

Issued Each Week—Only One Dollar A Year

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NUMBER 17

1913
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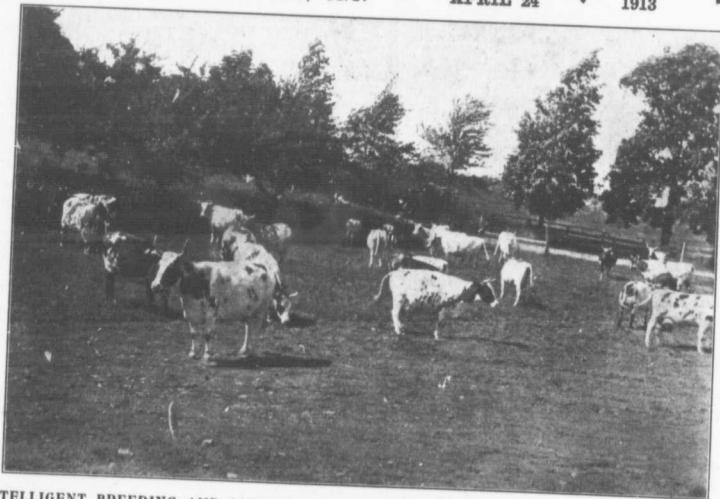
FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

APRIL 24

1913



INTELLIGENT BREEDING AND LIBERAL FEEDING EXPLAIN THE FAME OF THIS GREAT HERD
The breeder of dairy cattle who would produce notably large records in his herd must be a broad-gauged man, one who puts the proper emphasis on all the factors that go to encourage milk production. He must be feeder and breeder combined. The Ayrshire herd here illustrated, that of A. S. Turner & Sons, Wentworth Co., Ont., is a product of such well rounded management. This herd has produced more world record cows of the breed than any other herd in Canada. They are well bred to start with. Then they are fed well, each cow being fed according to her special requirements. Many other breeders have great cows of which we never hear, because some one factor in their management is neglected—usually the feeding.

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IN TWO

By starting in this season to Use a Large-Capacity

"Simplex" Cream Separator

The 1,100 lb. size "Simplex" when at speed and skimming, takes no more power than the ordinary 500 lb. size separator of other makes.



The favorite everywhere it goes. Note its beauty and heavy compact construction, with low-down, handy cup; can only 3/4 ft. from the floor.

The large-capacity "Simplex" Hand Separator will Save you Time, Save you Labor Save you Expense

Because it will cut the labor of skimming the milk more than in two, not only because it turns easier than most other hand separators, regardless of capacity, but because it does the work in half the time.

In these busy days when labor is so scarce and so expensive, and so unsatisfactory, a saving in time is a great direct saving in money to you.

Now, while you have time to read, send a copy of our book describing in detail, the improved "Simplex" large-capacity, Link-Blade Cream Separators.

Write us a post card to-day asking for the book.

When writing ask for an estimate on what it will cost you to put in a B-L-R Mechanical Milker to milk your cows.

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Pratt's Liniment

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It also relieves rheumatism and neuralgia. Equally good for man or beast.

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THE PRATT FOOD CO. OF CANADA, TORONTO, ONT. 144.

Stock Book FREE

The Banks and the Farmer
A. M. McNeil, Carleton Co., Ont.
"Cultivate the acquaintance of your banker," says Mr. J. A. Macdonald, in a most excellent article in Farm and Dairy of March 20th. Nothing can be said against the doctrine. It is admirable. Under the present system of banking, nevertheless, the banker can do little for the average farmer. The man who can "cultivate the banker's acquaintance" is usually not so much in need of money as the great majority of farmers who cannot cultivate the acquaintance of a banker. I venture to say that considerably over half the farmers of Canada practically never have anything that would form even a nucleus of a bank account. But they need capital, need credit, and the ordinary banks simply cannot do the business.

What is needed and what we will have to have in Canada before credit can be used to any extent by our farmers, are local associations of a dozen or two dozen individuals, who will start with what little capital they have, if it is only \$50, and will loan it to each other, and in all probability help one another to secure credit through the association, which will enable them to make their farming operations more profitable.

MUTUAL HELPFULNESS

Mr. Macdonald says: "No one wants his neighbor to endorse for him if he can at all help it, and I am sure no one wants to endorse for any man, even his brother." This must be changed. These associations will show farmers that instead of this spirit, they will adopt the contrary, "Each for all, all for each." Of course, this will mean that one will secure entrance to the society, unless he is worthy of credit, and will trust and can be trusted. It will mean, too, that every loan among themselves will be scanned most critically. No loans will be made without every member having full knowledge of how the money is going to be used. Each member will also have an opportunity to pass his judgment as to whether the investment is a good one or not, and in all probability if there is any doubt about the investment, the member will not secure the loan. This is a work which can be done by neighbors for each other, but which cannot be done by a banker and yet it is work that must be done before it would be at all safe to loan money in farm operations.

CENTRALIZATION TO FOLLOW

This, of course, is only the beginning. These societies, as they increase in number, will soon demand a central bank, which may be one of our ordinary banks, but more probably a specially created corporation, which would supply money even cheaper than the ordinary banks. When we have enough of these small local associations then it will be easy to introduce the land banks in use in most European countries, and do away with the exorbitant interest on the loans carried by our loan companies.

All these things will take time, but the beginning is small local associations among farmers themselves, using their own money, lending it now to one and then to another as the case may be, and securing additional money, from outside sources, on the credit of the members combined. This is not merely a matter of theory even in Canada. It is already beginning, and we have here in Ottawa a half-dozen societies of this kind, one among the civil servants and several among the laboring people of Ottawa and Hull. They are working most admirably. Of course, it must be admitted that it is somewhat easier to form them among working people and permanent residents, such as civil ser-

vants, than it would be among farmers, but exactly the same thing is possible among farmers as soon as they are educated to it.

Agriculture in the Schools

S. B. McCready, Director of Elementary Agriculture Education for the Province of Ontario, is alive to the importance of teaching agriculture through the medium of the public school. One of the methods that McCready is adopting for the forwarding of agricultural education in public schools is the supply of school teachers with agricultural bulletins. These bulletins deal with the management of school gardens and suggestions and helps to teachers. The latest one contains a description of the Carleton County Potato Growing Contest of 1912. Other bulletins will follow from time to time dealing with school improvements, parents and teachers associations, school fairs and such other matters as may help to arouse public interest in the subject the very best possible education for boys and girls in the country.

These bulletins and charts are mailed to every school in the Province of Ontario. On account of frequent changes in address, the bulletins are not sent personally to the teachers, but to the post office nearest to the Carleton County Potato Growing Contest of 1912. Other bulletins will follow from time to time dealing with school improvements, parents and teachers associations, school fairs and such other matters as may help to arouse public interest in the subject the very best possible education for boys and girls in the country.

Quality Spells Success

W. H. Bunting, Lincoln Co., Ont.

It was my privilege to visit one or two important sections of the United States in connection with my recent tour of the fruit-growing districts of Canada. The quality that impressed me most strongly, amongst our cousins to the south, was the strong emphasis placed on the question of quality by those who were most successful. Every possible method that will secure quality, finish and beauty of appearance in the product is being sought by many of these men and adopted. The result is apparent in the high prices which are now being obtained for Hood River, Wenatchee and Yakima apples, and in the reputation which many New York State leaders have established in the principal and most discriminating market of the east.

It has been demonstrated over and over again, in every province of the Dominion, that while there is a very large surplus of indifferent fruit produced and offered to the market, the market never has been, and will not for years to come, be fully supplied with fruit that can be called strictly "first class." A part of the satisfaction derived from handling a first-class article, permanent pecuniary success depends upon a proper appreciation of this fact.

It can give the Canadian fruit-grower a more thorough realization of the value and importance, not only to himself but to the country at large, of leaving no stone unturned and sparing no effort to secure the very highest quality of establish the very highest standard in every detail of his business, then I hope that the time and effort spent in making this investigation will result in giving some little impetus to the fruit industry of Canada.—Extract from address.

A rolling land of rather stiff clay is the best alfalfa soil. Gravel is fairly good if there is a good subsoil.—P. F. C. A. Zavits, O. A. C. Guelph.

HOW many bull? Many have spend every cows give the fortune for

The reason known to inherit their sire and the mothers. H say to devote is by but success allow milking power daughters. S good animal into the herd better for the way reasons lieved the con- and—of it.

