amount drilled in should prove ample of good Western seed. These oats in question had been cleaned three times through a mill, and each time the percentage of wild oats may have been increased to some extent. No less than 13,413 vital noxious weed seeds would go on each acre.

As the wild oats would mature earlier than the ordinary oats, each of these plants might shed 50 per cent. of their seed before and during harvesting. What a volunteer crop for future years to fight, when labor is so difficult to get! Surely ignorance is scarcely excusable in cases like this. Yet it is feared that it will be duplicated all over the province this spring, and even worse conditions may obtain when feed oats are used and some of them frozen, which is quite usual.

It is fortunate in a way that so many farmers are prejudiced in using Western oats for seed as they fear they will not do well the first year. This fear has arisen largely from the use of frozen oats in the past. If Ontario oats are well fanned and reduced in bulk to say, 40 per cent. of what came from the mill, the seed will do very well except there is likely to be about 10 per cent. double oats in them, which, to say the least, is undesirable from the seed standpoint. All this goes to show we should get busy at once about our seed supply, if we haven't that problem settled already.



Eat More of These—Live Better—Spend Less

Today is for the strong. Nowadays men realize that their eating power depends upon sound bodies and sound brains. And a man who seeks health and happiness—not only for himself, but for his wife and children—has a keener appreciation of the value of proper food, in quality and in quantity.

Overeating is Dangerous
Most people eat too much. Overeating does the stomach handicaps success. Gorging clogs the body, and robs you of sleep and vim.

Concentrated foods are best. They permit you to do more with less.

Use More Dairy Products
MILK is not merely a delicious beverage; it's a real food. A quart a day is not too much for active workers. The drink is dairy—eat a breakfast where you get your dairy which you can quickly vary with a little milk.

BUTTER is a 98 per cent. pure butter without water. It gives the body energy. Let the children have all the bread and butter they can eat. And cook and bake with good butter—like mother used to do.

CHEESE is a natural food, too little undervalued. Swiss, English, and other varieties, come from sources admitting largely no cheese. Eat plenty of cheese. You will find more appetizing these dishes in your kitchen.

better work, and more of it—you can earn more—if you relieve yourself of bodily overwork.

Back to Simple Life
In studying what you eat and what you feed your family, it is wise to include such body-builders and restorers as milk, butter, cheese and ice cream.

Since time began these gifts of Nature have been considered necessary for complete health. Your body craves their sustaining qualities because they furnish all the needed elements in a highly digestible form. They are pleasing and appetizing. They nourish, but do not distress.

ICE CREAM is not a luxury, but a necessity. It is a delicious, refreshing, nourishing, nourishing food. Eat lots of it.

STARTLING FACTS
Production of food from dairy products is the most profitable of any industry in the world. It is a source of wealth, and a source of health, vigor and vitality.

As a rule, the dairy products are clean and pure. They are the most healthful and most economical of all foods. They are the most nourishing and most palatable of all foods. They are the most economical of all foods.

NATIONAL DAIRY COUNCIL

General Offices Chicago, Ill.

The Council is composed of 250,000 dairymen, representing all and representative of all dairy products in the United States and Canada. Its purpose is to promote the production and consumption of dairy products.

A large part of the dairy products are sold in the form of milk, cream, butter, cheese and ice cream. These products are sold in all parts of the United States and Canada.

Our slogan is: "Drink and use more Milk." "Eat and cook with more Butter." "Cheese is the Staff of life of many nations, why not in U.S.A.?" "Ice Cream is not alone an Excellent Dessert, but a Real Food."

Send for the Dairy Manual. It's free. Write to the Dairy Manual, National Dairy Council, Chicago, Ill.

Do Pure Bred Cattle Pay?

By "A Prince Edward County Farmer," Ont.

THIS thought occurred to me more forcibly than ever the other day when a young farmer, to whom I had sold a sire some two years ago, came to me and made this remark: "I have a beautiful heifer calf at home, and as I was looking at it this morning I concluded it was worth about ten dollars, but the thought also occurred to me that if it was pure-bred I would not take \$100 for it."

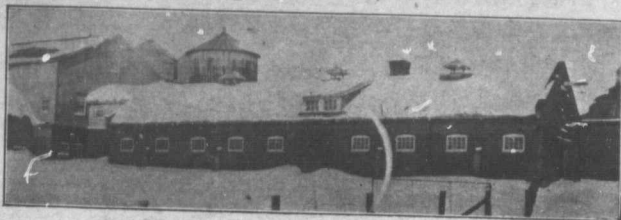
In considering the matter of the relative values of pure-breds and grades I have since wondered if this young man's ten-to-one comparison was correct, and how the pure-bred business had worked out with me. I commenced, therefore, to figure, and with the following result: On March 3rd, 1916, I made my first investment in pure-bred Holstein, which consisted of two calves one week old, a male and female. Since that time I have invested \$1,955. Now what have I received? After carefully estimating the herd on hand and what I have sold during that time it amounts to \$11,700. This amount does not include the milk from the herd—and they have been heavy producers—during that time nor does it include the service of sires on our own herd or outside service, although I have charged up the amount paid for sires in money paid out. Now, the "knocker,"

ment for any farmer than the reliable pure-bred Holstein cow.

The Trade Mark of Butter

YELLOW is the trade mark of butter by nature and the long practice of coloring butter. Since the inception of oleomargarine it has imitated butter in color and appearance and much of it has been sold and consumed as butter. The dairy interests have fought this counterfeiting and in some states there are laws prohibiting oleomargarine to be sold in semblance of yellow butter. The purpose of such laws is to provide a clear demarcation between oleomargarine and butter. These laws were instigated to prevent fraud. When one has had experience in the wily ways of many manufacturers and dealers in oleomargarine, he realizes how difficult it has been to keep oleomargarine in its own clothes and make it stand upon its merits.—Hoard's Dairyman.

Two There are two good. Under the are dropped every furrow during planting is done before soil on top of the over, will settle in more congenial land is thoroughly and drag harrow. The second system follows, calls for ploughing of the surface inches with the rill harrows. We never The soil is harrowed of uniform (10 to 12 inches with the out furrows with the and 32 inches apart lar is then spread rate of 600 to 800 lb dropped in on top of



A Part of the Fine Stables at "Allancroft Farm," Beaconsfield, near Montreal.

How We Handle the Potato Crop

Cultural Methods That Have Resulted in Profitable Yields—By Tom Alfalfa

ONE hundred bushels to the acre is the normal potato crop in the normal season. This is the average of all crops, good and bad. Contrast the average with the possible. As high as 1,000 bushels has been dug off a single acre; 500 bushels from an acre is achieved frequently every season, and 300 bushels to the acre is the regular thing with some growers, if the season is at all favorable. When we first started to grow potatoes on our farm, we occasionally had poor crops. We learned by experience. We paid for that experience, and now we are in a position where we can insure ourselves a good crop in almost any season. Last season was the most difficult one in many years. The spring was wet and cold, and was succeeded immediately by weather that was very hot and dry; two extremes and neither one favorable to the potato crop. Naturally our crop was below normal, but by following the methods that I shall endeavor to outline, we had much the best crop in a neighborhood where potatoes are commonly grown.

Whenever possible we follow our potatoes after clover. Never would we grow potatoes on the same land for several years in succession. Potatoes demand a rotation of crops. No crop is more subject to disease and these diseases, such as blight and scab, live over in the soil, and if the potato crop is continued on the same land, become more prevalent with every passing year. We plow the clover sod in the fall, and then surface work the land as much as time permits. The more the land is worked in the fall the better. During the fall and winter we spread 12 to 15 loads of barnyard manure per acre. Then we plow again in the spring.

We emphasize the spring plowing. It should never be omitted. And again we work the land very thoroughly.

Two Methods of Seeding.

There are two systems of seeding. Both are good. Under the first system the potato spuds are dropped every 15 to 18 inches in every third furrow during the spring plowing. When the planting is done in this way we would advise disking the soil before plowing. There is then loose soil on top of the furrows which when turned over will settle in around the potato set and give more congenial growing conditions. Then the land is thoroughly worked on top with the disk and drag harrow.

The second system, and the one that we now follow, calls for plowing first and then a thorough working of the surface to a depth of three or four inches with the riding cultivator, disk and drag harrows. We never get in a hurry with this work. The soil is harrowed and reharrowed until it is of uniform tilth over the whole field. Then we turn out furrows with the plow about four inches deep and 32 inches apart. A good brand of mixed fertilizer is then spread by hand along the drill at the rate of 600 to 800 lbs. to the acre, and the seed is dropped in on top of the fertilizer, 15 inches apart

in the drill. Each seed piece as it is dropped is pressed down into the soil with the toe. Then we harrow crosswise of the drills once, covering the seed sets to a depth of two inches. One harrowing does not level the field. There will be a considerable mound between each row of potatoes. The seed covered shallow in this way, however, gets a maximum amount of warmth. In case of rain the soil dries out more quickly and the potato makes a vigorous start. In a few days we harrow again, this time going lengthwise of the drill. This is to avoid covering the sets too deeply. When the potatoes are just about through the ground we harrow crosswise again and repeat the harrowing at frequent intervals until the potatoes are four or five inches high. Then we start the scuffler going between the rows and scuffle every week or 10 days through the growing season, riding very slightly as the season advances until the plants cover the ground completely.

Importance of Continual Harrowing.

It will be noticed that the drag harrow plays a very important part in our potato culture. We consider it the best implement on the farm to conserve moisture and kill weeds. If the soil gets a chance to harden around the hills, and it will almost inevitably do this if a crust is allowed to form on the surface, the potatoes cannot grow and develop properly. This is especially true on heavy soil. Where the field is harrowed fre-

quently during the early stages of growth, there is little danger of such a crust forming, as the ground between the hills will be well shaded by the vines, shortly after the scuffler is stopped. Last year, for instance, one of our neighbors planted his field with a potato planter and faithfully scuffed it all season. He had a nice mulch between the rows, but along the drill between the potato plants a hard crust formed, the soil baked solid, and when I was on the field just before digging the potatoes had actually cracked the soil in their efforts to grow, but naturally the crop did not amount to much. A harrowing or two earlier in the season could have avoided this. As a result of our harrowing, too, we have very little to do with the hoe to keep the weeds down, though we usually go through the crop twice during the season. It takes only one good healthy pig weed or lambs' quarter in close proximity to a hill of potatoes to reduce the product by one-half.

Will Use Small Seed.

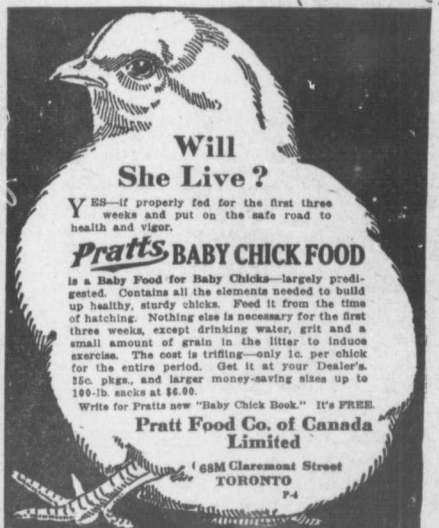
I suppose we are approaching this subject backward when we mention the seed last of all. For our last season's crop, we used our best selected seed. Prices this last winter have been so good that we have yielded to temptation and sold almost all of our good marketable potatoes. We will use the small potatoes for seed as probably thousands of other farmers will also do. These small potatoes have the same inherent power as the large potatoes from the same hills, and we expect practically, if not altogether, as good a crop as we would get from select specimens. We would not care to follow up this practice of planting small potatoes, however. Next year we will again select the best potatoes from the best hills for seed. We expect good results from our seed this year, too, from the fact that our vines were nice and green last season right up to the time that they were cut down by frost. The potatoes, therefore, are not so mature and dead ripe as is often the case, and they will make better seed on that account. The smallest of the seed will be planted whole.

Blight has not been common in our section, and we do not spray for it. We do, however, keep a sharp lookout for bugs and spray just as soon as we see the first evidences of their appearance. As a bug preventative we have gotten better results from a poison in powder form, put up by a local miller than we have been getting from Paris green. Also two applications is sufficient.



The Oldest Exhibitor in the Dairy Test at the Last Ontario Provincial Winter Fair.

Mr. Henry Welsh, Weston, Ont., had already passed his allotted three score and ten when he became an exhibitor of pure bred Holstein cattle. He didn't do much the first time he appeared at Guelph. Last December, however, he secured third place in a stringly contested mature class. His cow, Roberts Starabout Morin, produced 169.2 lbs. of milk testing 4.9% fat. Mr. Welsh and his cow are here seen as photographed by an editor of Farm and Dairy.



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She Live?**

YES—if properly fed for the first three weeks and put on the safe road to health and vigor.

Pratts BABY CHICK FOOD

is a Baby Food for Baby Chicks—largely predigested. Contains all the elements needed to build up healthy, sturdy chicks. Feed it from the time of hatching. Nothing else is necessary for the first three weeks, except drinking water, grit and a small amount of grain in the litter to induce exercise. The cost is trifling—only 1c. per chick 15c. pkg., and larger money-saving sizes up to 100-lb. sacks at \$4.00.

Write for Pratts new "Baby Chick Book." It's FREE.

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130-Egg Incubator and Brooder for \$14.50

If ordered together we send both machines for only \$14.50 and we pay all freight and duty charges to any R. R. station in Canada. We have branch warehouses in Winnipeg, Man. and Toronto, Ont. Orders shipped from nearest warehouse to your R. R. station.

Hot water, double wall, dead-air space between, double glass (11) doors, copper tanks and boiler, self-regulating. Nursery under egg tray. Incubator adapted to Canadian climate. Incubation time 21 days. Complete with thermometers, lamps, egg tester—ready to use when you get them. Ten year guarantee—24 days trial. Incubators finished in high grade mahogany. Ferns Redwood finished—best painted to prove interior material. If you will compare our machines with others, we feel sure of your order. Don't forget to send us \$1.00 in advance to pay us in advance before you buy. Remember our price of \$14.50 for both incubator and brooder and covers freight and duty charges. Send for FREE catalog, or send to your order and save time.

Write on order: **WISCONSIN INCUBATOR CO., Box 234, Racine, Wis., U. S. A.**

S.C. White Leghorn Day-Old Chicks

Order now from our well known laying strain. Pens mailed to Barron cockeries. Satisfaction guaranteed. Write for our booklet on Care and Feeding of Day Old Chicks.

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The Bissell Steel Roller has a rigid steel frame—no wood, whatever.

Large roller bearings and strong 2" axles insure durability and great strength. The Bissell is a 3-drum Roller of good weight, built to stand hard usage and give service. Write Dept. R. for free catalogue.

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Get in right this season by ordering Hatching Eggs and Baby Chicks from our 250 egg winter layers. Our stock has three-to-Lay and Pay for generations. Eggs, \$2 per 15, or \$4.00 per 100, fertility guaranteed. Baby Chicks, \$15 per 100.

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"I saw your ad. in Farm and Dairy"



Goose Raising Pointers

THE Toulouse and the Embden are the most popular breeds of geese in this country. The Toulouse is the largest breed, the adult gander weighing 25 pounds and the geese 20 pounds.

Geese can be raised in small numbers successfully and at a profit on many farms where there is low, rough pasture land containing a natural supply of water.

They need a house only during cold or stormy weather, when an open shed should be provided. Large boxes, barrels or shelter are provided as nests for geese, or they are allowed to make nests on the floor of the house.

Adult geese should be fed for eggs about February 1, or so that the goosings will be hatched by the time there is good grass pasture. Feed a mash in the morning of equal parts by weight of corn meal, bran, and middlings, or low-grade flour, with 10 per cent. beef scrap, and give whole or cracked corn at night.

Goosings should be fed a mash of two parts shorts and one part corn meal by weight, changing at the end of three weeks to equal parts shorts and corn meal, with five per cent. each of beef scrap and grit.

A fattening ration may be made of a mash of one part shorts and two parts corn meal by weight, with five per cent. of beef scrap, which is fed in the morning, with corn at night.

The period of incubation of goose eggs varies from 28 to 30 days. The first eggs usually are set under hens, while the last eggs which the geese lay may be hatched either under hens or under the geese if she becomes broody.—U.S.D.A.

The Coal Burning Brooder

THE most profitable year in the life of a hen is her pullet year. This has been demonstrated so often that it is now considered an axiom of poultry lore. In our own experience, pullets are at least 50 per cent. more profitable than hens because they lay the major proportion of their eggs when eggs are high in price. The great difficulty is to replace the entire flock each year. We believe that we have solved this problem with a large incubator and a couple of coal burning brooders. Our incubator is a 400-egg size and we run it twice. With it we can get far larger hatches than we ever got from hens; not only more chickens, but a larger percentage of chickens from the eggs set. We are equally pleased with the coal burning brooders. They solve the problem of brooding a great number of chickens with a moderate amount of work.

The first brood of chickens that we ever put under a coal burning brooder consisted of 265 Plymouth Rocks. We lost over half of them. All our previous experience had been with the natural method of brooding with hens, and we did not understand the care that is necessary when chickens are brooded artificially, particularly in large flocks. We profited by our experience, however, and the next brood of 305 chickens came through to an age of six weeks with only three dead. This could not very well be improved on.

Now let us check up the advantage of rearing chickens in large flocks with a coal burning brooder. It would take 20 hens, with 15 chickens

each, to handle as large a flock as would be covered by one brooder. It would mean 15 separate waterings and feedings, as compared with one. There is no worry about the hens over-walking the chicks and driving them out. They are not out in the wet grass, for the liberties of the chickens are regulated by the poultryman and not by the mother hen. Furthermore, we believe that the expense for fuel is not as great as the cost of food for the 20 hens. At first we had difficulty with the fire going out, which was partially due to a poor style of stove and partially to the fact that we tried to use too large coal. Pea coal is the ideal coal for the coal brooder. If Farm and Dairy readers are interested we will give our experience in brooding chicks by this system in more detail in a future issue of Farm and Dairy.—F. R. O.

Value of Hen Manure

WHAT is the chemical analysis of hen manure? What is especially adapted for—E. A. M., Drummond Co., Que.

The chemical composition of hen manure varies greatly according to the feed that the poultry has received, whether the manure is fresh or dried and the amount of litter mixed in with the manure. Where wood ashes have been thrown in the poultry house, the nitrogen content of the manure will have been decreased very materially owing to the action of the lime in the ashes setting the ammonia free. An average sample of fresh manure will analyze about as follows: Dry matter, 55 per cent.; nitrogen, 1.15; phosphorus, .465 and potassium, .375. Its value may be determined by a comparison with ordinary farmyard manure, which will analyze about as follows: Nitrogen, .51; phosphorus, .145 and potassium, .410.

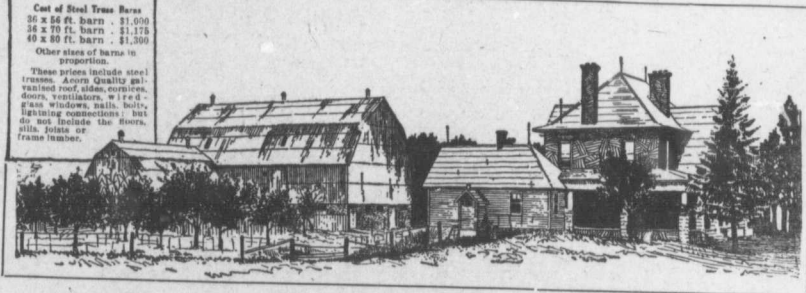
It will be seen that hen manure is more than twice as rich as ordinary yard manure in nitrogen and over three times as rich in phosphorus. Its composition, therefore, makes it especially suitable for crops from which a rapid, quick growth is expected. It would therefore, be specially valued by the market gardener and on the farm would be used for rapid growing crops, as, for instance, early potatoes.

Is This Roup?

LAST year I bought a setting of eggs to introduce some new blood into my flock. One pullet was noticed gasping for breath and its head swollen, but there was no discharge from nose. Its tongue seemed to protrude from its mouth and very thick. I isolated it for two or three days and finally swabbed its mouth and throat with coal oil on a feather. Also gave a few doses of salicylar, had an egg washed in the same way, but recently a cock from the same strain was affected in the same way. I cared him in the same manner. Would those birds be all right to breed from?—C. T. M. Yale, Carleton Place, Ont., B.C.

From the description the correspondent gives of this trouble it is impossible to arrive at any conclusion. It looks like a species of roup, though it may be a rood many other things. I therefore, suggest that an affected bird be sent to us. In the meantime give to the whole flock in drinking water permanganate of potash, one teaspoonful to one gallon of water, and any that are affected swab their heads well with a solution of this mixture at the rate of one teaspoonful to a pint of water. Disinfect as above advised and it would also be well to give to those who have birds dead from any disease whatsoever, that they would get into the process of burning them rather than throwing them into the manure pile or behind the barn. C. Efford, Dominion Poultry Husbandman.

Cost of Steel Truss Barns
 36 x 56 ft. barn . \$1,600
 36 x 70 ft. barn . \$1,175
 48 x 80 ft. barn . \$1,300
 Other sizes of barns in proportion.
 These prices include steel trusses, Acorn Quality galvanized roof, sills, cornices, doors, ventilators, wired glass windows, nails, bolts, lightning connections; but do not include the floors, sills, joists or frame lumber.



The Modern Barn--- for Busy, Prosperous Farms

In almost every farming community you will see them. They stand out across the country—everlasting signs of the farmer's stability.

They are Preston Steel Truss Barns—the best man-made shelter against the fury of nature's elements. Consider what a barn is for! Isn't it to house so many head of cattle; so many tons of hay; so much grain? In short, isn't it your very treasure-house, a place of safety for the fruits of your toil? What a boon to you and every farmer to know that

Lightning, Fire, Storms Are No Longer a Menace

Lightning may destroy an old-style barn utterly. The Preston Steel Truss has conquered Lightning—absolutely.

Fire may menace a frame barn at any moment. This barn is fire-proof. Windows are of thick wired glass—fire-proof. Doors and frames are metal.

Heavy rainstorms or snow blizzards may damage other barns. This barn is armed at every point with metal. Eaves, cornices, gable ends, ridge, hip joints—every nook and corner is sealed tight with metal.

It will stand four-square and staunch against the bluster and gusts of the mightiest winds, without creak or strain.

It is a roomy barn, a modern barn, a better barn. Not a single timber will occupy or kill valuable space. Loading and unloading will be easier because every square inch will be clear and open. Work will be pleasanter, because light will be good. Temperature will be cool and even because ventilation is perfect.

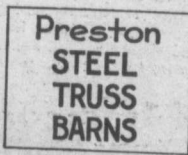
Few Men Needed—Low Cost of Erection

It is an easy structure to raise. Few men are needed—five to ten will be ample. They can complete your barn inside of two weeks.

There is not a timber in the whole job but what one man alone can raise to its place.

Think of the saving of labor by letting the factory do all your heavy work! At a little time, too, when labor is so scarce, so costly. Skilled labor is here—we solve the labor problem for you.

All the cutting, framing, figuring, planning—all the time-killing work—are done for you here at the factory.



Experts Plan For You

The job will be handled quickly because the plans are drawn up for you. They are easily followed, made so as to save time and labor.

We are not selling you barn-building materials merely. We are also offering you barn-building service and barn-building experience.

That is why we place at your command the services of a barn-building expert, a man of international reputation. He will help you draw up your plans: plans that exactly fit the special needs of your own farm.

He knows barns—has built more than 300. Surely his help and experience is worth something to you.

A Fine Organization Offers Its Advice and Experience FREE To Every Farmer

Behind this experts' advice stands a big organization, a tremendous factory. We have turned the resources of a large fire-proofing industry to help the farmers of Canada build better, safe, barns. You can rely on the faith of this organization as thoroughly as on the advice of our barn-building expert.

More information? Yes, of course, you will need to read our book carefully before you do any buying. It's free for the asking. So is our advice. Put your difficulties and problems up to us. We are glad to be of service to you at any time.

(Signed) C. DOLPH, President

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Farm Management

Cropping Wisdom From Zavita

ALBIE, plump seed of the Joannette oat gave a yield of 67.5 bushels per acre at the Ontario Agricultural College, as compared with 50.2 bushels from small plump seed, a difference of 17 bushels per acre. Cleaning and re-cleaning seed will thus pay big dividends on the time spent in the work. This was one of the nuggets

of agricultural wisdom emphasized by Dr. C. A. Zavita before the agricultural committee of the Ontario legislature. Following are a few more nuggets of wisdom extracted from Dr. Zavita's address.