But there a making too, dairy industry that almost breeding purpose bull cannot have fully grown ways. Yet a indeed. Bulls into or three whereas they or eight. I g come cross and. But if constantly, the accider's guard practice of keep best years before industry will no

The bull should by his masculin strong rugged—created by a full strong square be the impression cows. With the of fine male is no Strength should

RIGHT to But the bull battle that leads must be skillful deplorable fact of cows are still loss. If you d start a cow-tester your neighbors. favored localities of cows acre a loss of over \$9

That made him start, I can tell you this can't a test now laying the that will pay. H his neighbor, just a net gain of over cows. But if he test he might test, being the ling the road to man can keep a lishment for cows time.

SOME tests will formation, however seven-day tests are popular each year so. Before these, heavily until she's lion. But when the her feed is going she is thrown in condition. She is suming the fat of h dieing a heavy loss a few days. But t cate her feed out the year. Some production is requir only be secured ac

HOW TO GET STARTED RIGHT IN DAIRYING

J. Miller, Durham Co., Ont.

HOW much should I pay for a bull? A great many men have asked themselves that question. Many have asked why they should spend very much at all for one. The cows give the milk so why pay a small fortune for the bull?

THE REASON WHY

The reason is based upon a fact well known to breeders. The heifer calves inherit their characteristics from their sire and the bull calves from their mothers. Hence the very quickest way to develop a profitable herd of cows is by buying the best bull circumstances allow. He will transmit the milking powers of his mother to his daughters. So that by securing one good animal every member that comes into the herd after that time will be better for it. Our fathers did not always recognize this fact. They believed the cows were of most importance—and their sons are poorer because of it.

But there are mistakes that we are making too. A general survey of the dairy industry of the country proves that almost all the bulls used for breeding purposes are immature. A bull cannot be at his best until he has fully grown and developed in all ways. Yet such animals are scarce indeed. Bulls are usually kept until two or three years of age, only; whereas they are at their best at six or eight. I grant that they may become cross and are always treacherous. But if this is borne in mind constantly, they may be watched and practice of keeping against. Until the best years become general, the dairy industry will not flourish as it should.

The bull should always be judged by his masculinity. He must have a strong rugged constitution as indicated by a full deep chest and a strong square body. He should give the impression of great strength and vitality, which he can transmit to his offspring. The pretty, weak, over-fine male is not desirable anywhere. Strength should be the ruling factor.

RIGHT UP AGAINST IT

But the bull is only part of the battle that leads to success. The cows must be skilfully selected. It is a deplorable fact that many thousands of cows are milked every year at a loss. If you don't believe it, just start a cow-testing crusade among your neighbors. In one of our most favored localities one man discovered his cows were averaging a yearly net loss of over \$9 each.

That made him sit up and take notice, I can tell you. Perhaps if you start such a test you will too. He is now laying the foundation of a herd that will pay. He can do it too, for his neighbor, just next door, averaged a net gain of over \$30 each from his cows. But if he hadn't applied the test, he might still have been traveling the road to the poor-house. A man can keep a free boarding establishment for cows only for a certain time.

A CROOKED GAME

Some tests will not give much information, however. The three and seven-day tests are becoming more unpopular each year—and deservedly so. Before, these, a cow may be fed heavily until she's in splendid condition. But when the test is applied if her feed is changed and shortened, she is thrown into a nervous, feverish condition. She is then capable of consuming the fat of her body and of producing a heavy flow of rich milk for a few days. But this does not indicate her ability as a milker throughout the year. Some tests of heavy production is required and this can only be secured accurately with the

scales and Babcock test. The scales alone, however, will indicate to a certain degree, the relative merits of members of the herd. A standard of individual should be one that will produce at least 5,000 lbs. of milk from each cow.

Having done this the next thing is to look around for new blood. You may be surprised at how much you will require. Unless you have an idea of just what you want, and know how to tell it, when you do find it, your task is difficult.

The question of which breed to choose troubles some. Frequently men ask "Which one is best?" "But there is no 'best' breed." They are all good in their places. The principal thing is to choose one breed and to stay by it. One of our greatest faults is our mongrel stock. There are few herds that do not show a mixture of breeds. Any breeder knows what a scrub bunch of cattle will result from a confusion of characters that very often conflict. Yet this fact still stares us in the face; the country is filled with mixed herds.

Whether our cows be pure-bred or well-bred is of less importance. A herd of well-bred grades sired by a pure-bred bull will probably pay us as much as the pail as pure-bred stock. But it always pays to add a pure-bred heifer at times, as there is a ready sale for good blood.

HOW YOU CAN TELL

After all there is but one way to judge a dairy cow—that is by her performance at the pail. A cow should be a record-breaker, according to her books, as recorded in the herd she is confronted by a spring scales. There are, however, certain desirable features that are we fairly safe in looking for in her nervous and physical structure. If she possesses them we may feel comfortably sure she will not disappoint us—but there are always a few surprises.

First of all she should be in good condition. If she is not, much valuable food that should be turned into milk will be needed to place her there. This desirable condition of body is shown by a soft, pliable skin, that will slip smoothly when pinched with the thumb and finger. Her hair should be fine and soft—never dry or hard. She must have a strong nervous system to enable her to perform the work of turning food into milk. She also must have a very strong constitution and the capacity to eat a great deal of food. She is simply a machine working under high pressure and you must regard her as such. To possess these qualities she requires a deep chest with a wide spring of rib indicating lung power, and one that has a deep wide paunch and should be open ribbed.

Her milk vessels require special attention. The udder should be large, square and evenly balanced. The teats should be large and set well apart. The larger and more twisted the milk veins the better. The walls should be of good size and well shaped.

These points are by no means an infallible standard, but they indicate fairly well the value of the cow as a milker. Dairying is rapidly reaching such a stage that not every man can all phases of the game, and unless he is, the other fellow will come out on top. A knowledge of what dairy animals are, and the ability to judge, test and select them, are the chief essentials for success in the business.

The hardest blow that we could give to the dairy industry would be to establish a ventilating system in every



"When I have an odd moment, I do a little painting"

This is what a progressive farm owner said, and his farm is pointed out by the neighbors as being a prosperous, well-managed farm. This man has discovered one of the secrets of success, so well expressed by the old adage, "A stitch in time, saves nine." He knows that farm machinery costs a good deal; he knows that a little paint used occasionally will keep it in good shape.

Well painted farm implements do not rust, the woodwork does not crack or rot, and they keep in good condition for the longest possible time. Look around your farm today, and see if anything needs painting. Buy the paint at once, and use it at odd times. There is a Sherwin-Williams Agent in every town.

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THE SHERWIN WILLIAMS CO., OF CANADA, LTD. Montreal, Toronto, Winnipeg, Vancouver

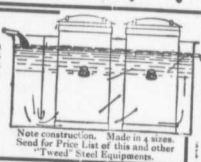


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This Tank of our making is enables you to deliver perfect as a Milk-Cooler. It condition is strong and light. Never gets water.

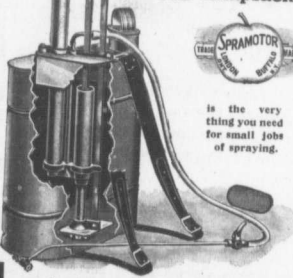
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Address me personally for your copy of the book, and in ordering a Knapsack Spramotor, I'll give your order personal attention.

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The small trader can connect with possible customers by placing a small advertisement in FARM AND DAIRY. Our rate is 38 CENTS AN INCH. Bargain-counter space in our classified columns at 2 cents a word. Make out your advertisement and send it to-day to Farm and Dairy, Peterboro, Ont.

Bigger Crops and Better Crops

May be raised by Top Dressing with NITRATE OF SODA 15% Nitrogen 18 1/2% Ammonia ALL IMMEDIATELY AVAILABLE The only Fertilizer that works in a cold soil.

Write for our Booklet on Home Milkings NITRATE AGENCIES COMPANY Bay and Richmond Streets, TORONTO, ONTARIO

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We shall pay this price per pound for good live hens delivered in Montreal. We handle dressed calves on commission. Try a shipment.

Harris Abattoir Co., Limited, Montreal

2 Pure Bred Pigs

and \$6.00 Cash

Earned in Two Weeks

By a Boy of 12

These pigs are worth many dollars to him now,—the experience has taught him valuable salesmanship,—the interest of owning pure bred stock will influence his whole life.