Good variety is as important as good seed. In nine years at the College, O.A.C. No. 72 oats have given an average yield of 90.6 bushels per acre as compared with 72.5 bushels from Banner oats grown under the same conditions. Moreover No. 72 has only 27.5 per cent. of hull, while Banner has 30.4 per cent.

The results of four years experi-

mental work indicate that the largest yield of oats is obtained from seedling at the rate of 1.36 bushels per acre.

Five years experimental work show an average yield from common six row barley of 45.3 bushels per acre, while O.A.C. No. 21 gave 59.1 bushels. What has this meant to the province of Ontario in transferring from the former to the latter variety?

A new variety may be developed very quickly. O.A.C. No. 72 oats is probably more largely grown in Ontario than any one variety and it has been developed from a single seed, planted on the college farm at

Geulph in 1905.

Why change seed potatoes or seed grain? The same varieties of both have been grown for 30 years at Geulph and the yields have steadily increased, but of course, the best seed was selected each year.

Barley is the heaviest yielding grain. The average crop for 14 years at Geulph is for barley, 2,677 lbs. of grain per acre; common six rowed oats, 2,503 lbs. and spring wheat, 1,882 lbs. There is no hull on barley and a good deal on oats and emmer. Oats, however, give more straw per acre and the straw is of greater feeding value.

Spring wheat should go into the ground as soon as the land can be worked, then oats, barley, peas and beans in the order named.

Hardening for Spring Work

WHEN the soft horse is started at heavy work the shoulders should be given a good deal of care. The horse will need frequent breathing spells, and at these times lift the collar so as to give the shoulder a chance to cool and to dry. When it becomes moist from sweat, it will become sore much quicker than if dry. The collar should be kept smooth, if any incrustations form on it, scrape them off. Care should be used in making sure that the horse has the collar that is fitted to its shoulders. A misfit collar is apt to lead to shoulder trouble. When starting the horse at hard work, watch its shoulders and neck, too, carefully.—N. D. A. C.

Treating Oats for Smut

NOW is the time to make ready to treat oats for smut. One pint of formaldehyde to 40 gallons of water is the proper strength to use. If such a solution is used, it will not be too strong to impair germination of seed, but will be strong enough to do its work thoroughly.

The oats are thoroughly mixed after the formaldehyde is poured on them. After being covered with gunny sacking or canvas a few hours or over night, they are spread out to dry. In re-sacking them care should be taken not to put them back into sacks infected with smut spores.

If oats are to be drilled, they must be well dried in order to seed well. Ordinarily, provision should be made for the swelling of seed, by adjusting the drill to seed faster. Treatment of oats is recommended in all cases where it is not positively known there was no smut last year.

War on Weeds

COOPERATIVE experiments in weed eradication have been conducted for five successive years by the Ontario Agricultural and Experimental Station, under the direction of Prof. J. E. Howitt. The results of these experiments may be summarized briefly as follows:

First, that good cultivation followed by rape sows 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 the destruction of twitch grass than broadcast; third, that rape gives much better results 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 of interest brought out by the experiments in spraying with iron



Real Daylight Saving

In the harvest time every hour between daylight and dark is worth money to the busy farmer.

You get an early start in the morning intending to do a big day's work, but the

binder, mower or other implement breaks down and you must go to town for the repairs. If you have a Ford you are soon away and its speed clips two hours off the former three-hour journey there and back.

Count up the extra half days that a Ford will save you

during the rush of seeding, haying and harvest. You will find that the Ford will save you a week or more of valuable time on your necessary trips alone.

Many times you will want to take some produce along with you. Then your staunch

Ford is ready to carry a load of 1000 pounds. How handy this would be!

Once you own a Ford and find out the many ways you can use it for business and pleasure you will wonder how you managed without it.

The Ford is an economical investment, and a necessity on every farm.

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Touring - - \$495

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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 older plants will not be destroyed by the solution, and will form seed, and hence the experiment will not be entirely satisfactory.
 2. To spray thoroughly, 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 entirely satisfactory.
 3. In regard to the cost of spraying with iron sulphate it was found that the cost of material per acre varied from \$1 to \$2.40 per cwt., so that it now costs from \$2.50 to \$3.50 per acre for material to spray mustard.

These cooperative experiments in weed eradication will be continued this year (1917) and it is hoped that a large number of men will take part in them in order that sufficient information may be gathered to warrant definite statements being made in regard to the best methods for controlling these pernicious weeds.—Address all communications to Prof. J. E. Howitt, O.A.C., Guelph, Ont.

A New Variety of Barley

MANCHURIAN Ottawa 50 barley is a selection made several years ago by the Dominion Cerealists from the old, commercial sort, Mensury, which has been favorably known in Canada for a long time and has been successfully grown in very many districts. As the tests in regard to yield are still in progress, final conclusions cannot yet be drawn, but it may be stated that the new selection appears to be, for many sections of this country, the most productive barley known among those sorts which have fairly satisfactory straw. The straw of this barley is of good length and strength, as compared with other popular six-row sorts; but it should be emphasized that even the best barleys have a tendency to lodge when sown on rich soil, in seasons when moisture is plentiful. The heads of this variety are exceptionally long and heavy, and herein, perhaps, lies the secret of its large yield. In very high winds it does not behave quite so well as some of the other sorts as it shows a tendency for the heads to break off at the base, and for the kernels to thresh out on the ground. However these objections, though worth considering in wind-swept prairie districts, are of no importance in most localities.

While it is early in ripening—like nearly all barleys of its class—it does not mature exceptionally early, being perhaps a trifle later than the average. The awns of this barley adhere somewhat firmly, so that, for best results, it should be in thoroughly dry condition when threshed. Consideration with its characteristics, Manchurian Ottawa 50 is recommended by the Dominion Cerealists as the best variety of six-row barley for nearly all parts of Canada, except those districts where destructive winds are to be feared about harvest time.—Experimental Farms Note.

The only reason why most weeds can live from year to year is that they are given a chance to ripen seed. If the weed can be swatted any time from the time it germinates till it is in blossom, that is the end of it, except in the case of quack grass, sow thistle and Canada thistle. Wild oats increase by ripening before the grain in which they grow, some of the seed falling and seeding the land for the next year. Mustard works a good deal the same way. When some crop, as corn or alfalfa or a grass crop, is grown in rotation with the grain crop, wild oats are doomed.

On which side of the book is YOUR Cream Separator?

ASK yourself this question, "Which will pay me better (1) to buy an ordinary separator that costs, say, \$55.00, and loses a whole pound of cream to every 1,000 pounds of milk skimmed, or (2) to invest in the

Standard
SEPARATOR
Gets all but 1/10 pound of cream in 1000 pounds of milk skimmed

Ordinary separators lose a whole pound in 1000 pounds of milk skimmed



Standard

—the separator that gets all but one-tenth of a pound of cream per 1,000 pounds of milk skimmed, and costs, say, \$75.00?"

The answer is that with a Standard you save in one year, with twenty cows, no less than \$27.25. Here are the figures:

	Standard 7%	Ordinary \$55.00 7%	Pan Skimming \$70.00
First cost	\$75.00	\$55.00	\$70.00
Interest	5.25	3.75	4.90
Add Depreciation	3.75 (5%)	5.50 (10%)	4.90
Add Loss in cream	3.00	30.00	70.00
Saving over ordinary separators	\$12.00	\$39.25	\$70.00
Saving over old pan skimming method			\$27.25
			\$8.00

The Standard's close skimming is substantiated by tests made at Government Dairy Schools. The Standard soon pays for itself, not only by saving cream, but by its longer service capacity. That is why only 5% is figured for depreciation in the Standard and 10% for ordinary separators, which decrease wear and tear (all bearings run in a mist of oil), spindle and bowl, etc., etc. The Standard has been tested for 15 years' farm use without apparent wear. Will it not pay you handsomely to have the up-to-date, close skimming Standard? Let us send you a Standard so that you may test it in your own dairy. Catalogue free on request.



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CITY MILK SUPPLY

Cow's Milk as Infants Food

ABOUT one-sixth of the milk produced by the 22,000,000 dairy cows in the United States, is used as food for infants and young children, of whom it is estimated that there are about 2,250,000 less than one year old in that country. The fitness of milk for this special pur-

pose is of the most vital consequence, yet this phase of the work has received but little attention at the hands of investigators. Now, however, comes an interesting treatise, the Value of Different Grades of Milk in Infant Feeding, issued from the Vermont Station, which deals with the subject. The authors of the bulletin state that two-thirds of the children referred to above are fed artificially before they are able to digest solid food and that practically all of them consume cows' milk as their chief or sole diet before they are a year old.

Nearly as many children between the ages of one and two years use cows' milk in conjunction with other food, and this second year of a child's life is a very critical period.

It would appear that great improvements are necessary in the quality of the milk used for feeding infants. The mortality of bottle-fed infants is estimated in the United States to be nine times that of those who are breast fed and it is further stated that more than 90 per cent. of all cases of rickets are among bottle-fed babies. The pitiable ignorance and

helplessness concerning the correct feeding and care of infants displayed by mothers, particularly in congested sections of large cities, is appalling. Much has been done of late to teach and aid them, but the fitness of the various grades of milk for infant feeding is only a matter of recent investigation.

Milk of the Breeds Compared.

As a result of these investigations, it was concluded that milk of average richness was the best for average feeding; that the size of the fat globules has but little to do in making milk superior or inferior for feeding infants and that therefore if the milk of one breed excelled the other, it was not due to the size of the fat globules, but because of the relatively low fat content of such milk. Evaporated milk prepared very carefully with normal milk standardized to a medium fat percentage, but sweetened condensed milk proved to be an undesirable food for growing young.

With the B.C. Milk Shippers

CONSPIRACY for the disposing of their product is beginning to take definite shape among the milk producers of British Columbia. The Fraser River Valley is noted for its dairying and milk production. The dairymen of the valley have long been exploited by the milk dealers of Vancouver, where the largest portion of their product is marketed. Efforts that have been made in past years to get these producers together have met with little success. Recently, however, they have made progress.

The Fraser Valley Milk Producers' Association, Limited, with a capitalization of \$250,000, has been organized. Every shareholder must be an actual producer. Subscriptions to date total \$70,000; 20 per cent. in cash and the balance in promissory notes for 10 months, to be paid in 10 monthly payments out of milk delivered. A trust fund is provided to take up the stock of any shareholder who ceases to be a producer. The company proposes to establish its own delivery plant at Vancouver. According to information at hand the banks are giving the company every possible support. The business is under the direction of seven directors elected by the shareholders.

SWINE

Castration of Young Pigs

THE objects of castration are to prevent reproduction, to increase fattening propensity, to better the quality of the meat of the animal and to help insure docility. Pigs should be castrated while they are young; the best time is between six and eight weeks of age, before weaning. At this age there is less shock to the pig and possibly less check in growth. If it is still sucking its dam when castration takes place, the chances are that it will be more thrifty and in better condition than when the operation is performed immediately after weaning. A pig six, seven, or eight weeks old is small enough to be handled conveniently and the testicles are large enough to render the operation quite simple. When it is possible to do so, avoid castration during "fly time" or in extremely cold weather.

A good castrating knife or a pen-knife that will keep a sharp edge is necessary to do a clean job. The attendant goes into the pen and picks up a pig by the hind leg, taking the right hind and front legs in his right hand and the left hind and front legs in his left. In this manner the pig



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☞ The safe, sensible, economical thing to do is to wear rubbers, rubber boots or rubber farm shoes that bear one of these Trade Marks:



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High-grade Fertilizers Are Best Values

The average cost of Nitrogen in 600 samples of "complete" fertilizers was 66% higher than the cost of Nitrogen in

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Get our wonderful new Land Clearing offer. Send for the free book. Special Low Price now. Take out big stumps at 3c to 5c each. Make money clearing land for others. 30 Days' Trial Unlimited Guarantee. Now, we want you to send for our free book. Tells the truth about how to clear land cheap, fast and best. Send in your name now. Address: **Hercules Mfg. Co., 1195 25th Street, Centerville, Iowa**

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Famous White Wyandotte eggs for hatching from prize winning stock. Utility strains, \$1.50 per setting. **B. W. Bald, R.R. 2, Jarvis, Ont.**

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Prospects 50 tons. Apply **A. J. Campbell, Komoka, Ont.**

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Stationary Mounted and Traction



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Grain Grinders, Water Boxes, Steel Saw Frames, Pumps, Tanks, Etc.
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may be held in the lap of the attendant. When the pig is in the desired position, the scrotum should first be washed with a piece of cotton saturated with the antiseptic solution and before making the cut the operator should be sure that the knife and his hands are thoroughly clean. The knife should be dipped in the antiseptic solution before making the cut.

One of the testicles is seized between the thumb and forefinger of the left hand and an incision made over the most prominent part, parallel with the middle line of the scrotum and a half inch to the side of it. The incision should be deep enough to liberate the testicle at one pass and should also be long enough to free the testicle and to insure good drainage; to do this it must go through the scrotum and also through the sack that incloses the testicle. The membranous sac is allowed to go back and should be cut loose at the inner part of the testicle so that the cords may be pulled out as scraped, not cut, off. The scraping is done by holding the knife in a slanting position and scraping back and forth until the cord is severed. The cord should never be cut off abruptly, for to do so may cause a greater hemorrhage. Jerking out the cord is also dangerous, as it may cause a rupture. The other testicle is liberated in the same manner. It is not necessary to sew up the wound, as it will heal more readily without interference.

In hot weather it is advisable to rub some pins or on the scrotum to keep the flies and other insects from the wound. Accidents following castrations of pigs are rare, though abscesses are sometimes formed. These are manifested by much swelling and soreness at the seat of operation. Treatment consists in opening the abscess with a thoroughly clean knife and fingers, and washing it out twice daily with an antiseptic fluid.

There are on some farms from year to year numerous cases of pigs ruptured in the scrotum, while on other farms this condition is scarcely known. Some farmers castrate these pigs as readily as they castrate their ordinary boar pigs, but a great many others find the operation difficult or are unable to perform it. The value of a pig in this condition is so slight that unless there is a considerable number of these ruptured pigs raised on the farm it will hardly pay the average farmer to employ a veterinarian to perform the operation.—F. G. Aetbrook, U. S. Dept. of Agriculture.

Inversion of Rectum

R. W. Caswell, Norfolk Co., Ont.

HAVING fed hundreds of hogs on whey and buttermilk, I have had a lot of trouble with cases of inversion of the rectum occurring amongst them. I tried everything I could hear of and lost some pigs by not knowing of a remedy, so I decided to operate on one. I had such good success that I think nothing of the trouble now. I operate about 24 hours after trouble is noticed. The flesh on the rectum will swell and crack open. Take a short pocket knife and trim that fleshy substance off, being careful not to puncture the membranes. Wash well with warm water and add a little fresh grease. Take the thumb and replace rectum. Make sure that it turns back to place. I have treated many in this way and have not lost one on which I have operated. By leaving it 24 hours or more, it does not appear to be painful.

DOUBTFUL Tenant: "This house would suit, but I don't like that beastly factory opposite."
Agent's War Time Representative: "That's only a new gunpowder works. It may blow up any minute."



Well, Sir, that's some fence

Because of its simplicity and amazing strength, "Ideal" Fence excites the admiration of every practical mind. "Some fence" is right. Take a look at it—

Ideal Fence

Notice how the Ideal lock takes a "grape-vine" grip of the upright and cross wires in a strong, even, uniform pressure. There are no sharp angular turns to break the surface of the wire and weaken the grip of the lock. Yet it grips, as you see, the wires in five places—twice on the upright, twice on the horizontal and again where the two wires cross. Thus, while it positively prevents either wire from slipping, it allows just enough play so the fence can be erected on hilly ground without kinking the line wires. At the same time, it keeps the uprights perfectly straight. You wonder why Ideal Fences are so free of broken or bent uprights; well, that's the reason.

May we send you a copy of our catalogue which tells the whole story in a factual interesting way? A post card will bring it promptly.

The McGregor-Banwell Fence Co., Limited, Walkerville, Ontario



Rock and Brick Face "METALLIC" Siding

Gives an armour-clad building that defies time—weather—fire—storms.

PUT heavy, full gauge Galvanized "Metallic" Steel Siding plates on your building and you cross a steel coat that simply laughs at old Father Time.

Needn't paint for years unless you want to—unlike inflammable wood that needs constant protection. "Metallic" plates are absolutely wind, snow, the Rock and Brick-face and Clapboard the most popular. Send for price list today. We can save you money. We also make "Estate" Galvanized Shingles; "Empire" Corrugated Iron "Metallic" Ceiling Plates; Ventilators; Roof-lights; Silo-roofs, etc.

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HINMAN THE UNUSUAL MILKER

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With HINMAN MILKERS One man is enabled to do Three Men's Work and that is making you a lot of money. One Horse Power will operate three machines.

Get approximate cost of HINMAN Outfit and surprise yourself at its low installation cost. "B" 'tis interesting.

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H. F. BAILEY & SON - Galt, Ontario
Manufacturers under HINMAN Patents

DEAL WITH Farm & Dairy's Advertisers

The Power Behind the Profitable Farm

Farmers to-day have the best chance ever to make money—if they can only solve the labor problem!

Here's where the TORONTO Gasoline Engine comes in. It handles no end of heavy work around the barn and house, and does it far cheaper than hired men—even if you could get them. From grinding, driving the straw and hay cutter, filling the saw, pumping water and saving wood, down to running the milker, the separator and the griddlestone, it will do so many hard, tiresome jobs that you'll wonder how you ever got along without it.

TORONTO ENGINES

Give particularly good satisfaction because they are so simple and adaptable. Our illustrated booklet shows that there is nothing complicated about them to be figured out. Unhooked up or referred to experts—nothing likely to get out of order and tie up an important job. They start easily and run like clockwork, at a speed that can be controlled within wide limits while they are running.

We also manufacture
Windmills, Pumps,
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Battery or Magneto Ignition—Gasoline, Kerosene or Natural Gas Fuel.

Made in five sizes—No. 2 1/2, 4, 6 and 8 H.P. Trucks furnished if desired. Full descriptions, specifications and shipping weights are given in our new Illustrated Catalogue, with valuable hints on using power instead of labor, to advantage and profit. Write and we will send you the booklet promptly.

Toronto Stable Equipment

is Durable, Sanitary and Time Saving

The stable fitted with TORONTO Stalls, Stanchions, Water Bowls and Litter Carriers is bright and airy—easy to keep in clean, sanitary condition—and so healthy and comfortable that the same animals will produce decidedly more milk and beef from the same amount of feed. Our Illustrated Catalogue on Stable Equipment tells all about the advantages of modern fittings. Write for it.

Ontario Wind Engine and Pump Co. Limited

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Sometimes a renewal subscription is sent us, but the initials are given differently. In this way sometimes two copies are being forwarded to the same person.

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If you are getting two copies, or bills when you have paid up, there is some mistake. In this case please send us a card giving as much information as possible, so we can locate the error.

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in FARM AND DAIRY are reliable. They are advertising reliable goods. They want to know you; and they want to know where you saw the Ad. When writing them don't forget to tell them you saw the Ad. in FARM AND DAIRY.

HORTICULTURE

Orchard and Garden Notes

It is not too late to order some fruit trees or berry plants.

Beets, onions, radishes, and lettuce may be sown in hotbeds now.

Rich soil and plenty of room are needed for the best development of sweet peas.

Be sure the manure is heating well before it is put in the hotbed and then tread it down solid.

Plant radishes or other rapid-growing and ripenaturing crops with slow-growing crops, such as parsnips, beets, carrots, or onions.

Dahlias, gladioli, sweet peas, pansies and perennials are good money crops if one is near a large town or summer resort.

About 125 acres of asters are said to be grown yearly in the vicinity of Rochester, N.Y., for seed. The cool nights and even day temperatures are excellent for good aster development.

Coal ashes, cinders or other similar material scattered over snow drifts will help break up crusts as the snow melts, and of small shrubs break through without damage to the branches.

It is time to get the spraying machinery in shape and to lay in a supply of spray material. It does not pay to get along without spraying. There are too many diseases and insects that may easily be kept in check by proper spraying.

A Surface Hotbed

A SURFACE bed is made by putting properly leached horse manure in compacted layers making a flat pile about 15 to 18 inches high and a foot longer and wider than the frame to be placed on top of it. The frame may be of any convenient size to fit the space available. It should be, however, facing the south and the front side should be four to six inches lower than the back, in order to get the most direct rays of the sun and provide for water running off. Care should be taken that the front side is of sufficient width to allow head room for the plants after the bed has been put in. Usually a board 10 or 12 inches wide in the front and 14 to 18 inches wide in the back is necessary.

Manure should be banked up about the sides to furnish protection. Four to six inches of soil is usually placed in the bed and seeds may be sown directly in this soil or sown in boxes and the boxes placed on the surface of the soil.

Where seed is sown directly in the bed, violent heating which usually takes place immediately after the bed is made should have subsided. Watering should be done only as necessary, and ventilation should be given regularly, in order to keep the plants in a thrifty growing condition.—J. J. Gardner, Colorado Agricultural College.

Potatoes—A.U.S. View

SUPIDS are the aristocrats of the vegetable world at the present time. Prices have touched a point never before reached. Unfortunately, the grower in few instances has received the benefit of these unheard-of prices. It has been the speculator who has enjoyed the big profit and had it not been for the boycott as a weapon in the hands of the public there is no telling how much toll the middleman would have taken from the public.

The situation is one that calls for sober thinking and it is safe to say that there is not that big fortune in potato growing that looms up at the present time. A word of caution has recently been sounded by the Iowa

State College. The truck-growing department of that institution has acquired information to the effect that an enormous acreage of potatoes will be planted this year, growers planning to get in on the ground floor while the high prices last. That institution states that, while potatoes should have a place in every home garden this year, it will be the height of folly for an inexperienced man to undertake potato growing on a large scale. At the first place, it will cost approximately \$35 an acre to plant potatoes, this investment being required for the seed alone. To this must be added land rental and the labor involved in handling the crop. If conditions are at all favorable for production, the market can be glutted in one season and the bottom may fall completely out of the price scale in a few weeks.—The Iowa Homestead.

Some Good Advice Right Off the Ice, For Dodging Froststuffs Awful Price

W. E. Vaplan, Colorado Agricultural College.

IT makes the grocer laugh out loud to see the foolish, hungry crowd step up and buy his tin can beans with money having long faded jeans. He smiles to see how keen they are to buy the stuff that's often tough, and stinky, stale, just good enough for thriftless folks to buy and eat; but not as good by fourteen miles as stuff that mother canned in pails. We've left the good old-fashioned way of fixing for a rainy day by canning corn and peas and beets and other things and for eating. We used to like to turn the soil, we used to exercise in toil, to pull the weeds on hands and knees and feed the chickens and the bees. To plant the radishes and peas was our delight, but now we scoff at honest toil and play at golf or jump into our rusty car and hit the highway with a jar; we spend our money on beer, and eat of eating garden sass. No longer is the cellar filled with kraut and lard, and pickles dilled, with spuds and eggs, preserves and jam, and bacon, sausage, pork and ham. The moral is not hard to tell, unless you are both deaf and blind. Just buy your wife some garden seeds, plant modern tools to dig the weeds. Send to your college for the rules for canning stuff from squash to mules.

Dormant Sprays

THE time of year for dormant orchard sprays is now at hand and doubtless there are many fruit growers who are considering the use of some of these sprays for the destruction of woolly aphis or some of the green orchard lice upon their apple, peach, or other fruit trees.

There seems to be an impression abroad among the fruit growers, that these plants will be safe from the egg stage by spraying with such materials as lime-sulphur or one of the miscible oils before the buds open.

We have gone quite thoroughly into this matter in an experimental way at the Agricultural College and have been compelled to conclude that neither of these sprays are at all efficient in the destruction of plant louse eggs. Facts in our experiments, we have not been able to destroy the eggs at all with these substances unless they are used in strengths far beyond what would be practical in orchard work. The experiments also indicate that it is not practical to use a lime sulphur mixture for the control of these plant lice at any time of the year.