Your Boy can do the same

He can have Tamworth, Yorkshire or Berkshire, of either sex. Over 200 men, boys and girls have secured pigs since we made this offer of

A Pure Bred Pig

Free for only 9 new subscriptions for Farm and Dairy

Write for details and supplies

FARM AND DAIRY, Peterboro, Ont.

I will try to secure 9 new subscriptions to earn a pure-bred pig. Please send me sample copies, receipts and order blanks Signed.

P. O. _____ Prov. _____

Just Milking

E. F. Eaton, Colchester Co., N. S.

The man who thoroughly appreciates the importance of proper milking of the dairy cow and will take the necessary precautions is a rarity, even among farmers themselves. Among hired men they are even more rare. The dairy cow is a highly developed nervous animal and this point must be appreciated. Any little thing that irritates her is bound to decrease the milk flow and make her

men's Association. A buyer went into the stable of a farmer who did not believe in testing and bought four cows. One the farmer himself said was not much good as he let her go for \$35. Her new owner did believe in testing, and as a three-year-old that cow classed as no good by her first owner produced 10,336 lbs. of milk, testing 3.7 per cent.

Another incident illustrating the same point was mentioned by Dr. Edwards. A man paid \$100 for an untested pure bred cow. Her new



Fine Products of Sunny Alberta

That the Alberta climate is more favorable to the development of high-producing dairy cattle than the climate of any other section of Mr. A. H. Trimble, Red Deer, Alta. He finds that Alberta bred stock grow larger and make better producers than do imported animals. His fine show cow, Lovely, and her two daughters may be here seen. Somebody of Mr. Trimble's experiences in Alberta are told in the adjoining article.

to that degree a less valuable animal. I have had many unpleasant experiences with hired men before I finally got them impressed with the idea that milking was an important job and had to be done right.

One man that I had recently, an Old Country fellow, had very long finger nails. I assured him that it would be necessary to trim his nails before he milked my cows, else he would have their teats so sore that no one could milk them. He thought that that was "blomin' funny" and did not do it. Pretty soon the cows that he milked seemed nervous every time he went around them and when I examined their teats they had been cut open by the milker's nails. This trimming of the nails seems a small point, but it is a very important one and one that I believe nine men out of 10 milkers neglect.

MILK COWS MAY

Another point that I insist on is that the cows be milked out dry every milking. This does not mean until the milk ceases to come readily as practically every milker who comes unto my farm seems to think, but that they be milked until the last drop is extracted. There is nothing that will dry a cow quicker than leaving a portion of the milk in her udder. We cannot afford to do it anyway for the last milk is the richest.

A bottle of vaseline is always kept in the stable. This I use on sore places whenever they appear. The vaseline keeps the scab soft and at the same time acts as an antiseptic.

Of course the general difficulty with hired men, and I believe this is more true of Old Country men than of Canadians, is to keep them from abusing the cows. The best thing to do with a man who wants to use the stool on the cow every time she lifts a foot is to fire him, even if we do not know where the next man is coming from.

It Pays to Test

Even as we humans may be entertaining angels unaware among our friends, so a farmer may equally unwittingly have a jewel in his herd. This fact was illustrated by Dr. Edwards in an incident that he told of the last Convention of the Eastern Ontario Dairy-

owner tested her and later sold her for \$500. All of which goes to prove that it pays to test.

Your paper is a welcome visitor to our home, and we would not like to be without it.—W. A. Milne, Northumberland Co., Ont.

Are You Going West this Spring?

If so, exceptional opportunities are being offered by the Grand Trunk Railway System in connection with Homeseekers and Settlers excursions. The Settlers excursions apply from Ontario to points in Alberta and Saskatchewan, April 16th, 22nd, and 29th, at low rates.

Homeseekers' round trip tickets are issued at very low rates from stations in Ontario to points in Manitoba, Saskatchewan and Alberta Each Tuesday until October 28th inclusive. Also be on sale on certain Tuesdays during above period via Sarnia and Northern Navigation Company, and are good returning two months from date of issue.

Through coaches and Pullman Tourist Sleeping cars are operated every Tuesday in connection with Settlers and Homeseekers excursions leaving Toronto at 11.00 p.m., and running through to Winnipeg via Chicago and St. Paul with change. Reservations in Tourist cars may be secured at a nominal charge on application to Grand Trunk Agents.

The Grand Trunk Pacific Railway is the shortest and quickest route between Winnipeg-Saskatoon-Edmonton, with smooth roadbed, electric-lighted sleeping cars, through the newest, most picturesque and most rapidly developing section of Western Canada. Through tickets sold and reservations made by all Grand Trunk Agents. Costs no more than by other routes. Trains now in operation Winnipeg to Saskatoon and Regina, Yorkton and Canora, Sask., Canora, Mirror and Edson, Alta., also to Fitzhugh and Tete Jaune, B.C.

Before deciding on your trip consult any agent of the Grand Trunk Railway for descriptive literature, timetables and particulars or write C. E. Horning, District Passenger Agent, Union Station, Toronto, Ontario.

Issue Each W

Vol. XXX

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Vol. XXXII.

FOR WEEK ENDING APRIL 24, 1913

No. 17

WILL COOPERATION SOLVE THE FARMERS' MARKETING PROBLEM?

This question, greater even than that of Crop Production, discussed by over 400 Delegates to a great Convention at Chicago. Many Cooperative Societies represented. An unlooked for Complication introduced by Dr. Spillman.

TO make two blades of grass grow where only one grew before" is no longer the one aim and object of the farmer of to-day. The successful marketing of the second blade is a much more difficult problem than its production, and one which the farmers of America so far have not been able to solve. Every season of large crops is followed by a fall and winter, in which prices for all lines of farm produce are so low that the actual returns to the farmer often are no greater than he would get were his crop small. In fact, his returns from large crops are fre-

quently smaller than they are from short crops. Last year the farmers of the United States received \$150,000,000 less for their abundant crop than they netted on the shorter crops of 1911. Canadian dairymen can remember when a short cheese season has been a most profitable one to them. The wheat grower of the West will recall short crop years in which he lifted a good slice off his mortgage, and good crop years in which he hardly made ends meet. Instances of this kind might be multiplied indefinitely. And why is it that greater crops do not go hand in hand with greater profits. Truly here is a problem calling fully as urgently for solution as are the problems of cropping and feeding! It was to discuss this great question that over 400 delegates, representing every walk in life, but principally farmers from the United States and Canada, met at Chicago recently. In Farm and Dairy last week the general aims of this conference, now a permanent organization, called "The National Conference on Marketing and Farm Credits," were dealt with. Here we will deal only with the discussions on marketing that took place at the conference.

WHY A PROBLEM AT ALL

The marketing problems that came up for discussion are a necessary outgrowth of our present system of society. There were no marketing problems when people were scattered in numerous small villages throughout the land. Then farmer and consumer dealt directly with each other, and middlemen, except to a very limited extent, were not necessary. Now the goods that the artisan once produced in his cottage are manufactured in great factories in which are employed hundreds, and in many cases thousands, of workmen.

Population has concentrated in these manufacturing centres and a wide territory must be drawn

on to feed their people. The farmer of to-day finds it inconvenient and impossible to deal directly with the consumer. To carry his produce to its ultimate market there has arisen a great army of middlemen, such as the railway companies, merchants both wholesale and retail, cold storage men and "dealers." So important have these handlers of our produce become that they absorb anywhere from 40 to 90 per cent of the price that the consumer pays. Hence, how to bring consumer and producer closer together and do away to a large extent with the expensive

agreed that the first essential to success is that the society be truly cooperative. The joint stock company is not a cooperative company, and this system of organization has been responsible for the failure of many a farmers' marketing concern. In a joint stock company the directors are usually the largest shareholders, and there is a tendency to make large dividends the prime object; for instance, a man owning \$1,000 worth of stock and doing \$100 worth of business with the company, would derive just 10 times as much benefit as would the man owning \$100 worth of stock and doing \$1,000 worth of business, although the latter is doing more to make the society successful. The form of cooperative society that will give the best success, as the experiences of delegates showed, is where the capital stock has a fixed dividend, say six or seven per cent, and the profits of the business are divided among the members in proportion to the amount of produce that they ship through the association. Several delegates told of cooperative societies that are successfully operated without any capital stock whatever, the members simply drawing up promissory notes. These notes constitute the working capital of the organization. And now for some of the results attained through cooperation.