If plant louse eggs are present upon orchard trees in any considerable numbers, it would be advisable to make a thorough spraying of the trees with miscible oil, tobacco extract (such as "Black Leaf 40"), or a good

Over
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in greas

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BRANCH

Three No. 1 Skunks

What
Your Be
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Get your best
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Has saved many thousands
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Kl. Hulse, Jr., Halifax
I have been a user of
Cure for about 20 years, and
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Don't miss the chance with
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The power furnished by the valve-in-head motor enables the driver of a Chevrolet to take on high gear, hills which baffie other makes of cars.

The Chevrolet delivers maximum power to the rear axle which accounts for the gasoline economy and hill climbing ability.

Own a Chevrolet and enjoy the thrill of passing the other fellow.

\$695 f. o. b. Oshawa, Roadster \$690, including electric lights and starter, speedometer, oil indicator light equipment, non-skid tires on rear wheels, etc.

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OSHAWA, ONTARIO

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MICA AXLE GREASE

makes miles shorter, pulling easier, friction less.

It's the Mica. Mica puts the e-a-s-e in grease.

THE IMPERIAL OIL COMPANY Limited
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Three No. 1 Skunk, B.R. 2, Casfold, Ont.

What is Your Best Horse Worth to You?

Yet your best horse is just as liable to develop a Spavin, Ringbone, Splint, Curb or lameness as your poorest!

KENDALL'S SPAVIN CURE

has saved many thousands of dollars in horse flesh by entirely curing these ailments.

Dr. J. Kendall Co., Rossford, Ont., writes: "I have been a user of your Kendall's Spavin Cure for about fifteen years, with good results. Could not take chances with your horses. Keep a bottle of Kendall's handy. It's worth \$1. Our book 'Treatment on the Horse' free at druggists or Dr. J. Kendall Co., Rossford, Ont., V19

kersene emulsion just as the buds are beginning to burst in the spring. At this time, the plant lice are nearly all hatched and will be resting upon the buds waiting for the first appearance of green leaf tissue to enable them to begin to feed and grow. At this time, the lice are easily killed, and it is not difficult to get the spray in thorough contact with their bodies, as there are no leaves to protect them.

The lime sulphur spray, while practically useless for plant louse control, is of great service as a dormant spray for the control of the San Jose scale and red spiders and brown mites in the orchard.—C. P. Gillette, Colorado Agricultural College.

The Apple Tree Borer

A SUBSCRIBER writes to tell us that apple tree borers are working havoc with his orchard and asking if there is any effective way of dealing with this pest.

We presume that the borer referred to is the common round headed apple tree borer (Saperda Candida Fabricius) one of the most destructive enemies of the apple and one of the most difficult to control. There is no remedy which will absolutely prevent its depredations. Kerosene emulsion sprayed upon the trunks of the trees several times during the summer, seems to be quite an effective deterrent. Tarred paper closely wrapped around the tree from the roots to a foot or more above the ground and a preventative netting are also used as mechanical protectors. Some chardists mound the earth up five or twelve inches around the base of the trees in early spring, thus forcing the beetles to lay their eggs higher up on the trunk where the grubs can be more easily found and dug out.

Clean culture is one of the best preventative measures. Do not allow rank or other vegetation to accumulate about the base of the tree. The surest and best remedy, however, once the borers are in the trees, is to dig or cut them out. The borers will betray their presence by the oozing of sap or by particular holes in the bark leading into the burrows. If it is then an easy matter to reach the borer with a sharp knife or chisel, or a wire may be pushed into the tunnel until the grub is impaled. The trees should be examined in early spring, not later than May, and continue to use the knife during the summer.

Why the Boys Leave

A PARENTIAL lack of opportunity, says the department of farm management of the Nebraska Agricultural College, is the reason boys leave the farm. A survey shows that 79 per cent. of the boys on small farms the exodus is only 16 per cent. This gives statistical support to what has been pointed out by persons willing to face the facts—namely, that a very large proportion of the boys who leave the farm do so not because they are lazy or because they do not want to stay in the country, but because they are crowded out.

When a farmer on a quarter section on that farm, they cannot all stay on that farm unless it is subdivided into farms of 160 acres are not being subdivided rapidly enough to be noticeable. One of the three sons can stay, perhaps, but the other two must find employment elsewhere, and they are very likely to drift to the town or city. More than that, the farms of the corn belt are growing larger and smaller and calling for fewer farmers rather than more.

We know of no question on which there has been more quackery than this one of why the boys leave the farm. A very large proportion of those who have discussed it have closed their eyes to the underlying economic reasons. They have advocated agricultural education, better social life, flower beds, music and other good things to stay the exodus. Some have delved a bit deeper and have urged fair prices to farmers, both on what they sell and what they buy. All of these things are good. They help to fill the farm with desire to stay on the farm. But they do not increase the number of farms, the opportunity to farm—and there's the rub. Educators, lecturers, preachers and writers have been denouncing it for years, and very few of them are talking the same old line of superficial stuff. The solution of the problem of keeping the boys on the farm, if there is any solution, will have to be set forward a long way when the majority see us the point that the Nebraska Agricultural College,—Nebraska Farmer.

In 1916 the fees for motor licenses received by the Province of Ontario totalled \$85,000. The Minister of Public Works estimates that the receipts in 1917 will total \$750,000, and that by 1920 the province will be receiving \$1,000,000 for licenses annually.

HYLO SILO

The cheapest silo you can buy—because it will make you the most money.

You don't buy a silo every day—get a HYLO silo. It's the best you can get. It's made of galvanized iron and yellow pine—built to last. It's the best you can get. It's the best you can get. It's the best you can get.

The exclusive patented features, special material, design, etc., of the HYLO silo set a new standard of silo quality in Canada.

Send for free silo book today!
Giles Mfg. Co. Ltd.
387 York St., Guelph, Ont.

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Bone Spavin

No matter how old the animal, how long the bone has been there, how many doctors have tried and failed, our Fleming's Veterinary Advice...
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WITH LOUDEN EQUIPMENT

IT IS EASY

Your time during harvest and harvest is most valuable. Save one-third of it by using Louden Hay Tools. They enable you to move larger loads easier and faster than in any other way. There are no delays at the barn for the user of Louden equipment. Louden Carriers with forks or slings will handle the loads safely and surely, and just as fast as they can be drawn from the fields.

THE LOUDEN JUNIOR CARRIER

Is at all times safe and dependable, because of its simplicity and its strength. For twenty years it has been standard, and on thousands of farms it is to-day giving excellent service.

THE LOUDEN BALANCE GRAPPLE FORK

Set the tines of the fork deep into the load. It will lift an immense bundle and deliver it in the mow in even flakes, not tangled up as is the case when other forks are used. Handles clover, alfalfa, loose grain or straw, as clean as timothy.

Our catalogues will tell you all about the big Louden line. Write for them to-day. They are free.

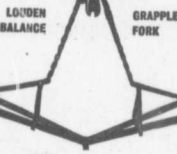


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LOUDEN MACHINERY CO. OF CANADA, LTD.

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VANCOUVER, B.C. WINNIPEG, MAN. ST. JOHN, N.B.

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Our handsome Spring Catalogue now ready. A copy will be mailed free on request.

SOW SIMMERS' SEEDS

J. A. SIMMERS
Bulbs, Limited
SEEDS, Plants
Toronto, Ont.

When You Write---Mention Farm & Dairy

A Sliding Prize List for Grain

In a great grain-growing province like Manitoba, seed selection is one of the most important considerations in connection with agriculture. Because of the importance of securing proper seed, the seed fairs of the province have great significance. Many seed fairs are held throughout Manitoba, but the greatest of them is the annual soil products exhibition, held under the auspices of the Manitoba Agricultural Societies. This year the exhibition was held in the Administration Building at the Agricultural College, Winnipeg, on Feb. 14th, and for the first time in connection with this fair the seed grain prices were awarded on a sliding basis. This plan has proved satisfactory at a number of the larger summer fairs. The graded prize list will permit of larger prizes being paid for oats and barley than formerly, and will also result in larger prizes where the competition is keener, and in the distribution of a larger number of prizes where the number of entries are large. The prizes will be distributed as follows:

		Wheat.									
Total Value.	Number of Entries.	1	2	3	4	5	6	7	8	9	10
\$5	2 or 3	\$3									
9	4 or 5	6	\$3								
18	5 or 6	9	6	\$3							
29	7 or 8	12	9	6	\$2						
39	9 or 10	15	12	9	6	\$2					
63	10 or 11	18	16	12	9	6	\$2				
84	12 or 13	21	18	15	12	9	6	\$2			
108	14 or 15	24	21	18	15	12	9	6	\$2		
135	16 or 17	27	24	21	18	15	12	9	6	\$2	
165	18 or over	30	27	24	21	18	15	12	9	6	\$2

		Oats and Barley.									
Total Value.	Number of Entries.	1	2	3	4	5	6	7	8	9	10
\$2	2 or 3	\$2									
6	4 or 5	4	\$2								
12	6 or 7	6	4	\$2							
20	8 or 9	8	6	4	\$2						
30	10 or 11	10	8	6	4	\$2					
42	12 or 13	12	10	8	6	4	\$2				
54	14 or 15	14	12	10	8	6	4	\$2			
70	17 or 19	16	14	12	10	8	6	4	\$2		
84	20 or 23	18	16	14	12	10	8	6	4	\$2	
110	23 or over	20	18	16	14	12	10	8	6	4	\$2

It is gratifying to note that notwithstanding the way last year's crops suffered from rust and drought there is still a great quantity of excellent seed grain in the province—more than enough for this year's needs if those wishing to secure seed can be placed in touch with those having seed for sale. In order to protect the buyers of grain for seed, germination tests were made in connection with the exhibition. It was hoped by means of the fair to put a large number of buyers and sellers of good seed grain in touch with one another.

Effect of Manure on Wheat

DURING the years 1912, 1913 and 1914, manure was applied to a number of plots at one of the U.S. experimental stations, in order that a comparison might be made with the unmanured plots. Five, 15 and 40 tons to the acre were applied to the respective plots. These man-

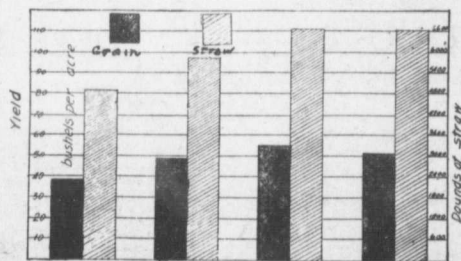
ured plots had for a number of years previous to 1912 been raising potatoes, and had received the same quantities of manure that were applied to the wheat. The figure shows the results obtained in the manuring test. They show an average yield of 38.1 bushels of wheat with no manure, 48.1 bushels with five tons, 55.1 bushels with 15 tons, and 51.4 bushels with 40 tons of manure. Thus, when compared with 15 tons, the yield of grain was actually decreased when as much as 40 tons of manure were applied every year. This is probably due in part to the fact that excessive manuring caused the straw to grow so rank that it lodged considerably and rusted.

The height of plants and the number of heads to the square yard were greatest with the most manure, but the length of heads, the number of kernels, the weight of 1,000 kernels, and the weight to a bushel of grain were highest with 15 tons of manure. The unmanured wheat had more kernels to the spikelet, than any receiving manure. The greatest gain in yield for each ton of manure was pro-

duced with five tons, which increased the yield two bushels for each ton of manure, while 40 tons increased the yield only .33 of a bushel for each ton.

A Record Dispute Settled

WHERE does the championship for Junior two-year-olds in H. O. P. work belong in the Jersey breed? Sometime ago the record was claimed for Brampton Central Princess. On the publication of this record, A. H. Menzies & Son, Pender Island, B.C., and Mr. Wesley McIntyre, of Sardinia, B.C., whose letters have been published in Farm and Dairy, both came forward with the claim that they had jr. two-year-old heifers that had exceeded the record of Brampton Central Princess. Farm and Dairy has written the Records Board and we believe we are now in a position to settle the question as to where the championship belongs. Fol-



Effects on Wheat Yields of Applications of 0, 5, 15 and 40 Tons of Manure per Acre.

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B. Centre Lady Park Butts' L.

From that Mr. the, hold production fat product Brampton stand, w of inform to claim Farm, Ont did not be

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15 to 14 qu will make pounds of this am no way in are tipped exp. Good poor sap y Maple st sweet. Ea puts every for no one the sugar h vitality con of maple s to eat it if keep on ea as food, or medi.

By-pro

There are maple sugar in all the to 1,000 tre ducts have yet, for the is just instal tion of time

Vinegar is any one fam vinegar from maple ayru article of vin your own y quality.

Then sugar is another b boils to syr down that is sugar sand eium and me former is one the acid-form powder.

Malic acid, has also a v \$10 the pound other commodo likelihood is chance reaso as a side issue tion.

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R OHT. Scot few days Ont, is c built the first about 30 years of the first purposes. He shire, Scotland, Canada in 1859. ceastly agricult ility of dairying

"What did you ed you a liar?" of his class. "I remember a soft answer to replied the boy. "Good lad! you know what "I bit him with

March 29, 1917.

FARM AND DAIRY

Following are the official productions of the three heifers:

	Lbs. Milk	Lbs. Fat.
B. Central Princess.....	2,241.5	490.185
Lady Pauline.....	10,023	431
Buff's Lassie.....	5,774	493

From this showing it would appear that Mr. McIntire's cow, Lady Pauline, holds the championship in milk production and Buff's Lassie in butter fat production. The claim made for Brampton Central Princess, we understand, was based on a faulty source of information and not on any desire to claim for the Central Experimental Farm, Ottawa, a championship that did not belong to them.

The Spring Sugar Harvest

(Continued from page 3.)

12 to 14 quarts of sap a year, and that will make from two to three or more pounds of maple sugar, and the taking of this amount of sap from the tree in no way injures it. The longer trees are tapped the sweeter becomes the sap. Good wheat harvest follows a poor sap year.

Maple sugar is nature's "supreme" sweet. Eating it and working with it puts everyone on his best behavior, for no one is ever out of humor in the sugar bush. Health, strength and vitality come to those that eat lots of maple sugar and syrup. To start to eat it as soon as it is made and keep on eating till you're satisfied is as good, or better than a course of medicine.

By-products of the Maple.

There are several by-products from maple sugar making that are utilized in all the larger bushes, of from 900 to 1,000 trees, tapped. The by-products have not been used in this bush yet, for the reason that an equipment is just installed, but it is only a question of time when all will be used.

Vinegar is the easiest product, and any one familiar with the making of vinegar from apples can make it from maple syrup. It makes a superior article of vinegar, and when you make your own you can be sure of its quality.

Then sugar sand or malate of lime is another by-product. As the sap boils to syrup a sediment is thrown down that is known in the bush as sugar sand. From it bi-malate of calcium and malic acid is made. The former is one of the most valuable of the acid-forming portions of baking powder.

Malic acid, the chief acid in apples, has also a variety of uses and sells at \$10 the pound, and in common with other commodities in ordinary use, the likelihood is that the price will enhance rather than diminish, so that as a side issue it is worth consideration.

Pioneer Silo Builder

ROBT. Scott, who passed away a few days ago at Meyersburg, Ont., is credited with having built the first silo in Eastern Ontario about 30 years ago, and was also one of the first to use gasoline for farm purposes. He was born at Berwickshire, Scotland, in 1839, and came to Canada in 1859. Mr. Scott was a successful agriculturist, making a specialty of dairying.

"What did you do when Jimmy called you a liar?" said the teacher to one of his class.

"I remembered what you said about a soft answer turneth away wrath," replied the boy.

"Good lad! What soft answer did you make?" inquired the teacher.

"I hit him with a gone-bad tomato."

Cockshutt Manure Spreader

—HEAD AND SHOULDERS OVER THE COMMON RUN—THIS
—SPLENDID MACHINE PUTS MONEY IN YOUR POCKET
—EVERY DAY IT'S USED—IN SAVED LABOR IN BET-
—TER DISTRIBUTION AND IN BIGGER,
—STRONGER CROPS

The Cockshutt ideals—simplicity, lightdraft and super-efficiency are fully worked out in this Spreader. "Spreader"—that's the word—not a mere "dumper!" Our idea of a Manure Spreader is one that thoroughly carpets the roughest field and leaves man and horses unwearyed at the day's end. And we've got it. The revolving spiked-studded delivery cylinders are fine but so far

ther—a special Distributing Paddle pulverizes and DISTRIBUTES the manure in a very thorough way. Strong, direct chain drive—no bothersome gears or clutches; the driving and conveyor chains are extra heavy and strong, for years of hardest service; easily-oiled bearings and big wide-tired wheels makes light draft; the box is specially low for easy loading.



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**The Rural Publishing Company, Ltd.
PETERBORO AND TORONTO**

"Read not to contradict and to confute, nor to believe and take for granted, but to weigh and consider."—Bacon.

Tax Reform in North Dakota

A BILL has passed the State Senate of North Dakota and will in all probability pass the House as well, exempting from taxation all improvements on farm lands. This is one of the first bills introduced by the Farmers' Non-partisan League, a league composed of North Dakota farmers, who, before the last state election, organized themselves into a third political party and swept both of the old parties almost into oblivion.

The enactment of this law will put an end to much of the silly talk, which was once accepted for truth, that farmers are opposed to all progressive legislation. Farmers are as able to see as others are that taxation of improvements is taxation of industry, and that the chief results of such taxation is to discourage improvements. They can see, furthermore, that taxation of land values does not hurt the farmer who puts land to good use, but the speculator who keeps it idle. Canadian farmers, particularly in the prairie provinces, have long stood for the taxation of land values and their endorsement of many other radical reforms leads us to believe that social progress, which once received its chief impetus from the cities, may in future have its home in the country. Canadian farmers will congratulate their North Dakota brethren in the step that they have taken.

Fertilizers Held Back

THE railway companies of Canada, unwillingly, perhaps, are about to give the agricultural programme for 1917 another black eye. Farmers in Ontario and at points further east, have suffered all winter from the shortage of heavy grain feeds, which were not forthcoming because of railway congestion at frontier points. Now comes word that congestion on the eastern

lines will prevent the delivery of thousands of tons of fertilizer this spring. Farm and Dairy has received information from the Ontario representatives of the Cross Fertilizer Company, of Sydney, N.S., that they are unable to ship their 2,000 tons of fertilizer, for which they have orders in Ontario, on account of this same railway congestion.

In view of the threatened food scarcity and the admittedly great need for keeping up agricultural production, this is a serious phase of the railway situation. In handling the situation Canada might learn from the enemy. In Germany so much importance is attached to the distribution of the fertilizer supply, that fertilizers are given priority over everything else on German railroads, except troops, munitions and foodstuffs. Of course, fertilizers do not play the same important part in Canadian agriculture, but when one concern is debarred from delivering 2,000 tons in one province, it is evident that the reduction, even in Canada, because of the lack of fertilizers, will be very appreciable. It may be that our railroads are attempting to cope with an impossible situation, but the Railway Commission should not allow the matter to rest where it is until the freight situation has been thoroughly investigated.

Our Imperial Relations

NOW that Australia is through with her political housecleaning, and has decided just who shall legally represent her at London, there will be an Imperial Conference in that city with statesmen from all parts of the British Empire in attendance. Our own Premier, Sir Robert L. Borden, is already in London awaiting the Conference. At this Conference the question of Imperial relationships after the war is certain to arise. Shall the Empire remain as it has been, a group of more or less independent states, bound together by ties of sentiment, or shall an Imperial Council be formed of representatives from the Old Land and all the Dominions, vested with legislative and executive authority? This is the great imperial question of the day.

The statesmen who will be called upon to decide this question carry a heavy responsibility. What do the people whom they represent really want? In Canada a small but noisy element, known as the Round Table group, are endeavoring to force the hand of our Premier. They are ardent imperialists. It is their desire to see the Empire governed from London. The United Farmers of Ontario took a stand in their annual convention which is more truly representative of Canadian public sentiment, and the resolution which they passed unanimously has already been cabled to Mr. Borden in England. They have asked that before any change be made in Imperial relationships that the people of Canada be consulted through a referendum. Mr. Borden will be glad to receive this cabled resolution, expressing as it does the opinion not only of Ontario farmers, but of the organized farmers of all Canada. It will indicate to him what his constituents desire. Incidentally, this cable is of significance as being the first attempt of Ontario farmers to make themselves heard as a united body in the discussion of a great national problem, an attempt made possible by organization. It is organization that will give the farmers a voice in the settlement of public problems, and organization only.

Reasons why the farmer finds the keeping of farm records advisable are summed up as follows by the farm management department of the University of Nebraska: (1) It provides a means of studying the farm business; (2) it often settles disputes, that is, if questions arise in dealing with others, the man who has kept records is best able to make his claims stand; and (3) carefully kept records improve credit.

Foodstuffs First

THE plea of the recruiting sergeant, from the first outbreak of hostilities, has made its strongest appeal to the unskilled laborer. The tendency in recruiting has always been to leave skilled laborers at their benches. Naturally! During the early months of the war, more munitions was the great need of the allies. The inevitable result of this policy, however, is that the farms were drained of their labor and agricultural production in Canada has declined to an alarming extent. From the first a few of the more far sighted leaders in the agricultural world have repeatedly warned our government that the result of heavy recruiting of unskilled labor, would be a dangerous decrease in agricultural production. The proof of their contention that a man can serve as well on the farm as in the trenches, is now more generally appreciated. Even the Minister of Militia, Mr. Kemp, seems to be fully cognizant of the importance of maintaining a sufficient working population on the land, and we understand that he is not urging that rural recruiting be vigorously pushed, for the time being at least.

Just how short is the supply of labor in Canada is made very evident by recent computations appearing in the Weekly Sun. According to the Sun the whole number of men in Canada, between the ages of 18 to 45 was 1,668,750 when the war began. The whole number of unmarried men was only 868,750. Of these not less than 300,000 have enlisted. When we consider that the majority of rural laborers, excepting the farmers themselves, were unmarried men, it is easy to understand why men just simply can't be had for the farms this spring. It may be taken as a foregone conclusion that agricultural production will decline in 1917 unless National Service is invoked to man the industry.

New Work for the Department

THE Ontario Department of Agriculture has done a grand work for the farmers of the province. When ignorance of methods of production was the one great obstacle in the way of successful agriculture, the Department tackled the problem vigorously. Farmers' Institutes were brought into being, fall fairs were organized, bulletins were published, and more recently district representatives have been stationed in almost all parts of the province. These agencies did and are still doing good work. But they don't fill the need so fully now as they once did. The field of agriculture has broadened. The problems of the farmer to-day are not problems of production so much as of economics. Department officials may well ask themselves if the work of their department has broadened correspondingly with the development of the industry it represents.

The fact, patent to every thinking person, is that farmers are getting tired of being preached at. This sentiment, which has been growing for several years, found voice on several occasions during a recent conference of the United Farmers of Ontario in Toronto. Delegates demanded, and their demands evidently met with the approval of the audience that the Department devote itself more to investigation work and less to preaching. Such problems as the cost of crop production, the adaptability of various sections and soils to various systems of farming and the relationship of the farmer to the transportation and marketing problems, are of greater moment now than the work to which the Department gives most of its attention. These are questions with which the farmer has to deal, and we feel that the Department which is supposed to represent our industry, should throw aside any tendency to get in a rut and deal as vigorously with present-day problems as they once did with production problems.

The Price of Canadian Wheat

Proposal to Buy the 1917 Crop Further Discussed by Government and Farmers

IN Farm and Dairy last week negotiations between the Federal Minister of Trade and Commerce and the Canadian Council of Agriculture regarding the purchase of Canada's 1917 wheat crop were reviewed. The prices set by the council, \$1.70 flat for No. 1 Northern, and other grades in proportion, or a minimum of \$1.50 and high. Sir Geo. Foster has issued another statement, part of which reads as follows:

"There are some considerations which may naturally suggest themselves to the farmers in coming to conclusions as to what constitutes a reasonable and safe price.

"(1) The rate paid for No. 1 northern does not indicate the price which the farmer will get for his whole crop. He is likely to have all grades from No. 1 northern to No. 6 commercial. On an average, he will have far less of No. 1 than of the lower grades. The farmer well knows the spreads to which, under the present method of purchase, he is subject on wheat of good milling value, and of inferior grades as certificated. If, on the other hand, the British Government buys all his millable wheat on terms of its millable value, and buys it from the farmer himself, and not from the speculator, the farmer gets the full price for all. He does not have to divide with anyone.

"In selling to the British Government the farmer gets the base price for his No. 1 northern, and gets for his other millable wheat a price determined by its value as compared with No. 1 for baking and for milling purposes. He is saved from the arbitrary spreads which rob him of his due and insure to the benefit of the middleman.

"(2) There are also chances to be taken in respect to price in the open market. The farmer cannot market this year's crop until the late fall of 1917 or the winter of 1918. Many things may happen between now and then. The price may be higher if the war continues for another year, the price may break lower if war ceases before this year expires.

"If he sells now to the British Government he knows that all his wheat is marketed at a good profit before he puts a seed into the ground. He may gamble, if he chooses, on chances, but before he takes that risk he should carefully consider the alternative—a profitable sale made now, and sure pay, and the getting of all his wheat all coming to himself.

Need to Secure Food Now.

"(3) There are, in addition, uncertainties of transport from Port William to Europe. At this very moment all British liners sailing from Canadian ports or from United States ports have from 75 to 100 per cent. of their space requisitioned for war and army food supplies; this leaves from 25 per cent. to nothing available for commercial freight offering. As the war goes on in this condition of things will not be likely to grow better—it may probably grow worse. Even if war ceases the demand for tonnage to transport to their homes the men and equipment released from the front will for many months be little less urgent than now. The uncertainty of transport will surely affect prices, and may very seriously affect them. But if the farmer sells now to the British Government his money is sure, and he need trouble nothing about transport—the British Government will attend to that.

"(4) It must be remembered that the British Government cannot wait until next autumn to look out for its food supplies. It must make certain that as possible as soon as possible. That is why it has arranged already for the British, Australian, Indian and

Egyptian surplus. That is why it wishes to secure the Canadian surplus and secure it now."

Is No Reason to Change His Mind.
H. W. Wood, President of the Canadian Council of Agriculture, and also President of the United Farmers of Alberta, when shown the statement of Sir George E. Foster, on the wheat purchase question, said he did not see anything in it to make him change his mind regarding the attitude which the Council had taken in rejecting the offer of the Government when it was considered by the Council at its Regina meeting.

"We took up the statement consecutively, and first touched on the \$1.12 which was paid to the Australian farmers. While there does appear to be quite a difference between this and the Canadian Government offer, it is more apparent than real." He said the Australian wheat is taken over on "fair average quality" grade, which is something very different from the strict grading to which Canadian wheat is subjected, and on which there is a very wide spread of price. The internal freight charge in Australia is considerably lower than the freight charge in Canada, and on which there are two very distinct advantages which the Australian farmer has, so far as concerned the actual net price which he gets for his wheat at the farm. The matter of bottoms for transporting this wheat must also be considered, and there is every possibility that the Australian wheat will not be available until after the war, whereas the Canadian crop available as soon as thrashing is completed, on account of the comparatively small inter-lanal as against the Australian distance.

1916 Offer \$1.50 to \$2.

"I have it on good authority," continued Mr. Wood, "that the British Grain Commission expressed their willingness to make an offer of \$1.50 as a minimum price for the crop of 1916, and a maximum of \$2 for No. 1 at Fort William, as their basis of operations for that crop. So far Sir George Foster has not made it clear that they are not willing to take the crop of 1917 at the same price."

Empire Farm for Canada

THE redemption of the British National Debt of four thousand million sterling by the establishment of an Empire farm, is the proposal put forward by the Empire Resources Development Committee, according to recent despatches from London, England. This great Empire scheme hinges upon Canada, and the suggestion was made by Mr. Moreton Frewen, M.P., vice-chairman of the Imperial Federation League, and a frequent writer upon economic problems.

Mr. Frewen sees great possibilities in the acquisition and ultimate sale by the State of farm lands in Western Canada. It is pointed out that certain lands in the United States, inferior in fertility to those in Western Canada, originally bought for nominal prices, have advanced to \$100 per acre. It is suggested that there might be lands in Canada which could be bought from the Dominion Government at five dollars an acre, which 20 years hence, under proper development, might realize \$100 an acre. The fact that the United States is, in near future, to become a large purchaser of Canadian cereals, coupled with the fact that European wheat lands have suffered owing to the war, would exert an important influence in these upwardly directed price anticipations proved correct then the purchase of 200,000,000 acres from the



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Better Now Than Ever Before

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The first belt driven, the first steam turbine driven, the first of the first bottom or suction feed, the first split-wing feed, the first matically-aild—all these and a hundred other features of separator development and improvement have been conceived by De Laval inventors and perfected by the De Laval Company, most of them for the De Laval construction.

The New 1917 De Laval

And now, in the De Laval machines for 1917, a number of new and still further improvements have been made, which make the De Laval machines of to-day much better in many respects than they have ever been before.

Their capacities are greater per dollar of cost; they skim cleaner under the most difficult conditions of separator use; they insure the proper speed necessary for complete separation; thus insuring the best lubricated, and the bowl construction is even more sanitary than ever.

In other words, superior as the De Laval machines have always been to all would-be competitors and utilizers of abandoned De Laval features, the De Laval machines of 1917 are improved and superior in every way to all previous types and models of De Laval construction.

All these improvements and new features are described and explained in the new 1917 De Laval catalogue now ready for mailing, but some of them are difficult to describe and make fully understood by words.

Be Sure to See a New De Laval

The new De Laval machines themselves best explain their new and superior features, and their use does this more completely and is glad to afford opportunity for examination, and better still, for home test of a new De Laval machine.

But the demand for the new machines is a month ahead of the possible supply under the present difficult conditions of manufacture and freight distribution. More De Laval machines by mail have been made ready ever before, but the De Laval Works is now ten thousand machines behind actual orders, and the demand is ever increasing.

Hence, the importance of securing a machine quickly if your local dealer happens to have one, and of ordering well ahead if he does not. And likewise, the importance of waiting patiently a little for a machine if he does not.

A new De Laval catalog will be gladly sent on request, and if you don't know your nearest local agent please simply address the nearest De Laval main office as below.

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

Dominion Government at five dollars a good, big, growthy two-year-old acre, re-sold 20 years later at \$100, could may be put to work if it is work-would redeem the whole of the national debt of \$20,000,000,000. At the cald only half a day each day. A three-year-old may work steadily if the load is not a constant strain for him, while the attraction of a great body of immigrants of the land settlement type so much preferred, mature and is good for a regular place in the work teams.



LIFE is worth living much better than most of us live it.

Winning the Wilderness

(Continued from last week.)

"It is ended now," Horace Carey said gently, "it is well that it is I am sure."

"Yes, Alice rests now beside her two little ones who went before her. She had no sorrow in going, except for Leigh. And—"

"And you lifted that, I know," Doctor Carey finished the sentence.

"I tried to," Miss Jane said, struggling between timidity and truthfulness. "I made her last hours peaceful, for she knew Leigh would be cared for and safe. I saw to that. Tank Shirley is bound to a surrender of all legal claim to her. It was left to Jim to take her, if he chose. If not, she belongs to me."

Doctor Carey read the loving sacrifice back of the words, and his heart warmed toward this sweet-spirited, childless woman.

"Jim wants her, else I could not have come," he said gently, "but you can come to Grass River to see her sometimes."

"Oh, no, it is so far," Jane Aydelot said, and Carey realized in how small an orbit her life revolved.

"Tell me of Tank, Miss Aydelot."

"He has run his course here, but he is shrewd enough to escape the law. His parents mortgaged the Shirley House to get money to keep his doings quiet. My Uncle Francis foreclosed on them at last. But by Jim's abrupt leaving, Cloverdale blamed him for a long time for the family misfortunes. Tank broke every moral law; he invested his money wildly in his greed to make more money, until finally the bank failure came. That is a long story, and it was a dead loss. But the cashier's suicide stopped investigation. All blame was laid on him. And he being dead, made no complaint and incriminated nobody."

"Where is Tank now?" Carey asked. He did not know why the image of Thomas Smith of Wilmington, Delaware, should come unbidden to his mind just now, nor why he should feel that the answer to his question held only a portion of what could have been told him then.

"Nobody knows exactly where," Jane Aydelot replied. "He left his wife penniless. She lived here with me and died here. Tank hasn't been seen in Cloverdale for a long time. It is strange how family ties get warped sometimes. And oftener over property."

Doctor Carey thought of Asher, and was silent. But Jane Aydelot divined his thought.

"I am thinking of our own family," she said, looking into the heart of the wood fire. "I have my cousin Asher's heritage, which by law now neither he nor any child of his can receive from me."

"Miss Aydelot, he doesn't want it. And there is no prejudice in him against you at all. Moreover, if his dream come true, little Thaine Aydelot will never need it." There was a

sternness in Carey's voice that pained his hostess.

"But, Doctor Carey!" she began hesitatingly. Then, as if to change the trend of thought, she added simply, "I try to use it well."

Horace Carey was by nature and experience a keen reader of human minds. As Jane Aydelot studied the burning coals in the grate, he studied her face, and what he read there gave him both pleasure and pain. Between him and that face came the image of Virginia Aydelot, who should be there instead; of the brown-handed farmer's wife, who had given up so much for the West. And yet, that face, framed

in its dark hair lighted by luminous dark eyes, seemed to blot out the dainty pink and white Jane Aydelot. A strength of will, a view of life at wide angles of vision, a resourcefulness and power of sacrifice seemed to defy the plainly clad prairie homemaker, winning, not inheriting, her possessions. Had Jane been anywhere else save in the home that Virginia might have had, her future might have had another story. But why forecast the might-have-been?

"You do use your property well, I am sure," Doctor Carey said, replying to the last words spoken between them, "and yet, you would give it up?" He knew her answer, or he would not have asked the question.

For reply, she rose and went to the little writing desk where the Aydelot papers were kept. Taking therefrom two documents, she placed them in Carey's hands.

"Read these," she said, "then promise me that in the hour when Leigh needs my help you will let me help her."

They were the will of Francis Aydelot and her own will. How much of sacrifice lay in that act of hers only Horace Carey could understand.

"I promise gladly, Miss Aydelot. I see why you are willing to give up little Leigh now," he said, looking up with eyes filled with sincerest admiration. "You are a wonderful woman. You have the same Aydelot heritage of endurance and patience and the large view of duty that characterizes your cousin Asher. Your setting is different. I hope the time may come soon when Ohio and Kansas will not

be so far apart as they are to-night."

He rose and took her hand in his. If Doctor Carey's magnetism made men admire him, it was no less an attractive force with women. As he looked into Jane Aydelot's gray eyes, he saw a new light there. And swiftly its meaning translated itself to him. He dropped her hand and turned away, and when their eyes met again, the light was gone.

It was still Indian Summer weather on the prairie when Doctor Carey and little Leigh Shirley reached Careyville. He had a feeling that Jim would prefer meeting Leigh in his own home, so no word had been sent forward as to the time of the coming of the two.

All through the journey, the doctor had wondered how Jane Aydelot could have given Leigh up at all. She was such a happy prattler, such an honest, straightforward little body, such an innocent child, and, withal, so loving that he could not but wonder how the first half day was ended. In her little gray wool gown and her gray cap with its scarlet quill above her hair, she was as neat and pretty as a picture of childhood could be.

Down on the Grass River trail, the two came upon the doctor's farm, and in from some errand to a distant neighbor, and the doctor hailed him at once.

"Come, ride with us. We'll take you home," he said, touching the wheel for Thaine's convenience. "This is Leigh Shirley, who is coming to live with her uncle Jim. You'll like to go to the Cloverdale Ranch more than ever now."

Thaine was only a little country boy, unused to conventionalities, so he took Leigh on her face value at once. And Leigh, honest as she was innocent, returned the compliment. At the Sunflower Ranch, Carey drew rein to let Thaine leave them. Leigh, putting both arms about the little boy's neck, kissed him good-bye, saying: "I have known you always because you are the Thaine"—she caught her breath, and added: "You must come to my uncle Jim's and see me."

"I will, I will," Thaine assured her. Doctor Carey looked back to wave good-bye just in time to see Virginia Aydelot coming toward Thaine, who stood watching the buggy. Instantly the pretty face of Jane Aydelot came to his mind, her face as she had looked on the night when they sat by the wood fire in the Aydelot farmhouse. Against that picture stood the reality of Virginia with her richer coloring.

"Nor storm nor stress can rob her of her beauty," he thought. "Forever sweet and self-sacrificing Jane Aydelot may be long ago."

He turned about at once and came back to where Thaine stood beside his mother.

"This is Jim Shirley's little girl, Mrs. Aydelot," he said, gently patting Leigh's shoulder.

"That's my wife," little Thaine said gravely. "We will go and live at the purple notices when I come home from the war."

Virginia's heart warmed toward the motherless little one and Leigh understood her at once. Not once in all the years that followed did the two fall each other.

The Cloverdale homestead never had known such a gay fixing as Jim Shirley had kept there for nearly a week awaiting the doctor's return. Truly, love is genius in itself, and only genius could have put so many quaint and attractive touches to such common surroundings as now embellished the little four-roomed house in the bend of Grass River.

Doctor Carey tied his horses to the post beside the trail, and, lifting Leigh from the buggy, he said:

"Uncle Jim is up there waiting for you, and oh, so glad, so glad to have
(Continued on page 23.)



"Read these," she said, "then promise me that in the hour when Leigh needs my help you will let me help her."

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The Upward Look

Christ's Words on the Cross

As the Easter time draws near we cannot but think of the days and the hours, the doings and the sayings of our Lord, before His crucifixion.

Clear and distinct stand out His last words on the cross, those words of forgiveness, love, despair, agony, trust and triumph. "Father, forgive them, for they know not what they do." No blame, no bitter words, but love, forgiveness and thoughtfulness for those, His bitter persecutors.

"Verily I say unto thee to-day, shalt thou be with me in Paradise."

All these years since, those words have been of inexpressible comfort to many a sin-burdened heart.

"Woman, behold thy son." Then saith He to the disciple: "Behold thy mother." We are so thankful for those words of tender thought to those two who loved Him dearly, the poor, grief-stricken mother, and the devoted disciple whom He knew He could trust to take care of her.

"My God, my God, why hast thou forsaken me?" Through these words of intense mental agony, Christ and humanity have been brought very, very close together. In hours of bitter anguish we can say: "My Lord knows and understands."

"I thirst." From those words we have a slight conception of the extent of that agony, which brings Him in His humanity very close to pain-racked bodies.

"Father, into thy hands I commend my spirit." When faith failed, in the presence of such mental darkness and physical suffering, the necessary comfort was given, and peace and trust were restored.

Last week I heard these words of Christ sung by a trained choir in a great church. "It is finished." This last was overpoweringly grand, but it could give but little idea of the real wonder, and grandeur, after those hours of agony, of that glad note of great conquest and glorious triumph.

—I. H. N.

Possibilities of Great Development

THE home garden contest, coupled with the canning contest, was undertaken I might almost say tentatively by Mr. P. Ryan, but I believe the results have encouraged him and he believes it well worth while.

Twenty-two branches took part, and a total of 245 gardens were judged on their own merits. These gardens were not competing one against another through the whole province, but the gardens of each branch competing one against another.

Fifteen varieties of seed were sent out from Mr. P. Ryan's department and information accompanied them. All that was necessary was to root them.

The score card that is used ensures fairness for each garden and no girl need fear to enter as a little plot 30 x 40 feet, isn't a very large undertaking. The possible total score was 100 per cent, allotted to various points. Ninety-six gardens scored 75 per cent. of those marks and over.

What about that for the women and girls? Two of the gardens scored 95 per cent. and one garden managed by one girl scored 100 per cent., the successful gardener being Miss Gladys White, of Whittington, in Dufferin county. Another garden, that of Mrs.

* Extract from an address given by Miss M. Yates, Port Credit, Ont., at the annual convention of the Women's Institute held in Toronto last fall.

Carruthers, of Grey county, scored 98.

There are other aspects of this gardening contest to which I would like to draw your attention. There is the question of the food supply. This variety or lack of variety in our food coupled with the cost, is quite a problem. I wonder how many know that \$10,000,000 was used in one year to import fresh fruit and vegetables. Don't you think that the women of Ontario might bestir themselves and see if our own fruit and vegetables might not be made as palatable and plentiful as the imported stuff. We hear much talk nowadays about meatless days. Couldn't we institute a vegetable day once a week? Last summer when out visiting these garden plots, I was given a vegetable dinner and I enjoyed it very much. There is altogether too much interest taken in the roots of our vegetables and not enough in the part that grows above the ground. Spinach and chard as a rule are not much enjoyed, the reason being that they are not properly cooked. We should study this point and cultivate a liking for more varieties of vegetables.

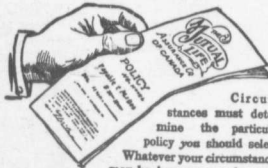
Then there is the human aspect in connection with the contests. It was delightful to see the eager interest taken in these winning gardens by the men and the eager interest in connection with the contests is that they are well worth while and there are possibilities for great development.

Homes Secured for Children

IN our issue of March 8, we published descriptions of several children secured for the Children's Aid Society at Oshawa, Ont., and for whom Rev. Mr. Hall, the superintendent, was anxious to secure homes. A few days ago we received the following letter from Mr. Hall, which speaks for itself:

"I must thank you for your promptness in advertising the children for me in your valuable paper. Your paper always reaches people and brings results. I have been almost deluged with applications for all the children we have but one, which is the feeble minded one. It was good of you to do so much for us. Best wishes and deepest thanks."

The very policy for you



Circumstances must determine the particular policy you should select. Whatever your circumstances may be, however, we have the particular policy to provide for them.

Is it protection you need? A straight Life Mutual policy, with profits applied to reduce premiums, is the one to choose.

If again you wish for protection, but do not care to think of paying throughout life, take a Mutual Life policy, but with payments limited to say twenty years.

If you wish to save money but find it difficult—as most of us do—take a Mutual Life 15, 20 or 25 year endowment payable to yourself at the end of that time.

It may be that you are liquidating a debt which will take some years to pay. Lest you should not live to complete the payments, take a term policy sufficient to pay the debt.

Do you fear that the proceeds of your policy might be misapplied on account of inexperience on the part of the beneficiary? The policy for you is our Life Income Policy payable in monthly instalments.

The Mutual Life

Assurance Company of Canada
Waterloo, Ontario

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This Free Book is Invaluable to Every Householder

If you intend to paint your house or barn, to varnish or enamel your furniture, to finish your floors, to decorate your walls, to paint your boat, automobile, buggy, wagons, farm implements, concrete, stucco or brick work—you need this book.

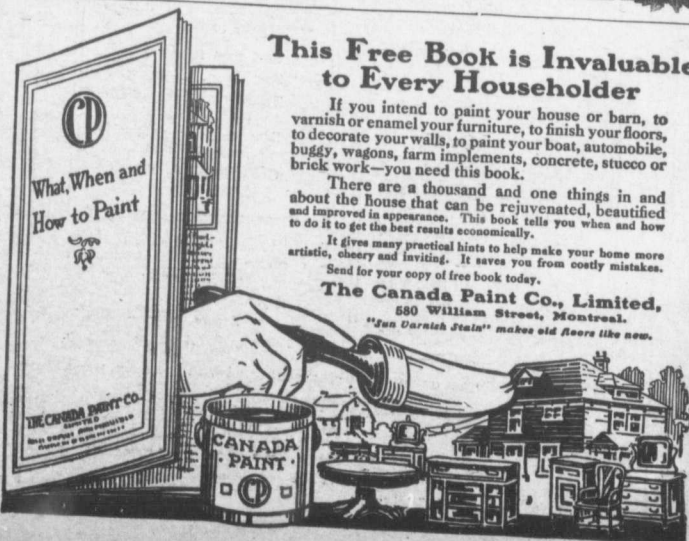
There are a thousand and one things in and about the house that can be rejuvenated, beautified and improved in appearance. This book tells you when and how to do it to get the best results economically.

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AMUSEMENTS

Conducted by MARION DALLAS

An April Fool Party and Pranks

"A LITTLE nonsense now and then is relished by the wisest men." So if you are feeling sad and depressed, thinking of the pre-

vailing conditions, throw off your gloom, send word to a few of your friends (who likely feel as you do), to come to an "April Fool Party." The invitations might represent a Fool's Cap, and if you can draw or paint, ever so little, decorate with sketches of a fool fester. Request each guest to relate the most fool things they ever did or heard. When the hour for the party arrives, have the house all in darkness and the blinds closely

drawn. As the guests enter the door, turn on the lights. The refreshments should be as deceiving as possible. Serve your ice cream first. Put your salad in cream puff shapes instead of a cream filling. Change your dishes; in fact anything that suggests substitution, carries out the idea of an April fool. Seeing Your Picture. Announce to the guests that they have a picture to show them, which

has given you a great deal of pleasure. Pull aside a curtain revealing a mirror with "April Fool" written on it with soap three two or three looking at the mirror at the same moment.

Blind Man's Walk.

Pile sofa pillows, books, plants and anything in the way of obstruction on the floor, then tell the guests, one at a time, to come into the room. Let them take particular notice of the obstacles, then blindfold them and tell them to walk across the floor. In the meantime after the victim is blindfolded, clear the floor. It is fun to see the blind man try to avoid the supposed obstacles and to witness his astonishment when he is free of the bandage.

Musical Chairs.

This good old game is appropriate for April 1st. Chairs, one less than the number of persons who are playing the game, are placed back to back in two rows in the center of the room. Some one plays the piano and as long as the music continues the players march around the chairs. The music stops suddenly and each one tries to get a chair and the one who falls is April fooled. The game goes on a chair being removed each time until all are out but one.

Partners for Supper.

To see "who will go to supper with who," take ribbons three-quarters of a yard long, and shut them between folding doors, the men on one side, the women on the other; each takes the end of a ribbon and when the doors are opened, the person holding the same piece are matched. After the refreshments are served, begin the recounting of "fool" stories with a prize for the best story. When awarded, the box or package will contain a laughing.

Pranks for the Small Boy.

Nobody objects to being fooled on April 1st, providing the prank is free from every element of danger that might result in personal injury or damage of some sort. The success of an "April fool" prank depends upon knowing how and when to play it. You must take a person unaware, when he is not thinking of what day it is, and your actions must be natural.

During the early morning the clock is probably the most looked upon object in the house. Therefore, if it develops an extra pair of hands over night, the abnormality is not likely to escape anyone. You must be right on the spot, of course, to greet each exclamation of surprise with "April Fool!" The hands are cut out of black paper and pasted on the face of the clock.

One of the most surprising and annoying things for father or mother to discover is a frog crack across the corner of one of the large panes of window glass. You can make a perfect imitation of a broken window pane by gluing a piece of cotton wrapping twine to the glass. Put only a touch of glue here and there, where you make a turn with the string. I have never known this deception to fail, even when the person examining the window has stood but three feet away. After everyone has seen the "crack" and all are wondering "who did it!" remove the string and have your laugh.

Quite as startling as the "broken" window pane is the sight of an overturned ink bottle upon one's writing desk. The ink bottle used in this prank must be empty, of course, and the spill ink must be represented by a piece of black paper placed so as to extend up to the mouth of the bottle.

To get that nice golden crust on the top crust of pies, instead of that pale sticky color we sometimes see, brush the top with a little milk and sprinkle with granulated sugar.

Forward to Victory

Mobilize Farm Forces for Production!

TO Raise Armies is not enough—they must be fed.

Vast quantities of staple foods are needed for overseas.

Wheat, Oats, Beef, Bacon, Cheese,
Eggs, Butter, Poultry, Beans and Peas,
Wool, Flax and Flax Fibre.

THE CANADIAN FARM can render NATIONAL SERVICE by keeping up the Food Supply.

Tremendous demand, scarcity of labour and high cost of seed insure against over-production.

THIS YEAR it will pay to

Save the choice calves
Breed all good heifers
Keep an extra sow
Rear another brood of chicks

Save time and labour by planning the year's work

Every extra effort helps.

REMEMBER it always pays to

Test seed for vitality
Sow clean, plump seed
Treat wheat, barley and oats for smut
Sow only on properly prepared land
Grow the best producing varieties

NO matter what difficulties may face us, food production is a supreme duty.

A great cause—

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A grand opportunity.

If you need information on any subject connected with the farm, write

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Are Our Meals Properly Balanced?

In Prof. R. Harcourt's recent bulletin on "Food Values" he imparts a considerable amount of valuable information which is well worthy of study and application by every housewife, especially under conditions at present. Too many of us are not familiar with the nutritive value of various foods, and we should take advantage of every opportunity to learn as much as possible on the subject of properly balanced rations for the family.