TRANSPORTATION PROBLEM SOLVED

The Corn Belt Meat Producers' Association, represented at the convention by Mr. Rex Berensford, of Ames, Iowa, was organized wholly and solely to secure favorable freight rates from the railway companies. Under the old conditions, when each man shipped his own produce, rates were high enough to absorb almost all the profit. Working together in a cooperative organization the producers were able to get their legislature to pass bills forcing the railroads to give them lower rates.

W. H. Tomhave told of the good work that is being done by cooperative live stock associations in Missouri. All of the shippers in a community get together in a shipping organization in order that they may ship in car load lots, thus securing better rates on the railway and more consideration from commission men. A manager is appointed, who gets a commission of six to seven cents a cwt., and it is his duty to arrange for shipments and the weighing of each individual farmer's offering. Mr. Tomhave cited the society of Litchfield, Minn., as a typical society. The farmers' organization is now the only shipper of live stock from that station, and farmers have been known to bring their cattle 20 miles in order to participate in the advantages that have been secured by the association. The first failure of such an association is still to be reported.

(Continued on page 7)



What Would We Do Without the Disc Harrow These Days?

We sometimes hear that there are so many machines nowadays that no farmer could possibly afford to have all of them. Quite right; but one implement that none of us can afford to be without, particularly at this season, is the disc harrow. In preparing old corn land for grain, in working up a rough sod, in incorporating manure spread on the surface and in numerous other ways, it pays its cost many times over before it finally goes to the junk heap.

—Cut courtesy I. H. C. Service Bureau.

middleman system, was the great problem up for discussion at the conference.

The farmer delegates present urged cooperation among producers for the shipping and marketing of farm produce. Delegates representing consumers urged cooperation among their people for the distribution of farm produce from house to house. When these two forms of organization can be brought together the majority of the delegates believed that the problem of the high cost of living will be largely solved.

TRUE COOPERATION RECOMMENDED

Men with wide experience in cooperative marketing were not lacking at this conference. In fact nearly every cooperative organization of importance on the continent had a representative present. Of the several dozen speakers all were

Breeding Horses for Profit*

John Garthouse, York Co., Ont.

The profit from horse breeding depends very largely on the kind of horse bred, the feeding and care of the colt, our facilities for producing cheap feed and our ability to get work from the mare and from the colt until it is of an age of greatest value for the market.

The horse for any of us to breed is the horse that we like best, can produce the cheapest and when ready for market will bring the highest price. This is my ideal of a profitable horse. If the farmer is making a success with light horses it would be advisable for him to follow on with light horses, but there are many reasons why, for the average farmer, the heavy draft horse is to be preferred. There is a good demand for this class of horse. The brood mare is capable of doing more work than the lighter horse, and the colts may be broken early and will earn their keep until they reach a marketable age. The average farmer has not the time nor experience to raise light horses such as will bring the best prices. It takes a lot of time to break and train the light horse, but when we teach the heavy colt farm work, we are breaking him at the same time to the very same kind of work that he will be doing after we have sold him.

THREE COLTS IN TWO YEARS

On the average 100-acre farm I would like to see at least three colts raised every two years. There should be at least one team of good brood mares. These mares will do a great deal of work. They should be well bred, of good conformation and free from hereditary diseases. We should study their weak and strong points and select sires accordingly, having the sire strong in those points where the mares are weak. It costs no more to raise a No. 1 animal than a scrub, and the No. 1 animal comes from attention to the points I have just mentioned. If planting trees in front of a house, we would select good trees. It is the same in horse breeding. Scrappy mares produce scrappy colts.

I believe the breeder will get better results from working his brood mares right along, provided they are in a good man's hands. No man should be allowed to handle brood mares at work who will abuse them.

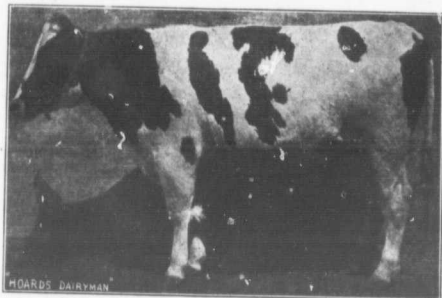
A few years ago I figured the cost of a colt at two and one-half years old at \$85. Feed is more expensive now, land and pasture a little higher, but there should still be a good profit left as the colt will be worth \$150 to \$500 at four or five years of age. A few days ago I sold a gelding, four years old, for \$425.

Here is one of my own experiences in horse breeding. I bought an imported mare for \$310. Her first foal was dropped at three years old. I sold it for \$800. Her next foal I sold for \$300. She was bred again and aborted a pair of twin foals. We got her in foal again, and her foal, which I still have, is worth at least \$400 or \$500. In all this mare had five foals when six years old and is in foal again.

*Summary of an address at the Ottawa Winter Fair, 1911.

Here is another case: I was short of horses to work my farm and bought a common grade mare for \$195. I sold her foal at six months old for \$100 and now have another foal worth \$100. She has worked all the time and paid her way.

I believe it would be advisable to breed more mares to foal in the fall. They would then do more work in the summer when most needed and when the colts are weaned in the spring they can be turned out on the green grass, which is the best feed imaginable for them, and they would



Does Body Fat Effect the Fat Test of Milk?

This heifer, calving in fat condition, was entered in Advanced Registry with an average test of 5.1 per cent of fat in her milk for seven days. Her average test for the year was 3.5 per cent fat.

not suffer the usual set-back. The greatest difficulty in the way of fall foals is the difficulty of breeding the mare at that season of the year.

Spraying is a disagreeable piece of work at any time, but much can be done to make the work more pleasant, and prevent injury to the hands or eyes from the spray mixture. Have a drip guard just below the nozzle. A circular piece of leather with a hole in the centre, makes a good one, or a simple piece of small rope tied around the pipe and allowed to hang down



Does it Pay to have Cows Freshen in Good Condition?

This heifer, the same one as seen in the top illustration, averaged only 3.63 per cent fat in her seven-day test at second freshening, the test being conducted the same length of time after calving as was her previous test. The difference was that the heifer was in thin condition, as seen in this illustration. It pays to feed the cows when dry. It all comes back into the pail.

four or five inches, will answer the purpose. Have a shut-off tap that does not leak and make sure that all the joints are tight. Put on a pair of cheap leather gloves, to protect the hands, and cover the horses with a pair of canvas blankets. With reasonable care a man should be able to spray all day with very little annoyance from the corrosive action of the spray mixture.—P. C. Dune, Hastings Co., Ont.

How We Grew a Bumper Crop of Corn

A. E. Hulet, Oxford Co., Ont.

We try to follow, as near as possible, a four-year rotation, consisting of corn, oats or barley, meadow and pasture. In 1911 our rotation brought us to an 11 acre field of clover sod for our corn crop. During the preceding winter we covered part of this field with manure, spread from the sleigh. After we were done seeding our grain crop, about the first of May, we finished covering the field with manure, putting it on with the spreader at the rate of about 15 large loads to the acre.

It was about the middle of May before we started to plow for corn. We plowed with two horses and a single furrow plow, using a skimmer. It was slow work, but we did a good job. We kept the land well rolled and disced behind the plow. By the time we had finished plowing we had disced the land twice, lopping half, and rolled it three times. We then gave the furrows an extra discing to prevent the sods turning up when we crossed the field with the disc. After corn discing we rolled again, gave the field one stroke of the spring-tooth cultivator, dragged it and rolled it again. It was then in good shape for planting.

We used a planter, putting the seed in drills at the rate of 10 quarts of good seed to the acre. Owing to many interruptions from rain and other work it was on the ninth of June before we finished planting. The weather conditions were ideal, and in four days' time one could see the rows of corn across the field. It came up very thick, and from then until nearly harvesting time everybody that saw the field considered it far too thick to get many ears. But we kept the two-horse corn cultivator busy, and when silo filling time came we had a clean field and enough extra well eared corn to fill two silos, one about 13 x 28 and the other 14 x 30, and enough left to refill one of them. It was an eye-opener to us as to the necessary conditions for successfully growing corn.

We had a level lying field of clay loam, extra well tile-drained, a clover sod well manured, well plowed and extra well worked before seeding, we kept the field clean while growing, and we concluded that we must have had good seed, although we had not taken the precaution of testing it.

In conclusion, we have learned that failure of the corn crop is because of one or more of the following reasons: Lack of drainage, lack of fertility or plant food and, last, but not least, lack of cultivation, especially before planting.