Prof. Harcourt points out the way in which the cost of living has increased. The price of flour has advanced over 50 per cent. in the last year or two; potatoes are double what they were a short time ago, and breakfast foods, meats, eggs, etc., are all selling for much higher prices than formerly. It is not the increase in

if there is sufficient protein in the diet to do the work which it alone is able to perform, the amount of heat a food is capable of producing is the best basis upon which to make a comparison. With this idea in view, Prof. Harcourt shows by the accompanying table, the number of calories of protein, fat and carbohydrates that will be furnished in one dollar's worth of a number of our common foods.

It will be seen that rolled oats will give us more calories for the dollar of expenditure than any other food listed. The cereals are all at the top and the meats at the bottom. Rolled oats stand high in energy-producing power and protein; skimmed milk is the cheapest source of protein we have, and buttermilk next. Cereal foods then, along with milk as a source of protein, are the cheapest. A pound of digestible protein from one source is just as good as

	Price.	Protein lbs.	Fat lbs.	Carbohydrates lbs.	Fuel Value Calories.
Rollod Oats	5 c	2.5	1.26	14.3	36,950
Wheat Flour	5 per lb.	2.0	.20	16.0	34,307
Spring Wheat Flour	5 00 " cwt.	1.21	.20	14.3	33,789
Corn Meal	5 " "	1.9	.20	16.0	33,733
Parinas	5 " "	1.9	.20	16.0	33,733
Rollod Oats (package)	25 for 4 lb.	2.09	.39	18.6	33,334
Sugar	8 00 per cwt.	1.00	...	...	29,560
Rice	7 " "	1.00	...	...	22,121
Peas	7 " "	3.00	.05	11.3	23,210
Parinas (package)	16 for 2 lb.	1.26	.14	10.3	22,297
White Bread	16 " 3 "	3.0	.50	9.1	21,650
Buttermilk	10 " "	1.94	.04	8.8	17,070
Skim Milk	10 per gallon	3.0	.50	9.1	17,262
Barley, pearl	10 " "	1.9	.34	10.0	17,070
Beans	10 " "	1.90	.27	6.0	16,633
Potatoes	10 " "	.74	.19	6.24	15,397
Maltia Vils	10 " 12 oz.	1.0	...	...	12,716
Toasted Corn Flakes	10 " "	.81	.11	6.06	12,517
Grape Nuts	10 " "	1.0	...	...	12,143
Milk	10 " "	.65	.03	1.66	10,482
Shredded Wheat	10 " 12 oz.	1.21	1.36	4.42	9,659
Butter	10 " 1 lb.	1.00	...	...	7,570
Beef, flank	10 " "	1.00	...	...	7,333
Mutton Chops	10 " "	.56	1.20	...	6,108
Ham, smoked	10 " "	.45	...	...	5,963
Beef, sirloin	10 " "	.84	...	...	5,770
round steak	10 " "	.79	...	...	5,718
Lamb, hind quarter	10 " "	.44	...	...	5,272
Ham, smoked and cooked	10 " "	.61	...	...	4,906
Salmon, canned	10 " "	.15	...	...	2,716
Salmon Trout (fresh)	10 " "	1.05	...	...	2,659
Cod (salted)	10 " "	.48	...	...	2,307
Eggs	10 " doz.	.61	...	...	1,912
Halibut (fresh)	10 " lb.	.18	...	...	1,834

the cost of those foods which may be called luxuries that is bothering the consumer; but it is the fact that the have advanced so much that providing for the wants of the family has become a serious problem.

The constituents we value most in our foods are protein, fat, carbohydrates and ash. Protein is the name commonly given to a class of substances which furnish the materials for the formation of bone, flesh, blood, etc. Protein, when oxidized or burned in the body, will produce heat, and if eaten in excess of that required for other purposes, may form fat. Protein is one of the most important constituents in the diet, and the most expensive in our food. Hence we naturally like to find a food rich in this substance. Fat is food of value for the formation of energy and heat. It has more than twice the value of protein and carbohydrates for producing heat and energy. Carbohydrates consist mainly of starches and sugars, and their particular function is to produce heat and energy and fat. Ash is the inorganic or mineral part of foods.

The various nutrients referred to above, when supplied in the food, enable the body to grow and to repair its tissues as they are worn out in the necessary exercise of the body functions. All the nutrients, except the ash, may be oxidized or burned in the body, and there are therefore sources of energy. This energy value is conveniently stated in terms of heat, the caloric or unit of heat being used for this purpose. As one of the main objects of food is to produce heat and energy, it is generally considered that

from another. Many will be surprised at the position of eggs in the table, but Prof. Harcourt calls attention to the fact that comparison of meat and eggs depends on the price. While it is difficult to make an absolutely just comparison between foods of unlike nature, such as those mentioned in the table, it is worked out on the principle that when there is sufficient protein in the diet, the number of calories in heat a given amount of food will furnish is the best method upon which to compare its nutritive value. The figures in the table will stand sure.

For an Eight-Hour Day

WHEN the dawn is in the sky Mother busily draws nigh, That precedes the drowsy peep, Busy still until the breakfast bell. Brings the dinner, none too soon; Busy still until the chime Gaily rings for supper time; Busy through the twilight glow As the stars begin to show Busy still, till prayers are said And the rest have gone to bed. Even when to sleep she goes, Vigilant in her repose she'll be, She will hear the lightest fall That from childish lips may fall. Yesterday she paused to smile, Saying, "Maybe, after while, An arrangement we will see For an eight-hour day for me."

—Washington Star.

To prevent new tinware from rusting, try rubbing it over with fresh lard and baking in the oven before using.

Wouldnt you exchange stumps for dollars?

Then Plant Crops where the Stumps stand

There has never been a time in Canada's history when it was so important to increase the production of your farm. This is true both from the patriotic as well as a money-making standpoint. You can increase your crops from 10% to 30% by removing the stumps and by using the



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Marmalade I made it with my same old recipe but I used

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On account of its Fine granulation it dissolves instantly making a clear jelly.

2 & 5 lb. cartons, 10, 20 & 100 lb. sacks

Will it be a Dry Season?

You don't know—nobody knows. But if you take the precaution of proper tilling you will have as little to fear from insufficient moisture as hundreds of users of Peter Hamilton Cultivators last year. Good seed deserves better treatment than simply planting it haphazard. Work up your soil with a

Peter Hamilton Cultivator

and you'll get improved results. All teeth cultivate to the same depth and thoroughly work up every inch of the ground. Every tooth reinforced, each section of heavy steel. Set this splendid implement before investing in any cultivator.

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Agents wanted in open territory

The Surest Way To sell your surplus stock is through the live stock columns of Farm and Dairy. The cost is little and the results certain. Send in your ad.

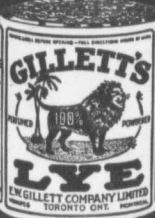
Some New Spring Shades, Very Brilliant

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Farm and Dairy patterns shown in these columns are especialy prepared for Our Women Folk. They can be relied upon to be the latest models and include the most modern features of the paper pattern. When sending your order please be careful to state bust or waist measure for adults, age for children, and the number of the pattern described. Orders are filled within one week to 10 days after receipt. Price of all patterns to Our Women Folk, 10 cents each. Address orders to Pattern Dept., Farm and Dairy, Peterboro, Ont.



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For some weeks past the styles which are to predominate this season have been more or less conjectures, and we have not been able to come to any definite decision as to just what styles were to consist of. The new more brilliant colors, such as light tan, bright greens being particularly conspicuous. Purple and maroon colors are being combined, and flame red is to be much favored. Favorite materials for houses are georgette crepe both plain and figured, crepe de chine and net and lace combined. White pongee combined with georgette crepe will make some of the daintiest summer frocks, so we are told. If the heavy variety of georgette is secured, these materials are durable and washable.

1918-1919.—Here is a popular style of costume for the school girl and for wear during the summer holidays. The middie is so easily slipped on and off that it proves a favorite with many girls. The skirt of this costume can be worn separately if desired, and the model calls for separate patterns, 10 cents for each. The outfit is cut in sizes 16, 18 and 20 years.

1919.—Girl's Dress.—This dress is made with a separate gimp, which makes it easy of construction and easily put on. Notice the dainty way in which the long sleeves are finished at the wrist. If desired, of course, short sleeves may be utilized. For a dainty dress for special occasions, this would make up nicely in silk with a contrasting material, probably net, for gimp. Four sizes: 8, 10, 12 and 14 years.

1917.—Lady's Apron.—Large pockets and a belt are two style features of this apron and they take away from what might otherwise be a very plain effect. An apron made from this model will be a great protection for the dress. Four sizes: 34, 38, 42 and 46 inches bust measure.

2001.—Lady's House Dress.—The noticeable feature about this house dress are the pockets and the large collar. A large collar adds so much to a plain dress that it is practically all the trimming necessary for a special for house dress. As leather belts are quite fashionable this season, one would work in quite nicely with this costume. Seven sizes: 34 to 46 inches bust measure.

1904.—Junior's Dress.—Long, loose lines are popular in dresses, both for grown-ups and young girls, and herewith is a dainty model. The wide belt, large collar and chic pockets are style features. Buttons are shown down the front, although these might be omitted if desired. A wash dress which buttons down the front is easily laundered. Three sizes: 12, 14 and 16 years.

1915.—Lady's Dressing Sack.—Many women favor the dressing sack for comfort, and this style is especially dainty. The large surplus collar is effective, and the skirt portion hangs quite full. Six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure.

2003.—Lady's Dress.—When it becomes warm enough to go out without a coat, it is sometimes a problem to decide just what we are going to wear. While a neat blouse and skirt look very well, the complete dress seems to fill the bill admirably. The design here shown a good prove popular with many of our women folk. It is plain, but carries good style. A large georgette crepe collar on a dress of darker color would be very effective. Note the artistic belt and cuffs. Seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure.

Don't forget when ordering your patterns to take advantage of our catalogue offer. An extra 10 cents will take one of these catalogues to your home.

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High Grade Government Standard Seeds

	Per Bur.
No. 1 Mammoth Red Clover	\$14.99
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No. 1 Alsike Clover	12.50
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No. 3 Timothy	3.25
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Marquis Spring Wheat	Per Bur. \$2.49
O. A. C. No. 21 Barley	1.45
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Leaming Fodder	Per Bur. \$1.75
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Compton's Early	2.45
Sanford White Flint	2.50
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SOLUBLE SULPHUR COMPOUND

The Sulphur spray in powder form. Best for cold spraying. Dissolves instantly in hot or liquid water—contains no sediment. Special for house dress. There is no leakage or loss, and it is easy to apply.

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A 100-lb. drum of Soluble Sulphur makes more spray than a 60-lb. barrel of Lime Sulphur Solution. Diluted, 3 lbs. to 49 gallons. Soluble Sulphur costs less than half as much as Lime Sulphur Solution. Remember: "Wherever Fruit Excelle, Niagara Spray is Used."

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Winning the Wilderness

(Continued from page 12.)

you come. Go and meet him, Leigh." Leigh smoothed her little gray wool frock down with her dainty hands. Then, pushing back the gray cap with its scarlet tulle from her forehead where the golden hair fell in soft rings, she passed up the grassy way to meet Jim Shirley. He could never have looked bigger and handsomer than he did at that moment. In his eyes all the heart hunger of years seemed centered as he watched the little six-year-old child coming towards him.

Just before reaching the doorway she paused, and with that clear penetration only a little child possesses, she looked up into the strong man's face.

"Uncle Jim. My Uncle Jim," she cried. "I can love you always."

Jim gathered her close in his arms and she clung about his neck, softly patting his brown cheek as they passed into the house.

Leigh Shirley's coming marked an epoch in the annals of the Grass River settlement, for her uncle often declared that he could remember only two events in the West before that time: the coming of Mrs. Aydelot and the grasshopper raid. With Leigh in his house, he almost forgot that he had ever been sad-hearted. This loving little child was such a constant source of interest and surprise. She was so innocently plain-spoken and self-dependent sometimes and such a strange little dreamer of dreams at other times. She would drive a shrewd bargain for whatever she wanted—some more of Uncle Jim's good cookies, or a ride on all alone on the biggest pony, or a two-days' visit at the Aydelot ranch, scrupulously rendering back value received of her own wares—kisses, or washing all the supper dishes for her tired uncle, or staying away from her play to watch that the chickens did not scratch in the garden.

But there were times when she would go alone to the bend in the river and people her world with folk of her own creation and live with them and for them. Chief among them all was a certain Prince Quippi, who would come from China some day to marry her and take her away to a house made of purple velvet and adorned with gold knobs. She had to send a letter to Prince Quippi every day or he would think she did not love him. Of course, she loved Uncle Jim best of what she called folks—and a Prince Quippi was big and brown and handsome; and, strangely enough, the only kind of letter he could read from her was in a flower.

So Leigh dropped a flower on the waters of Grass River every day to float away to China telling her love to Prince Quippi. And oftentimes it was the tawny sunflower, because it was big and strong and could tell a big love story. Thus she dreamed her happy dreams until one day. Thaine Aydelot, listening to her, said:

"Why my papa sent my mamma a sunflower once, and made her love him very much. I'll be your real Prince Quippi—no!—a paper-doll, thinkish one, and come after you."

"Clear from China?" Leigh queried. "Yes, when I'm a big soldier like my papa, and we'll go off to the purple notches and live."

"You don't look like my Prince Quippi," Leigh insisted.

"But I can grow to look like any thing I want to—like a big elephant or a hippopotamus or an angel or any thing," Thaine assured her.

"Well, excuse me from any of the free—a angel or a elephant. I don't know what the poppy one is, but it's too poppy," Leigh said decisively.

There were others in the Grass River settlement who would have avoided the mythical Prince Quippi also.

The baby gold was soon lost from her hair for the brown-gold like the shimmering sunlight on the brown prairie. The baby blue eyes deepened to the deep violet-blue of overhead skies in June. The pretty pink and white complexion however, did not grow brown under the kisses of the prairie winds. The delicate china-doll tinting went with other baby features, but, save for the few little brown freckles in mid-summer, Leigh Shirley kept year after year the clear complexion with the peach blossom pink on her cheeks that only rarely the young girls of the dry western plains possessed in those days of shadeless homes.

Thaine Aydelot looked like a gypsy beside her, he was so brown, and his

"Nothing But Leaves"
Not Tea Leaves intermixed with Dust,
Dirt and Stems but all Virgin Leaves.

"SALADA"

has the reputation of being the cleanest,
and most perfect tea sold.

BLACK, GREEN OR MIXED.

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SEALED PACKETS ONLY.



Look for the Roll

With the Paroid Label

The
Supreme Roof Covering

None Genuine
Without
it.

NEPONSET Paroid ROOFING

PAROID claims your consideration as the supreme roof covering, because it is approved by the National Board of Fire Underwriters, and is used by Railways and in Government Military Camp Buildings.

Farmers, who 19 years ago laid Paroid roofs on their barns, have had absolute security ever since—and their roofs are still good. Proof against the weather, the greatest protection against fire, these roofs have given

19 Years' Roofing Satisfaction

The name Paroid has come to mean something more than ready demand. Demand Paroid and look for the name on every roll you buy, because inferior grades have often been offered as being "the same thing as Paroid." This is a warning, for your protection as well as ours!

Paroid is positively fire resisting; burning brands die out without damage on it. Paroid costs no more than the best wooden shingles. It is easiest to lay, lasts longer, and gives you the greatest protection all the time. You waste no time repairing Paroid roofs.

Neponset Paroid is made in three permanent colors, Gray, Red and Green, the last two being surfaced with crushed slate

For your home select Neponset Twin Shingles, Red or Green, with the same high qualities of Paroid.

Lumber or Hardware dealers sell Neponset Products and will give you good satisfaction.

BIRD & SON Dept. D HAMILTON, ONT.

The Largest Manufacturers of Roofings,
Wall Boards, and Roofing Felt in Canada.

Warehouses: Winnipeg, Calgary, Edmonton, Montreal, St. John, Vancouver.

Also Manufacturers of Neponset Wall Board.





THE FARMERS SEEDSMAN FIFTY-ONE YEARS SERVICE

1866 1917

We wish to warn customers against delays in sending their orders for seeds. Supplies are limited and present indications point to a bigger demand than can be filled.

MAKE UP YOUR ORDER NOW

We pay railway freight on all orders of \$25.00 or more in Ontario and Quebec.

SEED CORN	Rack Orib	Gov't Standard No. 1 Red Clover	\$14.00 to \$14.50
Ontario Crown	cured	No. 1 Red Clover	12.50
On Cob	in crates, bags, Per Bushel.	No. 1 Alsike	\$15.00
		No. 2 or 3 (No. 1 for purity)	\$13.00 to 14.00
Wisconsin No. 7	\$11.15	No. 1 Timothy	8.50
Golden Glow	2.15	No. 2 (Ex. No. 1 for purity)	\$13.00 to 14.50
Bailey	3.15	Alfalfa—Montana Green	15.00
White Cap	2.15	Ont. Variegated No. 2 (Alfalfa—Montana Green)	\$25.00
Longfellow	3.25	Lyzmada's Grimm	35c lb.
"Dakota	2.75	North-West Grimm	75c lb.
Compton's	2.25	Creole Grass	25c lb.
Quebec No. 28	3.25	O.A.C. No. 21 Barley	1.85
		Marquis Spring Wheat	2.50
Rack cured, in bags, at 15c per bush, less than in crates.		Goose Wheat	2.50
O.A.C. No. 3 Oats	2.00	Early Britain Peas	3.00
O.A.C. No. 72 Oats	1.35	Rape (Dwarf Essex)	11c lb.
Banner Oats, unregistered	1.20	Hairy Vetch	15c lb.
Yellow Russian Oats	1.30	For Clover and Timothy alfalfa	50c lb.
Amber Sugar Cane	7c lb.	Low 25c for each cotton bag required.	Grain sacks free.
White Intermediate Cane	50c lb.		

MANAGER: Keith's Prize-taker, Danish, Sheldrup, Yellow Levantian, Yellow Intermediate, Giant Half Sugar and Mammoth Long Red, in 10 pkts., 25c; if 5 lbs. or more of one variety, 25c.

We are buyers of Alfalfa, Red Clover, Sweet Clover, Timothy and Seed Grain. Send samples. We are especially in need of Rye, Buckwheat, Spring Rye, Broom and Black Oats. Send for our 1917 Catalogue. It is FREE.

GEO. KEITH & SONS
SEEDS

124 KING ST. E.
TORONTO

Cheese Boxes for the 1917 Season

We make the STANDARD
BOX as demanded by Railway

Commission.

Factories at
Ingersoll,
Cavanaugh,
Peterboro,
Belleville,
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Take no chances with
any other.

Write us for prices de-
livered to your station.

C. B. Janes & Co., Limited
Orillia, Ont.

big dark eyes and heavy mane of dark hair, and ruddy cheeks made the contrast striking. From the first day of their meeting, the children were playmates and companions as often as opportunity offered.

Settlers were filling up the valley rapidly, but they all wanted ranches, and ranches do not make close neighbors. Land-lust sometimes overshadows the divine rights of children. And the lower part of the settlement was not yet equal to the support of a school of its own.

The two families still kept the custom of spending their Sabbaths together. And on Sabbath mornings Thaine showed Leigh the books and slate and sponge and pencils he was to take to school the next week. Leigh, who had been pleased with all of them, turned to her guardian, saying gravely:

"Uncle Jim, can I go to school with Thaine?"

"You must meet that question every day now, Jim," Asher said. "Why not answer it and be rid of it?"

"How can I answer it?" Jim queried. "Virgie, help us with this educational problem of the State," Asher turned to his wife. "Women are especially resourceful in these things. Jim, I hope Kansas will fully recognize the fact some day."

"Who is Kansas?" Virginia asked with a smile.

"Oh, all of us men who depend so much on some woman's brain every day of our lives," Jim assured her. "Tell me what to do for my little girl, Mrs. Bennington and some of the other neighbors say I should send her East for her sakes."

"And for both of your sakes, Jim, I say, no," Virginia broke in. "The way must open for all of our children here. It always has for everything else, you know."

"Thaine can walk the two miles. He's made of iron, anyhow. But Leigh can't make the five miles 'up stream,'" Asher declared.

"Jim," Virginia Aydelot said gravely, "Pryor Gaines will be our teacher for many years, we hope, but he is hardly equal to tilling his ground now. John Jacobs holds the mortgage on his claim still that he put there after the grasshopper loan, which he could not pay. Life is an up-hill pull for him, and he bears his burdens so cheerfully. I believe Mr. Jacobs would take the claim and pay him the equity. We all know how unlike a Shylock John Jacobs really is, even if he is getting rich fast. Now, Jim, why not take Pryor into your home and let him drive up to the school with Leigh and other little folks down your way. We can pay him better wages and he will have a real home, not a lonely cabin by himself, and you will be fortunate in having such a man in your household."

"Just the thing, Virginia," Jim declared. "Why haven't we done it before? He always says I'm his heart and he's my lungs. We might stack up to a one-man power. Old bachelors should be segregated, anyhow, out here. The West needs more families. And think what Pryor Gaines' cultivated mind will mean to a little artist soul like Leigh Shirley's. Glorious!"

"Well, Virgie, if you will also segregate John Jacobs and Dr. Carey, we'll settle the bachelors once for all. A quartette of royal good fellows, too. State-makers who really make. They ought to be in the legislature, but Carey and Pryor are democrats and Jim and Jacobs are republicans. They balance too well for the interests of any party. Anyhow, if Pryor agrees, the school problem is fixed," Asher asserted.

Pryor Gaines did agree, to the welfare of many children, who remember him still with that deep-seated affection of student for teacher unlike any other form of human devotion. But especially did this cultured man put into Leigh Shirley's life a refining ar-

istic power that stood her well in the years to come.

CHAPTER XI.

Lights and Shadows.

They saw not the shadow that walked beside,
They heard not the feet with silence shod.

—Whittier.

With successive seasons of good crops, combining with the time of the crest between two eras of financial depression, and with Eastern capital easy to reach, a mania of speculation known as "the boom" burst forth; a mania that swept men's minds as prairie fires sweep along the wide lengths of the plains, changing both the face of the land and the fortunes of the land owners and marking an epoch in the story of the West. New counties were organized, those of the still unoccupied frontier. Thousands of citizens poured into these counties. Scores of towns were chartered and hundreds of miles of road were constructed. Colleges and universities sprang up from the virgin soil of the prairie. Loans on real estate were easy to secure. Land, especially in town lots, took on an enormous inflated valuation and the rapid investment in real estate and the rapid transition from buyer to seller was bewildering, while voting bonanzas for extensive and extravagant improvements in cities-to-be was not the least phase of this brief mania of the fortune-making, fortune-breaking "boom."

When Hans Wyker had seen his own town wane as Careyville waxed, he consigned the newer community, and all that it was, to all the purgatories ever organized and some yet to be created.

Wykertown was at a standstill now. The big brewery had become a flouring mill, but it was idle most of the time. The windows served as targets for the sons of the men who consumed its brewing product in other days, and the whole structure had a disconsolate, dismantled appearance.

There was neither a schoolhouse nor a church inside the corporation limits. The land along Big Wolf was not like the rich prairie west of it, and freeholds entered first with hopes in Wykertown's prosperity had proved disappointing, if not disastrous, to their owners.

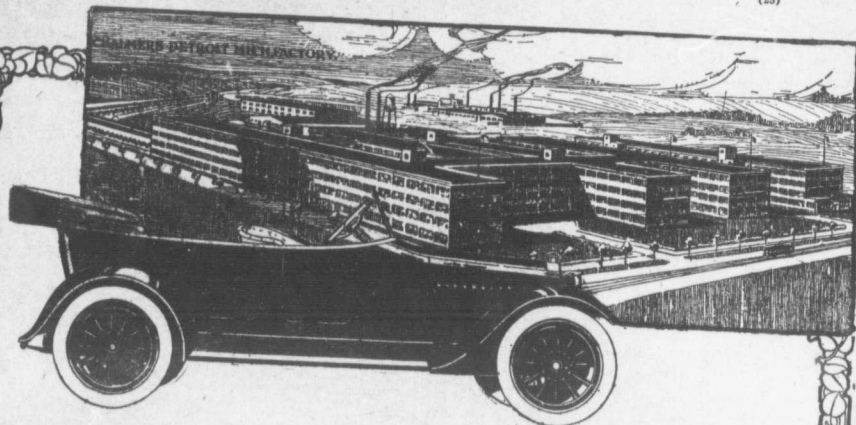
The rough ground, mortgaged now, and by the decline of the town, decreased in value, began to fall into the hands of John Jacobs, who made no effort at settlement, but turned it to grazing purposes. His holdings joined the property foreclosed by Wyker when his town failed, but inhabited still by tenants too poor to leave it. The boundary line between Wyker and Jacobs was the same ugly little creek that Doctor Carey had turned his course to avoid on that winter day when he had seen Virginia's distress signal and heard her singing a plaintive plea for help.

It was an ugly little stream, with much mire and some mud to be avoided; with deep earth-canyons and sliding avalanches of dirt on steep slopes, and now and then a stone outcrop jagged and difficult, not to say dangerous, to footways and impossible to stock. It was called Little Wolf because it was narrower than the willow-fringed stream into which it emptied. But Big Wolf Creek could rarely boast half the volume of water that the sluggish little tributary held. Big Wolf was shallow, with more shale and sand along its bed. Little Wolf was narrow and deceptively deep in places.

One spring day, John Jacobs and Asher Aydelot rode out to Jacobs' ranches together.

"You are improving your stock every year, Stewart tells me," Asher was saying. "I may try sheep myself next year."

(Continued Next Week.)



The Car was built—a CHALMERS

Across the vision of a man came a car.
He built the car
---and with it built a world-famed
institution.

The field of motordom choked with weeds.
Luxury rode behind a Mogul engine in an
upholstered truck.

Men were tired of motor extravagance. But, the supreme comfort of motoring came not with economy. Chalmers success—marvel of a decade—came from low-cost production of the car ideal.

Chalmers saw the sensible car—the sort of car a business man would drive. A car that would appeal to keen minds as a sound buy.

The Chalmers Institution, founded on ideals, took up the task, to bring to men of moderate means, comforts that until then only a Croesus could buy—luxury, beauty, fine furnishings and finish, light weight, speed performance. Chalmers built the ideal car.

Not—mark you this—a car ideal for the price. Price never creates the ideal. Chalmers has said, "Any fool can cut prices, but it takes brains to make a better article." No, the Chalmers Institution, made the car to the Chalmers' ideal. Your Business Man's car must be a fine car. Luxurious comfort, his family expects. Appearance he must have, he's grown an aesthete. Power, for speed and heavy going. Life, in crowded traffic. Pep, on the hills. Security and reliability above all.

Chalmers made a car for every day business:
not a toy
nor a truck.

—But a road-active pleasure car—A MOTOR CAR. The car was built, a Chalmers. Chalmers efficiency held down costs. Chalmers markets supplied an output enormous. The Chalmers Institution produced the ideal at the cost of mediocrity—\$1,625.

Chalmers Bridges the Boundary

The Canadian Chalmers is made to the Chalmers ideal—in Canada.

Chalmers has created a Factory in Canada.

The young giant parallels the old. It is one with the parent Chalmers institution; one in purpose—one in ideals of making and marketing cars.

Men high up in motordom have linked their fortunes with Canadian Chalmers.

In every city the big motor car distributors are Chalmers men. Local success joins with Chalmers success. Men who achieved by serving well, are eager to sell the ideal car—the Chalmers. Chalmers is a symbol of success that attracts successful men.

Your business man drives his Chalmers. He chose it because it was the ideal car, the sensible car for him. He calls it by name, "his Chalmers."

In Canada, throughout the world, the name rings clear.

Chalmers is a car, a man, an institution.

Chalmers 6-30 5-passenger	\$1,625.
" 6-30 roadster	1,625.
" 6-30 7-passenger	1,775.

The Chalmers Motor Company of Canada, Limited, Walkerville, Ont.

CANADIAN
Chalmers





"The Ontario Farmers' Own Organization"

There is a possibility of our Cement prices advancing after March 29th, and we would therefore urge you to send in your orders as soon as possible.

If our Coal estimate is large enough we hope to quote most attractive prices on this commodity for Summer delivery. We have heard from a number of farmers, but there are still a great many we would like to receive estimates from before setting our prices.

As anticipated, Coal Oil and Gasoline have advanced one cent per gallon. The oil market is strong.

We are now in position to handle your Butter and Eggs. Get our prices before disposing of same elsewhere. When shipping your produce always send us a statement of same by mail.

Farmers having Seed Grain or Potatoes for sale may forward samples to this office, stating varieties, price and quantity.

We have about 600 bushels of American White Beans at \$7.60 per bushel, also some White Normandy Oats at \$1.02, and O.A.C. 72 at \$1.05, all f.o.b. Goderich, Ont., bags extra.

Could you give us any idea as to your probable requirements in potatoes?

We are in a position to supply groceries, fertilizers, ground limestone, oils, etc. Get our prices.

Our supply of Seed Corn is almost sold out.

The United Farmers' Co-operative Co. LIMITED

110 Church Street Toronto, Ont.



"With your Milking Machine I can Produce Milk of Superior Quality"

The writer of the letter below is known throughout his district as a keen and rather critical judge of dairying methods and equipment. They say he is a "crank on quality!"

Certainly the John D. Duncan Co., of Montreal, are most particular about the purity of the milk they get for their patrons.

Witness—

I have noticed some of the testimonials you are publishing and though I would let you know how I like the Empire Milking Machine and Empire Engine which I purchased from you in the month of April, 1916, it has given entire satisfaction. I have had considerable experience with engines but many years, and am consequently in position to appreciate the merits of the Empire, and recommend same as one of the most reliable for milking machines and general farm use.

With your Milking Machine I can produce milk of superior quality, according to the statement of the John D. Duncan Co., to whom I have been shipping. I find that the machine is so very reliable in the covers or tests, and no other trouble has been experienced. The speed at which the machine can milk is regulated by the class of cows and the quickness of the operator.

EMPIRE Mechanical Milkers

produce milk of high quality, at the same time that they save time, reduce expense, increase profits, and make it possible to keep up and even increase the number of cows milked, in spite of the growing scarcity of help. They certainly are worth investigating.

Write for Brochure explaining the various parts, principles on which the Empire works, and giving the opinions of prominent Dairymen who are using it. Address Dept. E.

THE EMPIRE CREAM SEPARATOR CO. of Canada, Limited. MONTREAL, TORONTO, WINNIPEG, 63



You'll Find the Advertisers

in FARM AND DAIRY are reliable. They are advertising reliable goods. They want to know you; also want to know where you saw the Ad. When writing them don't forget to tell them you saw the Ad. in FARM AND DAIRY.

The Makers' Corner

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

Coagulants are Plentiful

EDITOR, Farm and Dairy: After a full inquiry among the manufacturers of and dealers in rennet and pepsin, it appears quite evident that there will be no shortage of coagulants of any kind to meet all requirements for the season of 1917.

The supply of standard rennet extract will be limited, but the quantity of pepsin in different forms will be ample, to make up the deficiency. There will be no occasion for any rush to stock up with supplies at the opening of the season. Any attempts in that direction will be foolish, as having a tendency to raise the price. Cheese makers need not be afraid of being unable to secure supplies from time to time.

Cheese makers are again warned against using any preparation as a substitute for rennet, which has not been thoroughly tried and found to be reliable. This branch proposes to keep a close watch on all coagulants put on the market and to give them a fair trial as soon as possible. If in doubt about any coagulant offered, write to the Dairy Division, Ottawa. —J. A. Ruddick, Dominion Dairy Commissioner, Ottawa.

Making Cheese With Pepsin

By J. A. Ruddick, Dairy and Cold Storage Commissioner.

IN making cheese with pepsin, the following points should be noted:—

(1) There is a great variation in the strength of the different brands, and care must be taken in testing the strength. The "tea cup" test will not give a true indication of the curdling strength of a pepsin solution if compared with the extract. For instance, one c.c. of rennet extracted in six ounces of milk curdled it in forty seconds, while the same quantities of milk and pepsin solution curdled in sixteen seconds, but when two vats of milk were set with the same quantity of each solution, the curds were ready to cut in the same time. The "tea cup" test is, however, a safe guide as to the relative strength of different pepsin solutions.

(2) Preparing the pepsin for use is somewhat inconvenient. The practice followed at the Finch Dairy Station was to prepare the solution the previous evening by dissolving the quantity of pepsin required for the following day at the rate of two drams of pepsin to three ounces of water. This is a good safe practice during the summer months. Some cheesemakers have adopted the plan of dissolving one pound of pepsin in ten pounds of water and adding salt as a preservative. If this is done, distilled water should be used and the solution kept in a cool place. We think it safer to make up the solution daily.

(3) Curds made with pepsin should be salted about one-eighth of a pound less than if rennet extract were used (all other conditions being equal). Enough pepsin should be used to coagulate the curd already to cut in about 25 minutes. The longer the time between setting and cutting the greater the loss of fat.

(4) An inquiry sent out revealed the fact that there were at least 402 factories in Ontario and Quebec using pepsin for the greater part of the sea-



Cures while working
Cures rheumatism, neuralgia, sciatica, lumbago, sprains, strains, and all other rheumatic affections. It is a sure cure for all these ailments. Buy a Lankford Now! It will save you a lot of money and a lot of trouble. Powers Mill Co., Toronto, Ont.

MAPLELEAF OIL CAKE MEAL
is made by the process, and is guaranteed absolutely pure and unadulterated. Contains over 22% protein and 25% carbohydrates. CANADA LINSÉED OIL MILLS LTD. TORONTO - MONTREAL

SEED GRAINS
We can supply Choice High Grade Seed as follows: Red Clover, Alsike, Alfalfa, Timothy, Sweet Clover, Oats, Barley, Buckwheat, Peas, (Corn on cob and shelled), Mangel Sugar Beet, Turnips, Carrots, Ruts, Butter Beans, Seed Potatoes, Cotton Seed Meal, (Old Process) Oil Cake Meal, Gluten Meal, Feeding Corn Meal, Feed Oats, Pure Linséed Meal and Flaxseed. Also a complete line of High Grade Poultry Feeds. Write for prices. CRAMPEY & KELLY, 778 Davenport St., Toronto

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to us. We are not commission merchants. We pay net prices and remit promptly. THE WILLIAM DAVIES COMPANY LIMITED Established 1854. TORONTO, ONT.

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

STEEL CHEESE FACTORY EQUIPMENT
Patented Steel Cheeser Vats—Agitators—Steel Whey Tanks—Storage Tanks—Whey Weighers—Steel Cream Vats—Heavy Smoke Stacks. The Steel Trough & Machine Co., Ltd. Tweed, Ont.

T HE (1) definite coagula- for work.

"Solu- Co., "Renym "Granula Co., "Scale P. Co., "Scale P. Chem "Spongy Walk "Rennet "R.P. Ex "Curly, "Kervilly "It is a on the map pepsin shou-

son of 1916, torties used a Rennet. (1) The fact of factories a season when cheese was no additional profit as a sup- (6) With ren- ash, we find th- from \$3 to \$7- quiry as to pri- tract shows th- ed all the wh- to \$16 per gal- The Depart- on hand a Soluble Powd- pound tons, wh- cheesemakers at- (pound) on re- Commissioner, I- cend five pound- in cases where having difficulty supply. The dep- business of sell- been thought a- quantity on han- cases of actual- from Circular 21-

Dairy Courses

Pro- EDITOR, Farm and Dairy: I find short co- pieces of the fa- faces is at pres- College of Agric- This is made up of for courses, men, and running a m- week's course fo- starting on March April 3rd. This c- to cheese and bu- least one season's College Dairy has- up for the purpos- treasury machine- makes of pasteur- ubras, printing can, moisture, salt The attendance- that was anticipat- ing enrolled for a- and a large num- cheese course. The- taking an active int- and are giving inst- subjects, such ch- chemistry, bacterio- science. Special I- been secured for the- follows: Butter making, Mr- son, Belleville, Ont- Morrow, Creamery- ment testing, Mr. C- Dept. of Dairying, N.J.

WHAT SHALL WE PAY FOR RENNET SUBSTITUTES?

THE relative value of the various rennet substitutes have been carefully tested in the experimental cheese factory at Finch, Ont., by the Dominion Dairy Branch. The following table shows—

Table with 5 columns: Co., Quantity, Milk Coagulated, Relative Value, and Price per lb. Lists various manufacturers like 'Scolabie Powdered Pepsin' and 'Rennzyme'.

son of 1916, and that 440 other factories used a mixture of pepsin and rennet.

(3) The fact that so large a number of factories were using pepsin in a season when it is claimed that our cheese was never finer in quality is pepsin as a substitute for rennet.

(4) With regard to the cost of pepsin, we find that factories have paid from \$3 to \$7.25 per pound. An extract shows that factories were charged all the way from \$3.10 per gallon to \$16 per gallon.

The Department of Agriculture has on hand a quantity of Armour's Soluble Powdered Pepsin in one-pound tins, which will be supplied to cheesemakers at actual cost (\$4.10 per pound) on requisition to the Commissioner, in quantities not to exceed five pounds at one time, and only in cases where the cheesemakers are having difficulty in securing their supply.

The department is not in the business of selling pepsin, but it has been thought advisable to keep a quantity on hand as a safeguard in cases of actual shortage.—Extract from Circular 21.

Dairy Course for Maritime Provinces

EDFORD, Farm and Dairy: The first short course under the auspices of the three Maritime Provinces is at present being held at the College of Agriculture, Truro, N.S. This is made up of a two weeks course for creamery men, starting March 7th and running to March 20th, and a two week's course for cheese makers, April 3rd. This course is only open to cheese and butter makers having at least one season's experience. The up for the purpose with the latest in creamery machinery, including two tubs, priting machines, starter cans, moisture, salt and acid tests. The attendance has been larger than was anticipated, over 20 men having enrolled for the creamery course and a large number expected for the cheese course. The College staff are taking an active interest in the work and are giving instruction in special subjects, such as milk production, chemistry, bacteriology and veterinary science. Special instructors have been secured for the practical work as follows:

Butter making, Mr. Mack Robertson, Belleville, Ont., and Mr. P. T. Morrow, Creamery Inspector, P.E.I. Milk testing, Mr. C. W. McDougall, next meeting.—F. Forsyth, Lanark County.

ators, Mr. Ben Gallant, St. Louis, P.E. I. Mr. George H. Barr will give the instruction work in cheese making, which starts on the 21st. Mr. W. A. Mackay, Dairy Superintendent, is in charge of the course.

Better Methods of Cultivation

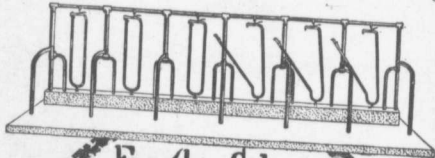
INCREASED farm production must be attained this year by better methods of cultivation, rather than by increase of acreage. Such is the decision of the sub-committee of the Organization of Resources Committee which has been holding sessions in Toronto recently. Some of the definitions submitted are: that farmers double their poultry flocks, sow only large plump seed and raise to maturity every female calf, pig and lamb. As a remedy for the shortage of labor it is suggested that high school boys be induced to undertake farm work and that men in other lines of life, give a day a week, or a week a year to assist farmers with their work.

The members of this sub-committee and authors of the foregoing wisdom are as follows: M. J. Hanev, Toronto chairman; Dr. G. C. Creedman, Guelph; W. J. Bell, Sudbury; Fred Cook, Ottawa; G. A. Gillespie, Peterboro; Walter Rollo, Hamilton; Norman Sullivan, W. E. Randle, Dr. W. A. Riddell, Dr. Abbott, Toronto; and Arthur Little, London.

Items of Interest

Land cultivation with a view to increasing the home supply of food has been taken up at Canadian camps, land. All batmen and grooms are daily employed several hours in cultivating spare Government land, the work being periodically inspected by a staff officer.

On the 5th of February the Almonte and Perth Junior Farmers held the second of their inter association debates. This debate was on the new Dairy Standards Act was on the new was taken by the Perth boys and the negative by the Almonte members. They had the principal of the High School in attendance and a Mr. Brown act as judges. I am informed that it was a well contested debate and that the affirmative, supporting the act, won the debate. This gives a win to each association, and the next meeting is to be held in Carleton Place at a neutral point, and the members are discussing the advisability of holding a banquet in connection with their next meeting.—F. Forsyth, Lanark County.



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enable you to stable more cattle in the same barn space than is possible with wooden stalls, yet each cow has just as much room. Then there is the big saving in time and labor. The cleaning of the barn is done much more quickly and easily. Valuable time is saved for other, and more important, work. The combination Gravity and Spring Lock on O.K. Stanchions is the simplest and surest lock yet devised. Stalls of 2-inch iron tubing with "Z" clamp fastened by 2 bolts. Strong, rigid, easy to set up. Send Coupon to-day for FREE BOOK. 41-2



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It's quite easy for you to call on or telephone a few of your neighbors. Tell them about Farm and Dairy. Tell them how useful it has been to you, and how much valuable help you get from it. Show them it's the cheapest and best hired help they can get. Tell them of its fight for better dairy condition, greater cooperation among farmers, and more money for them. Get their subscriptions. Send only nine new yearly subscriptions at \$1.00 each and we will send you, free of all cost to you, a pure bred pig. Your own choice as to variety. Pedigree for registration. If you don't want the pig we will pay you a cash commission on each subscription sent in. Right now is the time to begin. Say to yourself NOW, "Here is an opportunity for me and I am going to take it."

CIRCULATION DEPARTMENT FARM AND DAIRY - Peterborough, Ont.

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The Surest Way To sell your surplus stock is through the live stock columns of Farm and Dairy. The cost is little and the results certain. Send in your ad.

Wayside Gleanings

With Curry Comb and Brush

WHEN hired help is as hard to get as it has been for some time you are liable to be working short handed and many of the jobs that might have been done if the help had been available have been neglected. We had an extra man on now and the other day I took the curry comb and brush and went at the cows. I sure was surprised to see how those cows enjoyed the rub and you would hardly believe how much dirt I brought out of the hair on their backs. Why it seemed almost half an inch thick in some places. When I had finished it looked as if I had been using the clippers. The floor was covered with hair.

Recently I visited the stables of a breeder of Holsteins and his cows certainly looked clean, sleek and fine. I asked him how he kept them so nice. He said that he tried to clean them every day, even if it is only a rub with the brush. His stables were clean also, and he had a good coating of sawdust on the floors of the passage ways. Everything was spick and span. I went home ashamed of our cows; and we were selling milk in town too. Well the cows should be cleaned daily I am convinced and ours will receive more elbow grease from now on. It does one good to visit your friends occasionally, even if it is only for the inspiration you get.

Mixing Feed.

We have been feeding ensilage, cut straw and roots as a roughage ration to the cattle lately. The roots are sage and cut straw we mixed together every morning for the feedings of the day and we have had fair satisfaction. The roots were pulped and put on this feed in each animal's manger, then the grain added to it.

While talking to the hired man the other day, who by the way is a good intelligent fellow, I was given a new wide experience, he suggested we mix the turnips in with the ensilage and corn, and let it stand for 24 hours before feeding. I remembered that years ago we had tried this with good results. The cattle seemed to like it, eating every thing up clean and they milked well too.

We got busy and mixed up a batch of this mixture after the following plan: I took four two bushel baskets of cut straw on the floor and leveled it off evenly, then three bushels of ensilage and about one and a half of turnips. We then put on four more baskets of cut straw, a few handfuls of salt and about two pails of water. We then got on top of the pile and stamped it solid. Then other three layers were added in the same way, and so on until we had enough to do for about two days feeding. We are waiting to see what it turns out and whether the results will justify the labor, for there was considerable in connection with it.—Burnbrae.

Corn Planting Quies

WHAT distance apart should the rows of Indian corn be planted and what distance in the row? How many kernels should be put in a hill? I wish to get a few ripened ears as possible.—E. H. M. Drummond, Co., Que.

The most approved distance apart, when Indian corn is grown in drills, is 42 inches. Where it is grown for ensilage or fodder purposes, maximum returns are secured by seeding somewhat thickly with a stalk every four to six inches in the drill. In this case, however, it is again the desired and it is advisable to allow each stalk 10 to 12 inches in the drill. If it is decided, on the other hand, to

grow the corn in hills, the hills should be three feet apart each way and with two or three stalks in each hill. The number of kernels dropped in each hill will depend on the percentage of germination of the seed. With first class seed corn, three, or perhaps four, kernels in each hill is sufficient.

In many cases both drills and hills are run much closer together than we have advocated. This, however, is a mistake. The plant food, when taken from the soil by the roots of the corn crop, has to be changed over the leaves of the plant before it is available for crop growth. This change in composition is brought about by the action of chlorophyll in conjunction with a material called chlorophyll in the leaves, and where the drills are closer than 42 inches, and the hills less than three feet apart each way, sunlight is excluded and the best crop is rendered impossible. We would suggest that our subscriber in his section of Quebec, select the earliest maturing variety of corn he can get, preferably the varieties which have proved successful with himself or his neighbors.

Lime on Syrup Pans

WHAT will prevent the lime from sticking to the bottom of my syrup pans? I wish to know when pouring boiling lime ends of the pan, but still the lime sticks and it is almost impossible to clean the pan.—S. Leeds, Co., Ont.

A number of plans are followed for removing sediment from the inside of the bottom of the maple syrup pan. A weak solution of acetic acid and vinegar is used in some cases. Others recommend allowing sour milk to stand in the pan overnight. This seems to be the best. The lime that is sometimes called, rendering it easily removable in the morning.

Clover as Green Manure

IF I plant a full crop of clover, would I have to do this in the summer to be as good if I let it grow on till the fall? Or, on the other hand, would it be as good if I took a crop and plowed in the aftermath? I have no stock except for a few turkeys, so therefore I need a suitable manure. However, I intend to use a lot of phosphate.—Bouquier, Drummond, Co., Que.

We see no reason why a crop of clover plowed down in the early fall, should not be as beneficial to the land as if plowed during the flush growth in mid-summer. Clover, however, when first turned under, and this applies to all other green manures, is not in a very available form, and there must be considerable decomposition before the crop turned in can be of any use in addition to the feed of future crops. It would be advisable, therefore, to plow as early in the fall as soil conditions permit, and work the clover well into the soil. The ground freezes in the late fall. This fall cultivation would be a double benefit; it would kill weed seeds and would hasten the decomposition of the clover sod.

The practice of plowing under full crops of clover is not as common now as it once was, this because of the greater value that is now placed on clover hay of normal prices. Clover hay has a fertilizing value of about \$9 or \$10 a ton. If the hay is cut and fed to live stock, and the manure carefully conserved, at least three-quarters of this value can be returned to the soil. When the fertilizing value of the aftermath is considered, it is almost always advisable to take off the first crop of clover as a feed or sell it and plow in the aftermath. This would be especially advisable in our subscriber's case, as the clover aftermath, plowed down, would supply a fairly liberal amount of nitrogen and phosphates which are to be used, would tend to balance up the plant

food in the soil. We would suggest, too, that it probably would be cheaper to sell the first crop of clover as hay and buy barnyard manure, than to plow it down.

Provide Loans for Farmers

A BILL respecting the extension of public credit for agricultural purposes was introduced in the Ontario Legislature last week by the attorney-general. Hon. L. B. Lucas explained the purpose of the Act was to provide for loans for permanent improvements to farm and farm properties. The machinery of the title proposed new measure. Applications for loans will be made through municipal and township councils and principal payments will be made through the treasury. The Act does not contemplate loans for temporary purposes. Farmers desiring advances must state in their applications the purpose for which the money is advanced.

Alfalfa Seeding

WE will have very little hay next season. Practically all of our sod was get out plowed and we are going to make alfalfa as rapidly as possible. Would it be wise to seed part of the alfalfa with peas and oats early for hay, or would it be more advisable to seed alfalfa without a mixture crop? We are paying \$3 a bushel for the alfalfa seed, and would not do well to take any chances on the stand.—Bouquier, Hallowell, Co., Ont.

It is not the usual practice to seed alfalfa with a nurse crop of peas and oats, but I can see no reason why a successful catch could not be obtained by this method. I would suggest that you seed the cleanest part of your land in this way, and cut the peas and oats as a hay crop. The balance of your land would probably give you a sater catch if summer fallowed in July, and seeded with alfalfa without a nurse crop.

This arrangement would not only give you a certain amount of hay for next winter's feeding, but would also enable you to make a better distribution of your labor for the summer, than would either plan alone. I would suggest that your nurse crop of peas and oats should contain more than one-half bushel peas to the acre, as the pea vine, when sown thickly, tends to grow too close to the ground, which is an objection because it shades the alfalfa too much.—A. Leitch, B.S.A., O.A.C., Guelph, Ont.