The man who really should be encouraged at our fairs is the breeder. It is on him that the future wellbeing of the cattle interests of the country depends. As our fairs are at present run, however, there is little to encourage the Canadian breeder to attend. The prices are mostly gobbled up by importers. There are lots of small fellows around the country who would be glad to exhibit their stock at our fairs if classes were made that would make it worth their while to fit their stock for the show.—D. A. McParlane, Huntingdon Co., Que.

W. E. J. I.

A description

WHEN the children of the school should be given the same. Eye-educationists have several agricultural school use, but the teachers of agriculture have taught the children of this being teachers are side of the school order to get taught through selection of school forth.

With the work a number organized by the form of Agriculture of Towns were not follow ship convention having the pre-located school interested in the movement depended given by the to the different or five miles, among the teachers, corn, both good varieties and a taken along, and on the importance of phrasing the crop. The man then he demonstrated score card and a

In this way the able information they samples for They also receive ing,—a very im as the best result or is unable to



Ample Ev

The children who grow corn shows, but the which this crowd has

HOW ESSEX COUNTY CHILDREN STUDY AGRICULTURE IN SCHOOL.

W. E. J. Edwards, B.S.A., Dist. Representative of Ont., Dept. of Agriculture, Essex Co., Ont.

A description in word and picture of the School Corn Shows of Essex Co., Ont.—Of how School Children have been induced to Select, Grow and Judging of Educational Work.

WHEN Dr. Edgerton Ryerson laid the foundation of our Public School System in Ontario he recognized that agriculture should be given a prominent place in the curriculum. He made some attempt to have this subject taught in the schools, but with very indifferent success. Ever since that time, our leading educationists have endeavored to develop the subject. Several agricultural books, designed for public school use, have been written by leading agriculturalists of the province, and the public school teachers have endeavored at different times to teach the subject from these books. The result has been in almost every case a failure, the reason of this being that the large percentage of school teachers are not acquainted with the practical side of the subject. It is now recognized that in order to get the best results, agriculture must be taught through practical lessons, such as the selection of seed, the growing of crops and so forth.

With the object of introducing this practical work a number of Rural School Corn Shows were organized by the Essex Branch of the Department of Agriculture in the fall of 1900. These took the form of Township shows, although municipal lines were not followed closely; schools in another township convenient to where the show was to be held having the privilege of exhibiting. A centrally located school was selected, having a teacher interested in the work if possible; the success of the movement depends very much upon the assistance given by the teachers. A visit was then made to the different schools within a radius of four or five miles, to arouse an interest in the work among the teachers and pupils. A few ears of corn, both good and inferior, of the standard varieties and a number of corn score cards were taken along, and a short talk given to the pupils on the importance and beauties of rural life, emphasizing the need of improvement in the corn crop. The many points of an ear of corn would then be demonstrated with the assistance of a score card and a few ears.

In this way the boys and girls gained considerable information and were in a position to select their samples for the show more intelligently. They also received some information on corn judging—a very important phase of corn growing, as the best results cannot be obtained if the grower is unable to select his best ears for planting.

An effort was made to induce as many of the boys and girls as possible to exhibit, this being accomplished best by getting the teacher to encourage the pupils. Prize-lists, containing classes for the standard varieties of corn, were left at the different schools for each pupil. The prize-lists contain classes for White Dent and White Cap Yellow Dent, another for Yellow Dent, and usually one class for the Flints. Prizes for the best single ears are also offered. Five ears comprise an entry, and any school boy or girl under 16 years of age may enter each class.

When this work was inaugurated the larger part of the prize money was usually given by the Ontario Corn Growers'

championship classes, open to the district. This gives all the pupils from sections where the more approved methods are not adopted, a chance to win in their local classes, while the defects of their corn are brought to their notice when shown in the championship classes.

The Corn Judging Contests open to teams of two from each school are one of the very best features of these shows. The teams are picked by



Children are not the only ones who Study Corn Judging in School.

The rural school as an agricultural education medium may be made to reach more than the children of a section. In our illustration may be seen a class of young men diligently studying the art of corn judging in an Essex Co., Ont., school. Even after the children have left school they will be found in these advanced classes.

their teachers, often with the assistance of a good local farmer. Each team has the same sample of ears to place, the prizes being given according to placing and reasons. Ribbons are given in the contest and occasionally money prizes also.

During the time the corn, which is placed in racks around the school room, is being judged, a programme is furnished by the pupils from the different schools; short talks are also given by others present. If the afternoon is fine, outdoor sports are sometimes indulged in. After the exhibits are all judged, the judge takes a number of the exhibits to the platform and gives the reasons for a few of the placings, as we endeavor to make the show of as much educational value as possible.

We have held a large number of these School Shows during the past three years, as many as 13 being conducted during one fall and winter. The prizes offered are often very good. At one of them 13 schools gave \$5 each, the township \$10 and the town where the show was held \$15, making in all \$90. Over 300 entries of corn were on the shelves, sufficient to fill a fair-sized hall. Afternoon and evening meetings were held in the town hall close by. Programmes of music and addresses on agriculture were given at both meetings, the large hall being full at each. Fully 1,000 people were in attendance. The interest shown and the financial support given to this show was certainly very gratifying and encouraging. In every case we have also had the hearty support of the inspector, which is a great help in the work.

Realizing that more lasting results would be obtained if the pupils were to grow the corn they exhibited, we sent out samples of good White Cap Yellow Dent, sufficient to plant two square rods, to over 1,200 school pupils in the spring of 1912. This not only gave the boys and girls the benefit of growing and caring for the plot, but the parents were also benefited in a great many cases by getting a start with first-class seed. Special prizes were given for this corn, grown by the pupils, at the shows held last fall.

Special interest centres in the Junior Department at the Annual Ontario Corn Exhibition. This department is open to boys and girls under 16 years of age; prizes being given for all the leading varieties of Dents and Flints, a special

(Continued on page 12)



Important Factors in the Success of School Fairs

A good measure of the success that has attended the School Corn Shows of Essex Co., Ont., must be attributed to the school teachers who entered so enthusiastically into the work. A few of them may be seen in the illustration.

—All photos courtesy W. E. J. Edwards

Association, this organization giving \$5 to each School Show held. As the interest deepened and the work grew, most of the trustees of the different schools exhibiting, contributed generously to increase the prizes offered. With very few exceptions, the shows held during the past two years have been financed very largely by the school trustees of each township.

At one of these shows the trustees of one township gave \$5, while another part of this gave the local classes for the particular school giving it. From eight to 14 prizes are given in each class, and a large number of exhibitors are encouraged by receiving a prize, small as it may be. The remainder is offered as prizes for



Ample Evidence to the Popularity of the School Corn Show

The children who grow and select the corn naturally take most interest in their corn shows, but the older people of the community make good seconds. The fair at which this crowd has gathered is drawn from several school sections. Read of these school fairs in the adjoining article.

HOW TO DETECT TUBERCULOSIS IN A DAIRY HERD

TUBERCULOSIS, it is safe to say, is causing more loss to dairy farmers than all other diseases of the dairy cow combined. Many breeders of dairy cattle are afraid to test their herds for fear they have the dread disease. They think that if the disease exist it might be necessary to slaughter a good part of the herd. But such drastic measures are not necessary. The Bang system provides a convenient method of building a healthy herd from the progeny of diseased animals.

A few years ago a large part of the dairy herd of the University of Illinois was found to be tuberculous. The Bang system was followed. Calves were removed from the infected quarters as soon as dropped. Milk from the diseased cows was rendered fit for use and safe through pasteurization. In two years 23 cows in quarantine gave an average return of 19 healthy calves and milk worth \$4,436.67. Surely this is better than slaughtering the condemned animals, particularly where the cows are pure-bred and valuable. From the fulness of his experience with the disease, C. C. Hayden, of the University of Illinois, gives the following points on the detection of the disease in the herd:

SYMPTOMS OF THE DISEASE

There is a common belief that a cow which has the disease will cough. This may or may not be true, because it depends on whether or not the throat or lungs are affected. There are other diseases which affect these organs and cause cattle to cough; consequently a cough may or may not indicate tuberculosis. Unfortunately, the disease rarely appears on the outside of the body, and because of this fact it is difficult or impossible to discover its presence by physical examination until it is well advanced, when the animal goes down rapidly in condition and yields to no treatment.