The Intellectual Aspects of the Farmers' Movement

ONE of the ablest farmer statesmen that have been discovered and developed by the farmers' movement in Canada is T. A. Crearer, president of the Grain Growers' Company of Winnipeg. After presenting a report of the business of the company for the past year, a report that showed nearly fifty million bushels of grain handled at profits exceeding half a million dollars, Mr. Crearer dealt with the work of the farmers' movement in elevating the status of the grain growers. His words are worthy of careful study, showing that the movement has other aims than improving the financial standing of the tillers of the soil. Its object is in making them better citizens and better men, with a broader outlook on life and its responsibilities, and as far-reaching as its work in securing for them a fair return for the labor of their hands. He spoke, in part, as follows: "What I have just said has to deal with the material advancement, or perhaps better the purely commercial aspect of the work. While progress

has been made in this direction, equally great progress has been made in the direction of elevating the whole status generally of the worker on the land, as a factor in the development of the country. The farmers' organizations have today regarded by thoughtful men as important factors in the development of our national life. The work of agriculture has taken on a new life, and is looked upon in a new light, and the well-informed men in other positions of life. There has, unconsciously perhaps, generally been a better understanding of the work they are engaged in and a truer estimate of their position in society and of their importance in national development. The time was when the great majority of farmers (and still in a great many communities the idea still holds) thought that because a man earned his living by manual labor on the land, he therefore occupied an inferior position in society as against the professional man or merchant, and because of this inferior position they developed his own faculties were naturally lacking. His view was that muscle was the chief requisite in his work, and the brain was a part of the human anatomy that he could not do without in a very small degree. However, a change is taking place. There is now a growing consciousness among our farmers that this is a mistake, and that there is scarcely any occupation in life that requires in the same degree for its successful operation the same application of intelligent planning and thought that the business of farming requires. The idea of thoughtlessly trusting to what is called luck, is giving way to the better method of trusting to intelligence, strategy and action. That this change which has gone on unconsciously, very important though scarcely noticed, is due to the influence of the ideas emanating from the meetings of men working together for a common cause, cannot be questioned. Our farmers' organizations in and by this work have shown a marked tendency to unite, and this company to the extent that it has assisted in this, by promoting and aiding by financial help, or in any other way, the movement, and the influence small in helping in this very important work. Let us all keep in mind that we are working not alone for what concerns our material advantage, important as that may be, but for the bringing about of a better and higher type of citizenship. One of the most important responsibilities resting with those charged with any authority in any of our grain growers' organizations is to foster and develop and extend the growth of this idea not alone the line of sectionalism and selfishness, but along the broadest lines that seeks to inculcate as the best principle of human relations, the Golden Rule: 'Do unto others as you would have them do unto you.'"

Cleaning grain over a good fanning mill to remove from one-third to one-half of the bulk, including all the light, shrunk and immature seed, will greatly improve its quality as seed. In Farm and Dairy, March 1st, an article entitled "Cannot Get Accurate Test," was signed G. B. Gordon, Electric Co., Ont. This was a mistake, the correct signature being S. B. Gordon, Carleton Co., Ont. A blacksmith and a gardener as argued as to which was the first trade or means of living in the world. The gardener was sure it was gardening, and he quoted from Genesis that when Adam was put on the earth to till it. Pat, the blacksmith, was unconvinced. "Well, this," he queried, "who made the spade for Adam?"

AS annual Dairy, also held by the directors of the Co-operative Co., should not be the directors signed were Paris and E. ville. Mr. L. I. director of the tario, who is the United Farmers' signed. The directors vacancies by Messrs. R. S. Lanark county rary of the N. A. G. 4, Goderich, and these men have points. He diedly struck the Company's ers of Ontario.

THE Elgin St. Thomas represented the Forest Rangers and the secretar Grange, H. Pal the Dominion G ronto and the U. S.

The Forest Ro the Approveo every St. Thom or, with many us members of was held on the ing vs. Travel, given to the F who preferred to The Grange at now idea in the members contrib aged the last pr superintendence O. Lounsbury, and score yet attain ing will be in and at the final will be guests of

AN interesting Dominion Grange w tive to the best collecting amounts on purchases order of the G dent, Mr. D. described a me Grange which had factory.

series of notes fo one from each Grange, but the bcept them. Ten Grange then signed for the sum of \$20, responsibility secured. The bank repaid the instrum The Grange then the sum of \$25.00 fr of its members pu Grange. The not

In Union There is Strength

New Directors Appointed

AS announced recently in Farm and Dairy, two directors of the United Farmers of Ontario, who also held positions on the board of directors of the United Farmers' Co-operative Company, recently resigned. It was in the best interest of both organizations that there should not be so much overlapping on the directorates. The two who resigned were Messrs. W. C. Good, of Paris, and E. A. Van Allan, of Aultsville. Mr. L. H. Blatchford, another director of the United Farmers of Ontario, who is now a salaried officer of the United Farmers' Company, also resigned.

The directors have filled these vacancies by the appointment of Messrs. R. S. MacTavish, secretary of the Farmers' Club near Balderson, in Lanark county; S. Stapleton, secretary of the Fairmount Farmers' Club, and J. N. Kernighan, R. R. No. 4, Goderich, as directors. All three of these men have accepted their appointments. These changes should decidedly strengthen the work of both the Company and of the United Farmers of Ontario.

Grange Doings in Elgin

THE Elgin County Grange met in St. Thomas on March 24, with representatives from the Granges in the county well represented. The worthy master of the Forest Rose Grange, A. McCollum, and the secretary of the Apple Grove Grange, H. Palmer, gave reports of the Dominion Grange meeting in Toronto and the United Farmers' meetings.

The Forest Rose Grange entertained the Apple Grove Grangers on Feb. 23. A pleasant evening was spent together, with music and speeches by various members of both clubs. A debate was held on the old subject of "Readings vs. Travel." The decision was given to the Forest Rose debaters, who preferred to travel.

The Grange at Middlesex has a new idea in the preparation of programs. It is called the married members contest. The husbands managed the last programme, under the supervision of C. P. Rucker and O. Lounsbury, and it was excellent in every respect, making the highest score yet attained. The next meeting will be in charge of the wives, and at the final meeting the winners will be guests of the others.

How One Grange Collects Accounts

AN interesting discussion occurred at the annual meeting of the Elgin County Grange recently relative to the best way of securing and collecting amounts due by members on purchases ordered through the office of the Grange. The president, Mr. J. C. Dunn, of Moorefield, described a method used in his factory.

The first attempted to negotiate a series of notes for small amounts, one from each member of the Grange, but the bank refused to accept them.

Then one of the leading members of the Grange then signed a bill of credit for the sum of \$2,000, assuming this responsibility severally and collectively. The bank quite readily accepted this instrument.

The Grange then accepted notes for the sum of \$25.00 from each and all of its members purchasing through the Grange. The notes are made pay-

able on demand, and are drawn in favor of the secretary-treasurer of the local Grange. These notes become a guarantee of payment of all costs on produce ordered by the farmer. That is, if the Grange had ordered a certain commodity at the instance of a farmer, and the cost of the goods, the farmer is bound to fulfill his obligation to the Grange and accept same at the price the Grange paid. If he declines to do so, the Grange can be made by means of the note. It will be seen that this method places on the member the responsibility to fulfill his contracts and obligations to the Grange.

Of course, if the farmer is making larger purchases, notes for higher amounts can be demanded if deemed advisable.

Successful U.F.O. Meetings

THE great interest being taken in the movement of the United Farmers of Ontario is indicated by the large number of meetings that are being held in different parts of the country. Where there are more speakers available and more funds a much larger number of meetings could easily be handled.

President R. H. Halbert has returned after holding a successful series of meetings in Essex and Kent counties in southern Ontario. Some new clubs were organized and old clubs revived and inspired to greater interest. Meetings were held at Painscourt, where a new club organized; St. Joachim, where a new club organized; and organized intends to affiliate immediately with the provincial association, and to carry stock in the company; at Haycraft, where a live meeting was held; Silver Creek, where the hall was filled; Tilbury North, where two clubs were addressed, and at Tilbury in Tilbury East township, where there is a live club, which had out a large attendance. At Glenwood, in Kent county, about 70 were present. It was decided to affiliate with the U. F. O. Meetings were held also at Kent Bridge in Kent county, and at Chatham in Kent county. At this latter point about 70 were present, although it was a wet night.

Secretary J. J. Morrison attended a meeting recently at Postville, where a new club was organized. Mr. W. H. Morgan, of Palmerville, Toronto, Cheer, of the central office, Toronto, attended a meeting at Markham, where a new club was organized. Mr. L. H. Blatchford, of the Toronto office, attended meetings at Zephyr and Queensville, clubs being organized at both points.

On Monday, March 26 the members of the Mt. Pleasant Farmers' Club in Wellington county, were to hold a meeting, at which a debate was to take place on the question "Should locals do their buying through the Co-operative Company or through outside dealers, providing the outside dealers can give them better prices." The meeting was to be attended by Mr. A. Q. C. O'Brien from the Central Company in Toronto, who was to give the club certain information it wanted. Mr. F. G. Sandy, the secretary of the Ontario Farmers' Club, in Victoria county, is to attend some meetings shortly in his vicinity. This kind of work that is building up the movement all through the province.

It is possible that a call will be sent out to the locals asking them to get their local members in the Ontario Legislature and urge that the cooper-

RENNIES North Grown Canada's Best Seeds

- Rennie's Prize Swede Turnip, for table or stock, 4 ozs. 20c, 1 lb. 65c
- Rennie's Early Swede Turnip, biggest cropper, 4 ozs. 20c, 1 lb. 70c
- Perfection Mammoth Red Mangel, for stock, 4 ozs. 15c, 1 lb. 25c, 1 lb. 45c
- Yellow Leviathan Mangel, good keeper, 4 ozs. 15c, 1 lb. 25c, 1 lb. 45c
- Rennie's Jumbo Sugar Beet, for feeding, 4 ozs. 15c, 1 lb. 25c, 1 lb. 45c
- Improved Early Ohio Seed Potatoes Peck \$1.00, bus. \$3.50
- High Grade Longfellow Yellow Flint Seed Corn Peck 85c, bus. \$3.25
- High Grade Chopton's Early Yellow Flint Seed Corn, bus. \$3.25
- High Grade White Cap Yellow Dent Seed Corn Peck 75c, bus. \$2.75
- High Grade Wisconsin No. 7 White Dent Seed Corn Peck 75c, bus. \$2.85
- Select Yellow Dutch Onion Sets lb. 35c, 5 lbs. \$1.70
- English Multiplier Potato Onion Sets lb. 30c, 5 lbs. \$1.40
- Gold Medal Gladioli Bulbs (no two alike), 10 for 85c, 100 for \$6.00
- Rennie's Mammoth Squash, specimens 403 lb. weight, Pkg. 25c
- XXX Scarlet Round White Tip Radish Pkg. 10c, oz. 20c, 4 ozs. 50c
- XXX Melting Marrow Table Peas (dwarf) 4 ozs. 15c, 1 lb. 50c, 1 lb. 40c, 5 lbs. \$1.90
- Round Pod Kidney Bush Butter Beans 4 ozs. 15c, 1 lb. 50c, 5 lbs. \$2.40
- Cool and Crisp Table Cucumber Pkg. 5c, oz. 15c, 4 ozs. 40c
- XXX Early Table Sugar Corn (very fine) Pkg. 10c, lb. 40c, 5 lbs. \$1.90
- Rennie's Fireball Round Table Beet Pkg. 10c, oz. 20c, 4 ozs. 50c
- XXX Early Summer Cabbage (heads 12 lbs. each), Pkg. 10c, oz. 20c
- Rennie's Market Garden Table Carrot Pkg. 10c, oz. 25c, 4 ozs. 75c
- Early Yellow Danvers Onion, black seed Pkg. 5c, oz. 20c, 4 ozs. 60c, 1 lb. \$1.90
- Seed Corn and Potato Prices do NOT include freight charges.

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comes in handy

March 29, 1911.

FARM AND DAIRY

Ayrshire News

A CANADIAN AYRSHIRE IN THE U.S.

FROM away off in the State of Washington comes a report of the splendid performance of a Canadian-bred Ayrshire cow, Ryanogue Hatfield, a mature...

R. O. P. SUMMARY.

Canadian, to December 31st, 1910, summarized as follows: 238 mature cows gave a yearly average of 10,211 lbs. milk, 414.32 lbs. butter fat...

AYRSHIRE PROGRESS IN BRITAIN.

EDITOR, FARM AND DAIRY. In preparing the summary of the advance in dairy cattle in the quarter ending March 15, 1911, the average yield...

Advanced Registry.

Table with columns: Entries, Matur. Class, Lbs., Fat, % Fat. Includes rows for 29 Mature class, 12 Sr. 4-yr.-olds, etc.

AYRSHIRE COWS AND HEIFERS TEST FROM FEB. 19 TO MAR. 14, 1911.

Mature Class. Rose of Verschove, 2581; 10,522 lbs. milk, 312 lbs. fat, 3.55% fat, 482 dya.

Three-Year-Old Class.

Milk, 455 lbs. fat, 3.89% fat, 12,097 dya. Hospital for Insects, Selkirk, Man.

Two-Year-Old Class.

Milk, 397 lbs. fat, 4.39% fat, 9,157 dya. Thamesview Lady, 3787; 9,157 lbs. milk, 397 lbs. fat, 4.39% fat, 298 dya.

One-Year-Old Class.

Milk, 277 lbs. fat, 3.70% fat, 4,680 dya. Dawn of Hillside, Copetown.

Princess of Selkirk, 4816; 12,097 lbs. milk, 455 lbs. fat, 3.89% fat, 12,097 dya.

Hospital for Insects, Selkirk, Man.

Milk, 394 lbs. fat, 3.44% fat, 350 dya.

Thamesview Lady, 3787; 9,157 lbs. milk, 397 lbs. fat, 4.39% fat, 298 dya.

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Hospital for Insects, Selkirk, Man.

Milk, 394 lbs. fat, 3.44% fat, 350 dya.

lbs. milk, 381 lbs. fat, 4.18% fat, 365 dya. S. Turner & Son, Ryckman's Corner.

Flora of Woodhill, 4828; 8,023 lbs. milk, 325 lbs. fat, 3.95% fat, 365 dya. W. H. Gronbach, Rosbush.

Beaver Meadow Beauty, 4737; 7,821 lbs. milk, 319 lbs. fat, 4.07% fat, 280 dya. W. C. Tully, Collier Bros.

Nellie Burns Bk., 4379; 5,471 lbs. milk, 243 lbs. fat, 4.44% fat, 365 dya. Edwin A. Wells.

Beaver Meadow Wonder Lady, 4732; 368 dya. W. C. Tully.

Coronation of Edenhank 2nd, 4573; 6,270 lbs. milk, 357 lbs. fat, 4.85% fat, 365 dya. Edwin A. Wells.

ON THURSDAY, April 5th, the members of the Southern Counties Ayrshire Breeders' Club, through the medium of their fourth consignment sale...

Mr. R. D. Hillier, Burgessville, is the heaviest exhibitor, and is offering a particularly choice and tasty lot of studling his young cows and heifers that have been bred at both Toronto and London exhibitions.

His years old, considered to be one of the best specimens of the breed in Ontario, will be sold for \$1,000.

Mr. J. A. Edwards, Beachville, who is the owner of the best specimen of the breed in Ontario, is offering a particularly choice and tasty lot of studling his young cows and heifers that have been bred at both Toronto and London exhibitions.

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AYRSHIRES

FAIRMOUNT AYRSHIRES. Mature cows and young stock for sale always on hand (both sexes) from large heavy producing high testing cows...

LAKESIDE AYRSHIRES. A select lot of young bulls, all ages, sired by Auchincorn Sea Foam (Imp.) Performance, Grand Champion at both Quebec and Sherbrooke, from Record of Danx, Irish for catalogue.

Proprietor: GEO. H. MONTGOMERY, Dominion Express Bldg., Montreal. Manager: D. MCARTHUR, Phillipsburg, Que.

FOR SALE

AYRSHIRES AND YORKSHIRES. Having purchased from Senator Owens the Riverside Farm at Montebello, Que., and his celebrated herd of Ayrshire Cattle and Yorkshire Pigs, I am now offering Ayrshires, all ages, male and female, especially Bull delivery in March, April and May.

Proprietor: W. F. STAPLETON, Secretary, Ayrshire Sale at Woodstock.

Fernbrook Ayrshires for Sale. Bulls from 8 to 13 months old, out of dams closely related to the two greatest Ayrshire cows in the world, Gargula May Mischief and Jean Armour.

AYRSHIRE BULLS. We offer an exceptionally good pair of bulls, 12 and 14 months old, from particularly choice R. of P. cows, with R. of P. sires. Will be pleased to give descriptions.

AYRSHIRE BULLS. Seven splendid registered Ayrshire cows and heifers for sale. Some with calves at side. Must be shired here. Further particulars on request.

ADVERTISE. In these popular columns you only \$1.68 an inch.

NOTICE

To Stallion Owners

Stallion owners having horses requiring inspection should make application on or before APRIL 4th. Inspectors will be sent commencing APRIL 17th to those owners who have made application at the proper time.

Enlist. The Provincial Government is making every effort to supply our Ontario farms with labor during the coming season that our production may be as great as possible.

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11,584.23
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15.49

3,291.56

112.60

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112.60

"JUST THINK OF IT"

Dr. Mrs. LAKEVIEW DUTCHLAND HENGERVELD 2nd, Grand Champion C.M.R.E. and Western Fair, 1916, 75 per cent blood of L. D. Artis, Cham. Camp. Sr. 3, with 14.66 butter 7 days. Mr. Mrs. KING SYLVIA KEYS, born Dec. 12, 1915; faultless individual. Wife, Inka Sylvia Posch, the sire of MAY ECHO SYLVIA, world's greatest dairy cow, milk 1,000 lbs., butter 41 in 7 days, best day 153 lbs. Dam, Helena Keys, milk 1 day 160 lbs. At 3 years 25.13 lbs., mature 28.20; will be tested again shortly and make easily over 30 lbs. of butter. Helena Keaysa's Dekol at 16 yrs., 29.69 lbs. Cham. Camp. 29 of "KINGS" nearest relative average, 7 days, 23.07 lbs. "KINGS" are open to service to a limited number of approved cows. Write at once for terms, prices, etc.

W. G. BAILEY, Oak Park Stock Farm R. R. No. 4, PARIS, ONT.

HIGHLAND LAKE FARMS

Herd sire, AVONDALE PONTIAC ECHO (under lease), a son of MAY ECHO SYLVIA, the world's record cow for milk production and Canadian Record for butter, 41 lbs. Only one other 41-lb. bull in Canada. Our herd of one hundred includes nearly fifty daughters of a 33.21-bu. son of the great KING SEGUS, brother to the sire of three world's record cows—mature 28.63, Sr. 3, 4-yr.-old 48.54, Jr. 4-yr.-old 46.32 lbs. Junior herd sire, KING SEGUS PONTIAC CANADA, a half brother to AVONDALE PONTIAC ECHO, out of a 29 lbs. Segus cow. He is for sale. If his combination of breeding interests you, write for prices on other males or females. R. W. E. BURNABY, (Farm at Step 55, Yonge St. Radial), Jefferson, Ont.

The Last Sire for Sale

From that great sire, "King Pontiac Artis Canada," born April 5, 1916; a magnificent individual; two-thirds white. Dam a show cow with nearly 20 lbs. sold at a bargain. Several to offer by our great Pontiac bull, "Woodstock's Best Sire," one born 10 months old. One born 8 months old, 3rd quarter white. Dam daughter of K. P. A. Canada, record at 3 yrs. 23.66 lbs., second dam 29 lbs. average. Will be tested for 100 lbs. milk one "Shampion Echo Sylvia Pontiac." Book your order now. H. LYNN, AVONDALE FARM, BROCKVILLE, ONT.

FORSTERCREST STOCK FARM

We have just one grandson of the noted Luna Keys from a tested dam. A good individual and fit for service. Younger cow sired by Riverside Sir Kordyke. Would also offer one or two young cows, prices reasonable. R. B. BROCK, R.R. 2, SIMCOE, ONT.

HOLSTEINS

Could spare 10 cows or heifers bred to the Great Bull KING SEGUS PONTIAC DUPLICATE. Also one yearling bull, and calves from 16 months down. Myrtle, C.P.H. Manchester, G.T.R. R. M. HOLTRY, Port Perry, R. 4

A BULLY BARGAIN

To avoid inbreeding we are offering our herd sire for sale at a bargain. His sire is COUNT SEGUS WALKER FIFTEENTH, with five two-year-old daughters averaging over 30 lbs. butter in milk, and calves from 16 months down. May, nicely marked; a show bull and a sure getter. YOUNG BULLS also for sale. Write for particulars, come and see yourself. M. E. MAYBEE, Prop. R. R. No. 6, TRENTON, ONT.

RIVERSIDE HOLSTEINS

For Sale, Choice Young Bull, sired by King Johanna Pontiac Kordyke, a grandson of Pontiac Kordyke, and a brother of Pontiac Lady Kordyke. On 82 butter in 7 days, 18.92 lbs. 30 days—world's record when made. Also females bred to "King." J. W. RICHARDSON, MALEDONIA, ONT.

OURVILLA HOLSTEINS

Present offering—A show bull, 16 mos. old, from a 4-yr. cow, sire a daughter of DUTCHLAND COLANLITA, SIR ABBERSBERK, Price, \$175.00. LAIDLAW BROS. AYLMER, ONT. R. R. No. 1, Elgin County.

Fairmont Holsteins

Only two bulls left—A and 3 mos. respectively—sired by King Segus Alcatraz Calamity, winner ten nearest dams average over 30 lbs. butter, with almost 4 1/2 fat. Also two heifers in calf to king, due in April. Write for prices or better come and see them. PETER S. ARBOGAST, R.R. No. 2 (Perth Co.), Michell, Ont.

Holstein Stock Wanted

Card of yearling bred to freshen next fall. Registered. Must stand tuberculin test. Also card breeding seven. For particulars to D. B. Howell, Yorkton, Sask.

A FAVOR Please mention FARM AND DAIRY when writing to our advertisers.

Particulars write to John McKee, Secy.-Treas. Norwich, Ont., for catalogue. Residents of Ontario purchasing cattle at this sale will have the railway freight from Woodstock to destination refunded by the club.

HOLSTEIN-FREISIAN RECORDS.

- (Continued from last week.) 2. Daisy Pauline, born 1916, 7y. 3m. 13d.; 27.73 lbs. milk, 14.66 lbs. fat, 18.21 lbs. butter. 14-day record: 7y. 3m. 13d.; 77.6 lbs. milk; 27.93 lbs. fat; 24.92 lbs. butter. Wm. Lemuel, London. 3. Sady Teaks of Hillside, 27.62, 2y. 10m. 13d.; 26.4 lbs. milk, 12.13 lbs. fat, 15.17 lbs. butter. W. A. McDowell, Guelph, Ontario. 4. Colony Madam Pauline Abbecker, 27.43, 2y. 6m. 13d.; 33.6 lbs. milk, 11.89 lbs. milk, 14.86 lbs. butter. 14-day record: 2y. 6m. 13d.; 64.31 lbs. milk; 23.48 lbs. fat; 23.35 lbs. butter. Colony Farm, Essexdale. 5. Riverside Lyons Pet, 23.21, 3y. 4m. 2d.; 26.7 lbs. milk, 11.46 lbs. fat, 14.33 lbs. butter. Allison Pats. 6. Colony George Kordyke, 23.81, 2y. 3m. 3d.; 23.9 lbs. milk, 10.99 lbs. fat, 13.74 lbs. butter. 30-day record: 2y. 3m. 3d.; 149.33 lbs. milk, 42.62 lbs. fat, 53.27 lbs. butter. Colony Farm, Essexdale. 7. Lakeview Canary Countess, 21.69, 4y. 1m. 23d.; 27.9 lbs. milk, 10.70 lbs. fat, 12.32 lbs. butter. Lakeview Farm, Brantford. 8. Queen DeKol Plus, 22.83, 2y. 1m 2d.; 27.3 lbs. milk, 11.42 lbs. fat, 14.84 lbs. butter. S. Lemon. 9. Daisy Pauline, 21.47, 1y. 10m. 2d.; 25.4 lbs. milk, 9.73 lbs. fat, 12.17 lbs. butter. A. E. Phillips. 10. Countess Pearl, 23.45, 2y. 5m. 25d.; 21.1 lbs. milk, 9.31 lbs. fat, 11.64 lbs. butter. Seven Hills Farm, Brantford. During the month of February the records of 46 cows and heifers were accepted for entry to the record book. In the mature class Pontiac Jessie made a splendid record, 37.42 lbs. of butter and 664 lbs. milk in 7 days and 153.45 lbs. butter and 2327.3 lbs. milk in 30 days. Her best day's milk was 162 lbs. Pontiac Jessie now stands second in her class only to May Echo Sylvia, for both 7 and 30 days. Mechtilda de Frieda also made a good showing, with 25.09 lbs. butter and 611.9 lbs. milk in 7 days. Daisy Pauline has completed 7 months under offer, and has yielded 118.8 lbs. milk and 780.56 lbs. butter. W. A. CLEMONS, Secy.

GLENROD STOCK FARM SALE.

WE would direct attention to the large Holstein sale of A. D. McLaughlin, of Rodney, whose announcement appears elsewhere in this issue. Owing to continued serious illness, Mr. McLaughlin compelled to dispose of his whole herd. The sale will be held on April 10th, and although the location is very remote, the dairy districts, the fine herd of 50 head showing such excellent qualities as wanting heavy-producing, well-bred Holsteins. The foundation cows were selected for size, type and heavy milking qualities, and had the best of backing in their breeding; and for these nothing but high-class sires have been used. An inspection of the herd will convince anyone that the breeding has been almost practical lines. A process of selection since the herd was founded has been followed, and only the paying ones have been retained. The cows are all young, with the exception of three, and the sires are young, except one yearling and two-year-heifers. The great herd sire, OLYMPIA, by HENRY VAN DERKRIEKE (1821), is a show bull from the ground up. He is one of the best in the Province as a sire, and should go to head some good herd. M. JESSE.

PONTIAC JESSE.

BREEDERS of Holsteins have talked for miles of late of the record made by Mr. M. McDowell, Oxford Centre, in the mature cow class. His record is one worthy of notice, and as a cow of this age, it is well to note she stands second in butter fat production in the Dominion, being beaten only by May Echo Sylvia. Her record is 64 lb. 37.62 lbs. butter in 7 days; 2.87 lbs. milk and 18 lbs. butter in 1 day.

The production record of this great cow is not the only thing about her that gives her prominence, and she has a very creditable show record also. In 1913 she was 1st and champion at Guelph as a two-year-old. In 1913 she was again first in her class, and in 1914 she received 26.17 lbs. butter in 7 days. Her daughter, Pontiac Jessie 2nd, was first and champion two-year-old at Guelph in 1915, and second at Ottawa, 1917. Pontiac Jessie is a cow owned and bred by Mr. McDowell, and all her progeny are held by him. She is a cow weighing about 1,700 lbs. and is in the best of her capacity for food is very marked; her feet are always clean, and she is a cow who had a greater capacity. She is improved from first acquaintance as being an extraordinary cow. She possesses a straight top line, ample spring of ribs and a sinuous, perfect udder. The even quarters, large feet and the mammary system are most important organs in a very marked. The milk veins are large and branched. She has a long quarter, strong udder, a good dairy cow. Pontiac Jessie is a queen in her world, and in her Mr. McDowell has an animal that is sure to bring him large returns and much popularity. ELIAS SNYDER'S SALE.

HOLSTEIN breeders in Oxford county are justly proud of the result of said at the Elias Snyder's sale. It was said at the close of the sale that one prominent breeder of these famous cattle in Ontario. The 20 animals sold were in all of the best of the type and were in the drive shed, where comfortable seats were provided for the bidders. The sale started at 10 o'clock, and the bidding was sharp through the afternoon. The animals were sold at a distance, and a number of choice animals went to other counties. Seven females for \$4,195, an average of \$246.75 each, and three bulls for \$296, an average of \$230 each. The highest price paid for one animal has been by C. P. Wilcox, Chatham, for Netherland Francy. The handsome figure of \$290 was given by G. F. Mahon, Woodstock, for the yearling bull, Colantus Posch Abbecker.

Females. Olive Abbecker, Posch 3rd, \$285, W. Wilson, Salford; Clara Abbecker, Posch 4th, \$175, W. Wilson; Rosalind Calamity Abbecker, Posch 5th, \$175, W. Wilson; Rosalind Calamity Hengerveld No. 1, Twin, \$150, W. Wilson; Pauline Calamity Hengerveld No. 2, Twin, \$150, W. Wilson; Francy, \$125, F. Stock, Tavistock; Netherland Francy, \$115, C. P. Wilcox, Chatham; Lily Abbecker, Mercens, \$115, W. Stock, Tavistock; Francy Hengerveld, \$105, W. Stock; Nation Beauty Hengerveld, \$100, L. Wilson, Hamilton; Beattie Mercedes Abbecker, \$100, H. Brown, Welland; Nell DeKol Pontiac, \$225, L. Wilson; Nell DeKol Mercens, \$205, F. Stock; Cora Hengerveld, \$200, W. Wilson; Pontiac Daisy DeKol, \$155, W. Stock; Francy, \$150, W. Wilson; Francy, \$150, W. Wilson; Netherland Francy, \$145, W. Wilson.

Colantus Posch Abbecker, \$290, G. F. Mahon, Woodstock; Hengerveld Calamity Abbecker, \$170, H. Cantler, Burgessville; Paul Calamity Abbecker, \$230, J. Good-willand, Welland.

UNION STOCK YARDS SALE.

ABOUT 80 pure-bred horses, Clydesdales and Percherons, were sold at the Union Stock Yards, on Thursday. Prices on the whole were very good. The horses were withdrawn. Clydesdales sold horses readily than Percherons. Girtling For sale, a pair of horses, one by W. J. Howard, Fairbank, Ont., was purchased for \$1,000. This was the highest price for a pair of horses. A Percheron consisted by J. B. Hesse, Woodstock, was sold for \$1,000. This was the highest price for a pair of horses. The average price for the 119 horses was \$121.12. Percherons were disposed of at an average price of \$165.

A CORRECTION.

In Farm and Dairy last week, in advertisement of W. E. Watson, Pine Grove, Ont., a misprint occurred. Bull given her price was \$1,000, not \$1,000. This should have read March 8, 1917. See corrected ad. on another page.

POSTPONED

Due to the delay in the securing of the catalogue, MR. W. B. ALLISON, of CHESTERTON, has been forced to postpone his big dispersion sale of FINEST BRED FARMERS AT BETHUNE, B. C. on March 21st to TUESDAY, MARCH 27th. Readers who receive this copy of Farm and Dairy in time, kindly make note of the change as above.

secure investment ever returning ever may be taken up as \$100, it should make investors money to spare. The agricultural showed but little. There grain, higher, eggs above average, and dairy products are strictly. The wheat market is probably early in the season were secured however, because run the nerves of oper Winthrop and their

Owing to five-year-old in these months. This year has been the best of a grand lot of. The sale was from imported stock. ALLY TRADING Co. Ltd. MOORE ST. TORONTO.

Tory was admitted, showed that 1916 agricultural. Reports of an increase in cultural products. Average prices increased. Average prices of agricultural products. Average prices of agricultural products.

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WHAT BREEDERS OFFER AT THE BELLEVILLE SALE

Look up the list below on what is offered from each of the big herds.
For complete information write the Sec'y or Sales Manager
for a Catalogue.

WHAT WE ARE OFFERING.

The great producing quality of the LULLU KEYES family are known far and wide. LULLU KEYES, Sr.; LULLU DARNNESS, over 50 lbs.; TRIDENT KEYES, 27.61; PRINCESS LULLU KEYES, the only daughter of Lulu Keyes, Jr., two-year-old 27.31. We are offering three generations of this great family—LULLU INKA PIETERTJE, a ½-sister of Lulu Keyes, bred to MAY ECHO JOHANNA and due to PIETERTJE; a ½-sister of Lulu Keyes, and her daughter, LULLU FRESHEN after sale. Her daughter, LULLU ORMSBY, and her daughter, LULLU HERMES ORMSBY, three other good daughters of PONTIAC HERMES. This well-known breeding is long looking after, and we will have them with us at the Belleville sale on April 4th.

E. B. MALLORY

BELLEVILLE, ONTARIO.

ROSELAWN CONSIGNMENT.

One two-year-old half-sister to MAY ECHO SYLVIA, 41 lbs. butter. One four-year-old daughter of the 100-lb. sire, COUNT SEGIS WALKER PIETERTJE. An eight-year-old granddaughter of PIETERTJE HENGEVELD DROGOL, her dam was a half-sister to MAY ECHO. One yearling bull, sired by KING SEGIS ALCARTRA SPOFFORD, a half interest of which was recently sold to Mr. Shaw to feed the famous Her-Loo herd. Also 2 bull calves by above sire will be sold after dams.

J. M. BRANSCOMBE, Proprietor BLOOMFIELD, ONTARIO.

10 Head from Hamilton Farms

Two daughters in our consignment are from Sir Sadie Korndyke Segis, one, the daughter of a 21-lb. cow whose record was made with a ½ sister. There is a promising daughter of Pontiac Hermes and out of a daughter of Inka Sylvia Beets Poesa and a grand daughter of May Echo. Every animal on an offering is of high standing and without exception will reflect credit on their buyers at Belleville. Come and look them over and see for yourself the splendid individuals they are offering.

J. B. TRACY, Hamilton Farms, Cobourg

Get These At Belleville

The stock I am consigning to Belleville is bred from Sidney Echo on dam's side, half sister to May Echo, the two in milk and being tested are making creditable records. All my consignment are typey animals, well grown, and worthy of a place in any herd. See them at Belleville.

GEO. D. WRIGHT, FRANKFORD, Ont.

The Ninth Annual Dairy Magazine Number of Farm and Dairy will be published April 5

Prepare Your Copy and Reserve Space Early

ROSELAWN FARMS' OFFERING.

N this year's consignment to Belleville Club, J. M. Branscombe, of Roselawn Farm, offers a two-year-old half-sister to May Echo Sylvia, whose dam was a daughter of Count Segis Walker Pietertje. A yearling bull, fit for service, sired by King Segis Alcartra Spofford, from a dam with a 17.69 Sr. two-year-old record. He is a fine individual and sure to please. Two bull calves will also be sold from the above sires, after dams. One six-year-old cow, whose dam was a sister to May Echo, and her daughter, four years, sired by the 100-lb. sire, Count Segis Walker Pietertje.

THE LEAVENS & PURTELLE CONSIGNMENT.

THE animals in this consignment to the Belleville sale are of unusual high quality, both as to breeding and individuality. Among them are four daughters of Count Segis Walker Pietertje, sire of a 21-lb. five-year-old, and a 22-lb. two-year-old, and four that average 100 lbs. milk per day. Four of his granddaughters are also half-sisters to May Echo Sylvia—the world's champion milk and butter cow—and a daughter of King Segis Alcartra Spofford. Remember these cattle are not only bred along the very best lines, but as individuals are large, deep-bodied, with strong constitutions, and are heavy producers of milk when having freshens. Two of them have been tested, and are in test, the rest are heavy in calf in Canada's popular young sire, King Segis Alcartra Spofford. Leavens and Purteile are consigning some of the best of their herds and are trusting they will go to high-class breeders.

THE WRIGHT CONSIGNMENT.

The consignment of Geo. D. Wright of Frankford, which consists of four head, contains some good breeding. On the dam's side is Sidney Echo, half sister to May Echo. Two of the cows are being tested and making a very creditable showing. These are grand daughters of May Echo and on sire's side the sire of two 1 and 2-yr.-olds was Pontiac Perfection, son of Pontiac Hermes, who has been bred from same line on dam's side and from Segis Dike Jones on sire's side. Also in Queen Keyes, 100 lbs. milk in one day. These animals are all worthy of notice and maintain the high standard of excellence looked for at such a sale as Belleville.

A CHOICE LOT.

N this consignment of E. B. Mallory to the Belleville sale are three daughters and one grand daughter of the grand old bull, Pontiac Hermes, and two of these are bred to a May Echo bull—a combination of breeding hard to beat. All Holstein breeders or those starting in the business are familiar with the merits of the Lulu Keyes and the May Echo families, and at Belleville three generations of the Lulu family are being offered.

Lulu Pietertje Inka, who was born out of the herd has never yet been tested, but is a fine type of dairy cow, and has had two excellent heifers since coming into her possession. One 11-year-old

gone to a noted Holstein breeder near Montreal. She is not due to calve until after the sale and although nine years old will be in fine condition for the sale and will reflect credit on the Mallow herd, on her buyer and on the Belleville sale. The daughter and grand daughter will be there—but we are anticipating, Grand Mallow, from a dam with a 17.69 Sr. two-year-old record. He is a fine individual and sure to please. Two bull calves will also be sold from the above sires, after dams. There is no chance to sell a poor dairy animal for a milk producer and disappoint somebody when you can get any old price for beef.

THE D. B. TRACY CONSIGNMENT.

THE consignment of D. B. Tracy to Belleville sale are bred from the best. It includes two daughters of Sir Sadie Korndyke Segis, one, the daughter of a 21-lb. cow made with a three-quarter udder; the other out of a promising daughter of a 27-lb. cow. Their sire is Sadie Vale. Another is a very promising daughter of Pontiac Hermes and out of a daughter of Inka Sylvia Beets Poesa and a grand daughter of May Echo. He is bred to a son of King Segis Alcartra Spofford with this heifer, but she regrets parting with this heifer, but she wants to give good stuff in the sale.

Two attractive bulls, one out of a promising daughter of a 21-lb. cow and sired by Sir Sadie Korndyke Segis. The dam is out of Princess Dixie of Amnathdale 3rd and a son of Count Segis Walker Pietertje, and a 26-lb. cow that has milked 95 lbs. a day. In addition there are three nice heifers in milk, one 22-lb. daughter of a 27-lb. cow, one 21-lb. cow bred to King K. Sadie Keyes and one 22-lb. daughter of Sir Sadie Korndyke, and one promising heifer bred on producing lines.

WATERLOO HOLSTEIN CLUB MEETS.

THE second annual meeting of the Waterloo County Holstein Club was held in the Waterloo Hotel on Thursday, Mar. 8. Mr. Hallman, the president, referred in his opening address to the work done and objects of the club, and spoke strongly in favor of the club holding a public sale and urged the adoption of the same by the members. District Representative Knapp also spoke, strongly advising the holding of a public sale, not only as a means of selling surplus stock, but as an advertisement to the Holstein interests of the county. A motion was carried to hold a sale the coming fall or winter.

The afternoon session was held at the farm of Mr. H. Knell, near Freeport, where was seen one of the best Holstein herds in the county and stable equipment of the very latest kind. Mr. R. S. Stevens, son of Ancaster, was the speaker of the afternoon, and conducted the judging class. The election of officers resulted as follows:

Mr. Hallman was re-elected President; Mr. Andrew Zouler, New Hamburg, 2nd Vice-President; Anthony Gies, Waterloo, 3rd Vice-President; and the following directors: H. Knell, H. Ladolph, H. Shirk, Kitchener; Warren Bean, Harry Walker, New Hamburg; Henry Becker, Elmira; J. A. Bryden, Galt; John Howling, New Dundee; H. Groh, Preston; Wm. A. Rife,

Get "King's" Blood at Belleville

You can own "King's" blood in your herd if you buy at our great Belleville Sale. It's the kind of blood that will not only "raise your records," but every calf that "King" is throwing is the right type and makeup—and then, too, "King" is backed by the "best blood in America," thus we say to every breeder in Ontario—THIS IS YOUR OPPORTUNITY to secure sons and daughters and females bred to King Segis Alcartra Spofford, the son of the \$50,000 bull. Here's a few of the offerings from our own herds:

No. 48—King Alcartra Keyes—He's a choice one—a true son of King and out of a dam that traces to the best. She is under test now and making over 20 lbs. as a 2-yr.-old with 4% fat. Just a year old and ready for service. Don't miss this "King" if you want our choicest.

47—Countess Segis Pietertje—A daughter of Count Segis Walker Pietertje and dam of "King" above. Her sister has just made 31 lbs.

50—Sylvia Segis Walker—A beautiful heifer that made well over 20 lbs. as a 2-yr.-old. Today as a Sr. 2-yr.-old she weighs about 1,700 lbs. Be sure to look her up at the sale. She is high in fat and we now have her in test.

46 and 49—These are choice ones. In your own interests look them up now. The latter is a full sister that we sold for \$1,000 recently.

No. 43—Korndyke Segis Sylvia, 29.625, and her sister, her dam and sister, grand-dam and sister averaged over 31 lbs. butter in 7 days. She

No. 64—Contributed by Peter Cave. On the dam's side he has the blood of "May Echo and Lulu Keyes," two of the greatest cows in Canada.

No. 1—By J. M. Branscombe. The dam is a grand daughter of "Dedcol Pins," Canadian champion for 1916 with over 22,500 lbs. milk in 1 year, and Pietertje Hengerveld's "The Kol," with more 100 lb. daughters than any bull in the world.

No. 64—By J. M. Joyce. The dam is a grand daughter of "Pontiac Korndyke and Count Segis Walker Pietertje." He is bred along the

is in calf to King Segis Alcartra Spofford. You cannot pay too much for her. We sold her next year's bull calf for \$250. We are also offering a ½ sister of hers. She is a plainer heifer, but has lots of constitution and size and is a worker all the year.

Sons of King Segis Alcartra Spofford

same lines as the 50-lb. cow and the 41 and 46-lb. No. 93—A daughter of "King." Her dam is richly bred. She is a 21-lb. sister of the 2-yr. 2-year old sister. She is closely related to "Moris Durham" one of the best individuals in Canada. Mr. Joyce has reduced \$600 for her.

You cannot pay too much for these sons and daughters of "King's." The bottom parts of their pedigrees are from the best females in Canada, and are filled in on all sides with good records. Don't fail to get some of "King's" on April 4.

LEAVENS & PURTELLE - MARK THESE IN YOUR CATALOGUE - Bloomfield, Ont.



75
Head

Belleville---

The Sale of 1917

THE TRUE VALUE OF GOOD COWS

The breeder of good Holsteins is the most envied man in the farming business in America. He is on the right track to progress. He has a machine with "capacity" for production that seems unlimited. The Holstein cow is still climbing the ladder—30 lbs., 40 lbs., and now the great 50-lb. cow.

Years ago, Belleville breeders recognized the true value of good cows. They not only cow, and they were crossed and recessed with better blood, proving their worth in the records of their dams. To-day, Belleville District Holsteins have a reputation for records and type of which we are justly proud. You buy them, Mr. Breeder, at our 1917 sale, you add to YOUR herd the fame and records of our great cows—the May Echoes, Lulu Keyes, Daisy Pauline Pietertje, and others. Practically every animal we offer on our April 4 has been bred and developed by the consignors.

The Sires--

Our offerings of sires this season are exceptional. They form one of the great features of the sale. Not only are they from splendid dams, but the great majority are sired by KING SEGHS ALCARTRA SPOFFORD, the son of the \$50,000 bull, and out of the high record cows of this district. Then in PRINCE PRESOTT KORNDYKE ANNANDALE we offer a bull whose two nearest dams average 29 lbs. of butter in seven days, and who is by the same sire as LADY PERFECTION KORNDYKE (milk 724 lbs., butter 40.43).
So Come to Belleville for Your New Herd Sire.

The Date

APRIL 4th

Wednesday

12.30 noon

The Females--

Belleville has long been known as the Home of Champions and One Hundred Pound Cows.

LISTEN--

Many of them are sisters of the world's record cow, MAY ECHO SYLVIA (152 lbs. milk in a day). You know how this happened. Her sire stood for service for eight years in this District of Champions. Daughters and granddaughters of the 100-lb. sire, COUNT SEGHS WALKER PIETERTJE, who has five two-year-old daughters to average over 23 lbs. butter in seven days. Daughters of a son of the great foundation cow MAY ECHO, who for five years stood champion in R.O.P. Her progeny stands unequalled in the stamping of the 100 lbs. quality in her offspring. Daughters of the 30-lb. sire, FAIR-VIEW KORNDYKE PONTIAC, out of a sister of the 20-lb. cow, VICTORIA BURKE. Several cows with records up to 25 lbs. butter in seven days and sisters salore to 20-lb. and 40-lb. cows. Heifers by a brother to MABEL SEGHS KORNDYKE, butter 40.32. A full sister to a cow that sold for \$1,000, she herself having milked up to 96 lbs. a day on three milkings. Several females bred to a son of LULU KEYES (milk 785, butter 35.05, in seven days).

The Place BELLEVILLE, ONT.

Albion Stables

C.P.R. G.T.R. & C.N.R.

A Clean Sale--

That's been our motto in the past. We assure you of it in the future just as long as we are conducting these great Belleville sales. A \$50.00 fine against any suggestion of by-bidding guarantees every buyer a clean, square deal.

We Invite You--

We invite every breeder in Ontario to attend our sales, inspect our stock and meet us "in our home town." Arrange to meet your friends here. Come whether you are prepared to buy or not. There may just be the sire or female offered that you need to "nick in" with your herd. And you'll be comfortable. We've arranged for that—a covered sale ring and seats for all.

Auctioneer

Norman Montgomery

Brighton

The Catalogues--

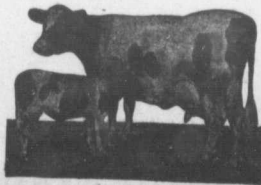
There is one for you with the Secretary or the Sales Manager. Get it and go closely over our offerings, noting the splendid records and backing. Then come to the sale in the morning and go over carefully the ones you like best and mark them in your catalogue for your bid. And if you do, you'll go home smiling.

SO ADIEU TILL APRIL 4.

RALPH PARKS, President
Napanea, Ont.

JAS. A. CASKEY, Sales Manager
Madoc, Ont.

F. R. MALLORY, Secretary
Frankford, Ont.



Department
of
Agriculture



Province
of
Ontario

ONTARIO

Will you want labor this Summer?

Cut out this
form—fill
it in and Mail it
today to Trades
& Labor Branch
15 Queens Park
Toronto

No. Date

TRADES AND LABOUR BRANCH
Ontario Government Public Employment Bureaux
15 QUEEN'S PARK, TORONTO

APPLICATION FOR FARM HELP

SIGNATURE OF FARMER POST OFFICE COUNTY

What is your nearest railway station? Acres in farm What kind of farming practised?
Mixed
Fruit
Dairy

Mark (X) after help required

SINGLE MEN

Experienced (Plough, Milk, etc.)
Partly experienced (handle Horses)
Inexperienced
Business Men (3 weeks)
High School Boys
WAGES—including Board, Lodging and Washing
\$.....

MARRIED MAN AND WIFE

Experienced
Partly experienced
Inexperienced
WAGES—if Wife works in your house, \$.....
If separate cottage is provided, \$.....

Age Limit Length of time help is required months, from
All engagements subject to two weeks' trial with wages, and railway fare—if fare has been advanced.
High School Boys will all be 14 and over, and will be available for from 2 to 5 months after April 25th.
Ontario Government Public Employment Bureaux. Form 11. P.F.D. 1

The Ontario
Government
will make every
possible effort
to supply you

High School Boys are Being Enlisted in Large Numbers--

of the right kind for farm service. Last year hundreds of bright young men from town and city schools did splendid work on Ontario's farms. This year, the Department of Agriculture is lining up this class of help very strongly, and thousands of enthusiastic young men, with more or less farm experience, will be available for Ontario farmers.

Here is What the Department of Agriculture is doing to get you this Help?

We are carrying on a vigorous campaign through the Ontario Government Employment Bureaux, through the High Schools, through the newspapers, and through many voluntary organizations in the cities and towns, both inside and outside the Province. Great care is being taken to secure workers who mean business. Remember, however, that the supply of first-class, experienced men will be limited, so if you can use partly experienced, or inexperienced men, or business men (3 weeks), or High School boys, please ask for them. Be sure to get your application in early. Fill out the above Form very carefully and as fully as possible. Any further information you wish to give us, kindly write on a separate sheet of paper. We await your answer.

ONTARIO DEPARTMENT OF AGRICULTURE

SIR WILLIAM H. HEARST, Minister of Agriculture

PARLIAMENT BUILDINGS, TORONTO