Sometimes it appears as an enlargement of the glands of the throat, causing coughing and difficulty in breathing, or as a hard lump in, or enlargements of, parts of the udder. However, other causes may also be responsible for the latter trouble. No farmer should permit a cow which has died or been killed to be buried without an examination of the lungs and the intestines, unless death was caused by some contagious disease which there is danger of spreading. Frequently such an examination would reveal the presence of the disease in a herd where it was not suspected. The tuberculin test is practically the only means by which it can be discovered during its early stages.

EFFECT ON ORGANS

The appearance of tuberculous organs is very characteristic, so that the disease is easily recognized after it has once been pointed out in its different forms. It would be a fine thing if every farmer could readily recognize it in slaughtered animals. Hard lumps or cavities in the lungs, containing pus, enlarged glands containing pus or having a "corn meal" appearance, white nodules or abscesses in the liver, knots or bumps on the walls of the lung cavity or intestinal cavity, should be looked upon with much suspicion and considered tuberculous unless they are shown to be otherwise.

"As has been previously stated, tuberculosis cannot be detected easily in its earlier stage by a physical or outward examination; in fact, this is impossible in the majority of cases. If a cow grows thin (pines away), has a persistent cough, or swollen glands of the neck, she should be considered suspicious. However, these symptoms usually appear after the disease

is well advanced and the cow has done great damage by infecting other cattle. For this reason those symptoms are of no value except to warn the owner, after it is too late, that his herd is diseased. One reliable method of detecting tuberculosis when it should be detected is the tuberculin test.

In brief, this consists in determining the normal temperature at least four (preferably more) times at equal intervals between five o'clock in the morning and eight o'clock in the evening of a given day. About eight o'clock in the evening a certain amount of tuberculin, varying with the size of the animal, is injected beneath the skin. On the following day the temperature is taken every two or two and one-half hours. If the temperature rises and subsides gradually, giving what is called a typical reaction, the cow, with the highest temperature two or more degrees above that of the previous day, the cow is considered tuberculous. There are many things which may affect the results



Firm Friends

This is Mr. Frank Williams, a young Englishman, working on the farm of Mr. T. Linnas, Oxford Co., Ont. He certainly can make friends. He may be here seen with two of his farm friends.

of the test, and therefore it should not be applied by persons who have not been properly instructed in its use.

FEVER DOES NOT INJURE CATTLE

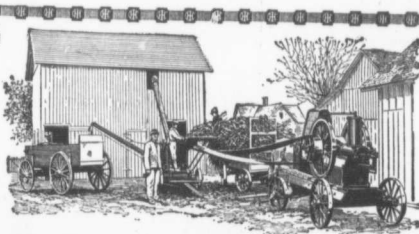
"Some persons fear that the use of tuberculin will give cattle tuberculosis. It cannot, because the germs have been killed and then removed. It is possible that, in case the animal injected is diseased, it may cause the disease to become more active, but this has not been definitely proved. If a cow is healthy, tuberculin has no effect when injected, nor afterward, so far as the best authorities have been able to determine.

"It does not affect the milk of a healthy cow; in many cases the milk from herds under test has been supplied to children and adults as usual, and in no case has it been definitely shown to cause any trouble. If a cow reacts, the fever produced may affect the quality of the milk, and it would be best to exclude the milk of such animals during and after the reaction."

Canadian National Horse Show, Toronto, April 29 to May 3

On account of the Canadian Horse Show at Toronto the Grand Trunk Railway System will sell return tickets single fare for the round trip, with 50c added for admission to the Show.

Tickets good going April 29th and 30th, May 1st, 2nd and 3rd, returning Monday, May 5th, 1913. Secure tickets and all information from any Grand Trunk Agent.



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SUPPOSE you bought an engine that did practically all of your hardest work for you—sawing, pumping, grinding, etc.—and that paid for itself in a short time. Would you call that a good bargain?

An I H C engine will do all that, and more. Having paid for itself, it will continue to earn its way by working steadily year after year until you will say, "My I H C engine is the best bargain I ever made."

I H C Oil and Gas Engines

are thoroughly dependable, and unusually durable. The fine-grained, grey cast-iron cylinders and pistons are worked together to a perfect fit. The ground piston rings insure maximum power from the explosion. The ignition apparatus can be understood at a glance. The fuel mixer is the most effective and simplest known. Moving parts are perfectly balanced. Bearings are large and carefully fitted.

I H C engines are made in all styles—vertical and horizontal, portable and stationary, air and water-cooled; in sizes from 1 to 50-horse power, to operate on gas, gasoline, naphtha, distillate, kerosene or alcohol. Kerosene-gasoline tractors, 12 to 60-horse power.

The I H C local agent will show you the good points of the I H C engine. Get catalogue from him, or, write the nearest branch house.

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The question of feed is as much an economic one as any other one involving profit or loss. You do not decide the question of hand. It is a question of scientific feeding. Every modern and up-to-date farmer knows the importance of chemical values with reference to soil, manure and feed.

You could almost starve a cow to death on a purely heat-forming ration or reduce your milk output to a minimum on a bone or muscle building one.

THE ADVANTAGES OF
"MAPLE LEAF" CAKE

It is absolutely pure and relatively the cheapest, healthiest and most concentrated form of feed obtainable. It mixes well with all kinds of feed, including bran, shorts or corn meal. Cheap coarse fodder containing little or no nutriment can be converted into good feed by a judicious mixture of "Maple Leaf" Oil Cake Meal. Feed it to your cattle, horses, pigs, live stock of all kinds, and reduce your feed bill.

The Canada Linseed Oil Mills

Mills at LIMITED

MONTREAL and TORONTO

WILL COOPERATION SOLVE THE FARMERS' MARKETING PROBLEM ?

(Continued from page 3)

So many successful cooperative institutions were represented at the conference, that an extra night session was called to hear their experiences. From Wisconsin it was reported that the grain growers, owning their own elevators and holding their own grain until the market needs it, have completely beaten the elevator monopolists; the corporation-owned elevators now stand empty. When the state legislature opposed bills favorable to the farmers' interests, the Wisconsin farmers of Wisconsin elected to stay at home 47 out of 52 of the legislators who had opposed the farmers' organization.

Albert E. Jack told of how the Chicago Milk Producers' Association had waged a successful fight against the milk merchants, compelling them to allow the farmers to fix the price on their own products. At the present time four-fifths of the milk coming into Chicago is under the control of the farmers' organization. Mr. Geo. McKerron, also of Wisconsin, stated that practically all farm property in Wisconsin is insured in cooperative fire insurance companies. One cooperative creamery in that state did a business of \$250,000 last year, while five years ago the same creamery company was in a bankrupt condition. Testimony from still other speakers showed how cooperation was working successfully to the advantage of the producer in almost every line of agricultural activity.

CAN THE FARMER HELP HIMSELF? Some of the schemes proposed savored of benevolent despotism. This was particularly the case when college men were talking. Everything was to be done for the farmer. Bureaus of economics in connection with state colleges, whose duty it should be to organize farmers into societies were proposed. Some college men were even opposed to asking the farmer to contribute \$1 in cash for fear he would contribute away from the cooperative idea. This stand never failed to bring forth indignant protests from farmer cooperators present, and it was significant that the most successful cooperative associations represented among the delegates were associations organized by and for the farmers themselves. Such an association is that of the Southern Rice Growers, who starting three years ago, have raised the wholesale price of rice from \$2.25 a barrel to \$4.50.

Another farmers' organization formed by farmers for farmers, was the County Farmers' Exchange of New Jersey. This organization of truck growers was formed in 1908 with 300 members and a capital of \$7,000. The first year they did a business of \$414,665. Last year their business aggregated \$4,420,748. Their membership numbered 1,250, their capital \$75,196, with a reserve fund of \$18,926. The organization is at present a stock company. No member is allowed to hold more than one share. No profits have been declared so far, all available money being used to establish their fertilizer factory on a firm basis. When this factory is in good running order the growers expect to get their fertilizer at much reduced cost. It is also proposed to divide the profits according to the business done through the exchanges, the dividends on capital stock being limited to a reasonable figure.

CONSUMERS ONLY WILL PROFIT As man after man stood up in his place at the conference and told of the great things that cooperative enterprise had done for himself and his neighbors, enthusiasm ran high. Farmers began to believe that at last they were getting an insight into the

true solution of their problems. And then along came Dr. W. J. Spillman, of the United States Department of Agriculture, and for a time he placed a damper on their enthusiasm. Dr. Spillman argued that while cooperation might benefit the producer in its early stages, in the long run its benefits would redound entirely to the advantage of the consumer. He illustrated his contention as follows:

Texas is admirably adapted to truck farming. Suppose that all of the truck growers of Texas organized themselves into one great cooperative society, got the best of rates from the railroads, and eliminated most of the middlemen. For a time the truck growers of Texas would be most prosperous. But there is an unlimited supply of land in Texas. Other farmers seeing their prosperity would become truck growers also. The supply of produce would at once become so great that prices would drop to a level where growers would receive only the old-time wages and a small interest on their investment. The same result would occur, said Dr. Spillman, in all other lines of farm products. It is the consumer who must ultimately benefit, not the producer.

A FARMERS' TRUST

And then came Dr. Spillman's solution of the marketing problem, the most complex and elaborate of all the plans proposed at the conference. It was nothing more or less than this, that the federal government should establish marketing bureaus with almost unlimited powers, to study crop and market conditions and advise farmers as to just how much of each crop they should sow in order to avoid over production, and consequent decreases in prices. In other words, that farmers, added and abetted by the government, should establish a joint combine to hold down production and uphold prices, the very method for which the majority of us so heartily condemn the "Trusts."

When Dr. Spillman sat down one could have heard a pin drop, so staggered were the delegates by this new and unlooked for complication. Dr. Spillman's method of dealing with the problem, however, did not appeal to the fair play instincts of his audience. The sentiment of the meeting was voiced by E. W. Kirkpatrick, a former president of the Texas Farmers' Congress. "Over-production," said he, "How can we talk of over-production when even in the years when crops are plentiful and markets are glutted there are in this great city of Chicago and every other city of the continent thousands of people who feel the pangs of hunger. Are we going to combine to reduce production and increase prices at the expense of the poorer classes of the cities? We have not got to the bottom of this problem yet."

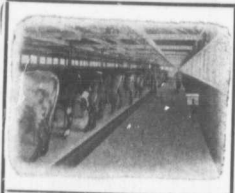
Lack of time prevented the discussion being carried farther at this session. It was not expected that the whole problem of marketing would be solved at this one gathering. The question is too big and too new. The farmers are alive to this new phase of their calling as they never have before. It shows that they are coming to realize that they have greater problems to solve than they have realized who are connected with agriculture, and that they have resolutely set their faces for the accomplishment of this subject.—F. E. E.

I have my poultry keeping down to a system that involves a minimum amount of labor. I feed my chickens once a week in summer.—J. W. Clark, Brant Co., Ont.

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As a Potato Grower I would like to have a free copy of this book.

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18

HORTICULTURE

Apples for Quebec

Prof. J. G. Bunting, Macdonald College, Que.

There is a great demand, that has not begun to be filled, for McIntosh and Fameuse apples from November till January, and it is the high-class dessert apples such as these that will sell best and bring the top prices. In these two varieties we have hardy, strong-growing trees, particularly adapted to Quebec, early maturity in tree, that is the trees come into profitable bearing at from five to seven years—high quality fruit of high color and varieties well known to the trade and of established reputation, and the demand is not nearly supplied.

If it is desired to lengthen the season by planting other varieties, the following for early fruit in the order named are good: Transparent, Duchess and Wealthy. For later varieties the following are good: Milwaukee, Bethel and Scott Winter. No matter how many varieties you plant let one-half to three-quarters of them be McIntosh and Fameuse. Specialize in these at first and Quebec will soon become as famous for its McIntosh and Fameuse as the Annapolis Valley is for its Gravenstein, or the Hood River Valley for its Jonathan and Spitzenburg. — Journal of Agriculture.

Fruits for the North

We have very severe weather in this north country, and as I propose starting fruit growing, would like to know varieties and species of fruits that would stand our winters.—E. C. S. Cochrane, New Ontario.

There are very few varieties of tree fruit that could be recommended for Northern Ontario, and these would require the most favorable conditions of soil and location that could be found. I would not recommend planting fruit trees on the flat and level country that surrounds Cochrane, nor would I recommend planting fruit trees on the heavy clay soils of the north country. The ideal combination of conditions would be light soil, at least light enough to be very thoroughly drained. This should pass at least slight elevation above the surrounding country and should slope north, northeast or east rather than south. Under any other conditions than those just described, I should hesitate to recommend the planting of any tree fruit, as chance for success would be very slight indeed.

The iron clad fruits such as currants and gooseberries could be grown on almost any well drained soil and the only requirement in regard to situation would be to avoid planting in low areas, which would likely be frosty. I do not know how successfully raspberries could be grown, but should expect that with the abundant snowfall of the north, it would not be difficult to bring raspberries through the most severe winters, by bending down the canes in the fall. Strawberries would grow successfully in any well drained soil, but care should be taken also to avoid frosty situations.

- The best varieties of small fruits are probably the following:
- (1) Red Currants—Cherry, Fay, Perfection.
 - (2) Black Currants—Champion, Naples, Victoria.
 - (3) Gooseberries—Pearl, Downing, Red Jacket.
 - (4) Raspberries—Golden Queen, Herbert.
 - (5) Strawberries—Parson's Beauty, Ruby.

In tree fruits the hardest varieties so far as I know are the following:

(Continued on page 10)

A FARMER'S GARDEN

It is without real serious meaning to many thousands of farmers who think it is too hard work or too inconvenient to understand what so many farmers fail to understand that there are in modern hand tools.

IRON AGE Wheel Hoes and Drills

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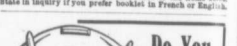
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Do You Want To Get Results ?

Cracked when Cracked when Pin head on Grit Feed this chick per day, with milk and also on posed as follows: Bran Corn Oatmeal Middlings Give them mix what or small the place of chick older.

IF no milk is kind of animal for such as blow-mesh may be fed in consist of about mash. If no grow it should be suppli grass, tender le If the chicks are can run around feed less carefully

After they labor to six weeks old. ing. This is do grain and dry ma partment hopper, possible to the chick and hence a gr where chickens at numbers or are qu the buildings. Separate the male as soon as the dominor over the will do better and also do better. Av ances so far, you fairly well matured age.

CLEANLY PR Cleaning mess feeding chicks. All the water dishes, and

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POULTRY YARD

Expert Advice in Chicken Feeds

A. S. Berney, Macdonald College, Que.

It is generally believed that the chick derives its nourishment from the yolk of the egg which is absorbed through the umbilical cord into the abdomen of the chick, just previous to its exclusion from the shell. Consequently too early feeding may prevent the proper absorption of this yolk and may also cause indigestion. Chickens begin to show signs of being hungry when from 36 to 48 hours old. They peck at each other's toes and beaks, and rush to the first part of the incubator when they hear a tap at the glass door.

Whatever the method of feeding followed, avoid feeding soft, sloppy and bulky foods, and feed little and often. For the first feed it is well to start them on hard boiled eggs and bread soaked in milk and pressed dry. Give this food for the first few days, and also give them skim milk to drink. Feed five or six times per day for the first few weeks.

EVEN CHICKS SHOULD WORK

After the chickens are about three to four days old it is well to get them to work. Feed them their grain in cut straw, which makes them scratch, thus encouraging exercise which is essential to success. Avoid using dusty or mouldy straw for the litter, as this is the cause of the "mouldy" growth in chickens and is the cause often of heavy mortality in young chicks.

The method of feeding young chicks is simple. After the first few days give them chick feed as Purina, or a chick food made of the following:

- Cracked wheat 3 parts.
 - Cracked corn 3 parts.
 - Pin head oatmeal. . . 3 parts.
 - Grit 1 part.
- Feed this "chick food" three times per day, with one feed of bread and milk and also one of moist mash composed as follows:
- Bran 20 lbs.
 - Cornmeal 15 lbs.
 - Oatmeal 10 lbs.
 - Middlings 10 lbs.

Give them milk to drink. Small wheat or small corn may take the place of chick food as chicks get older.

If no milk is available some other kind of animal food must be provided such as bio-m meal or beef scrap. This may be fed in a dry mash, and should consist of about 10 per cent of the mash. If in no green food is available it should be supplied, such as sprouted grains, tender lettuce, cabbage, etc. If the chicks are late hatched and can run around outside, you need to feed less carefully and less frequently.

THE LABOR SAVING WAY

After they get to be about four to six weeks old, start proper feeding. This is done by putting the grain and dry mash into a two-compartment hopper, and having it accessible to the chickens at all times.

This saves a great deal of labor, and hence is especially convenient where chickens are kept in large numbers or are quite a distance from the buildings.

Separate the males from the females as soon as the males commence to dominate over the females, as they will do better and your females will also do better. Avoiding all disturbances so far, your pullets should be fairly well matured at six months of age.

CLEANLY PRECAUTIONS

Cleanliness must be followed in raising chicks. All the pens, the food and water dishes, and everything used

about the chicks, should be carefully cleaned and disinfected at frequent periods. This care should begin before the chicks go into the brooder and should continue throughout the entire time of brooding. As soon as the litter becomes soiled or damp it should be removed, and the pen disinfected and new fresh litter take its place. The feed dishes should be cleaned frequently to avoid contamination of the food supply. Food should never be allowed to accumulate in the litter, as it is likely to become spoiled and unfit for use. Neglect of sanitary precautions furnishes a fruitful source of disease.

Keep on the watch for lice and mites at all times, and if necessary dust them with some insect powder.

Capons on the Farm

By Edward Dreier

There is one industry on the farm that is given very little attention by most of our farmers, that is the growing of capons. The farmer raises all the way from 25 to 100 cockerels each sells in the fall at the market price, which is under 24 cents at the market price, the cockerels will probably average about seven pounds. That means the farmer will get at the very most \$1.68. I have made this price high—too high perhaps, but it will do the trick in illustration anyway. If he could sell 100 at this price he would have \$168.

Here is what he could do if he caponized them. The price of capons depends on the market. We will strike an average and say 40 cents a pound. Suppose the farmer picks out 80 good, healthy cockerels and caponizes (castrates) them. Their average weight will be about 13 pounds; and that is a very low average—many capons will run to 16 and even 20 pounds. At the market price, taking 13 pounds as an average at 40 cents a pound, each capon would bring \$5.20. We will allow for 10 bad cuts and figure on 70 out of the 80 birds at this price and that means over \$350, or a gain of very close to \$200 on fewer birds.

THE OUTFIT

The cost of the caponizing outfit is about five dollars—this outfit is simple and as good as any of which I know. It can be procured of Geo. Pilling and Co., Philadelphia, Pa. They send directions as to how to do the work and offer suggestions as to the feed.

I caponized my first birds last year and had excellent success. I chose 25 Barred Rocks and three Rhode Island Reds and two White Wyandottes. One of the Wyandottes got loose while I was removing one testicle and severed an artery, dying immediately. The other was alright for about three days and then dropped and I had to kill it. Two of the A. D. fowls died as soon as they touched the ground after the operation—though the cuts were among the best I made. The other Rocks lived and some of them grew to weigh 17 pounds. Of these we sold 15 at 50 cents a pound. Of these we sold 15 at 50 cents a pound when we were away from home by eight Collie pups we had. The 15 birds brought us over \$100.

I shall be very glad to help anyone who wishes to try caponizing. I will give them all the help I can as to methods—feeding, etc. Send your inquiries to Farm and Dairy and they will reach me sure.

Let us not worry too much about what the future will bring forth. Let us do well the work we are doing to-day, and the future will take care of itself.

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Do you want a strong, durable fence that holds back the strongest animal, and lasts for years? DYER has it, guaranteed. 17¢ per rod up, freight paid. Law's fence 5¢ per rod up, freight paid to you. DYER Fence Mfg. Dept. L. Toronto. Please send me your special circular price and gate offer. I want to save dollars and I want the best, but this does not obligate me to buy. Name and Address. DYER says: "One cent postal to me NOW may mean many a \$1 saving later!"

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Fruits For The North

(Continued from page 8)
(1) Apples—Yellow Transparent, Duchess, Dudley, Matoun Red, Martha.
(2) Crab Apples—Florence, Iaham, Hawk Eye, Stoddard.
(3) Plums—(These are native sorts as the European will not endure the climate.) Aitkin, Cheney, Wolf, Hawk Eye, Stoddard.
I shall be glad to receive from any of your readers in the north country, their testimony concerning these varieties or any others which have been successful. It will also be of value to know those which have been tried and found lacking in the necessary hardiness.—Prof. J. W. Crow, O.A.C., Gulph, Ont.

Pruning at Planting Time

J. W. Hollinshead, New Westminster District, B. C.

How shall we prune at planting time, is a subject discussed in a recent issue of Farm and Dairy. From my own experience I have found that it is far better to plan the root grafts instead of trees. If by comparison is worth anything one cannot afford to plant trees, because a root graft and grow, at the end of five years will have a larger top tree and more fruit than will others.

"Learn to unlearn what you have learned amiss." This is what I see has to do when planted in the field. It has not been forced to take on unnatural shape by being shaded in the nursery so that the only thrifty limb is the top one. This kind of a tree is unfit for the orchard and in order to secure a good growth the top must be cut off. Six inches from the ground is plenty high enough to form the top. So why not set the graft directly in the field. It will not need pruning for five years, except perhaps to prevent a fork forming that might eventually split down the trunk of the tree. This style of tree, if all vegetation is kept away from it will have an average annual growth of about one inch in diameter.

ON LOW HEADS
By having a low-set tree it is easy to locate and destroy caterpillars and other pests. One can save at least half the time in spraying and about half of the spray material. One would also be able to utilize the greater part of the heat that is so necessary to give one good rich fruit. The fruit can be thinned if thought necessary with much less dropping, much less damage to when it rains and less damage to the trees by the wind. Then too it would reduce the cost of picking about one-half.

Let us cease to think of what father or neighbors did in their orchard. We should hunt for the evidence, not for precedent. Let tradition go where the evidence is not viable. Our watchword should be "Where is the evidence?" not "Precedent." The person who is looking for precedent never improves, he is not progressive. The supreme courts of the world make most of their decisions on precedent, but seldom refer to evidence or justice.

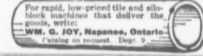
The County Council of Waterloo county have shown their appreciation of the work being done by F. C. Hart, B. S. A., District Representative of the Ontario Department of Agriculture in that county, by deciding to expend the sum of \$765 for the purchasing of a motor car for Mr. Hart. Their action will be productive of benefit both to the county and to Mr. Hart. A regrettable feature is that the majority of the rural representatives of the council voted against the expenditure.

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Why His Cows Sold Well

"How did your sale go?" This question, asked of a farmer who belonged to a dairy test association in north-eastern Iowa, elicited the following reply: "Fine, thirty-two cows averaged over \$100 per head." "No, they weren't pure-breds, they were grades. A neighbor of mine and I were simply cleaning up our herds with the expectation of stocking up with pure-breds later on."

"How did they come to bring such a high price? Well, you see the cows were all in the dairy test association and we knew how much butter-fat each cow produced and how much it cost to produce it. When a cow was brought out for sale, the auctioneer had the record from the tester's books and the buyer knew what he was buying. The price paid tells the rest. I am satisfied that my cows brought at least \$20 more per cow because I had them in the association. Besides this, the increased butter-fat production per cow paid the cost of the test association many times over."

Culture for Alfalfa

J. H. Cristale, Director Experiment-
al Farms, Ottawa.

It is sometimes said that inoculation is absolutely necessary to success with alfalfa. This is not necessarily true as alfalfa can be sown with a little clover and so give it a start. Inoculation, however, does not cost much and where one is sowing alfalfa for the first time and does not know whether or not the necessary bacteria are already in the soil, inoculation is advisable.

Where soil from an old alfalfa field is used in preference to the laboratory inoculator, it should be dug up when slightly damp and spread immediately. Do not let this soil dry in the sun or the bacteria in it will be destroyed. Spread it when damp and harrow immediately.

The same applies to the inoculated seed. Sow when damp and harrow it in immediately if good results are to be had.—Extract from address.

Longevity of Dairy Cows

Prof. C. H. Eckles, of the Missouri Experiment Station sums up their investigations along the line of the profitable longevity of dairy cows in part as follows:

"Probably the majority of dairy cattle are rejected from the herd on account of failure to breed, or from under trouble before the effect of advancing years can be observed on a marked event. It is a fact often observed that a cow may make her best record when ten or eleven years old, although as a rule she does her best rather earlier. If a dairy cow continues to breed, she usually shows no marked decline until at least twelve years old. Occasionally a cow continues to breed until she is 16 or 18 years old.

"While it is not entirely safe to judge the future milk production of a cow from her two-year-old record, it is reasonably safe to judge the richness of her milk.

"A dairy cow on the average as a two-year-old may be expected to produce about 70 per cent.; as a three-year-old, around 80 per cent., and as a four-year-old, about 90 per cent. of the milk and butter-fat she will produce under the same treatment when mature.

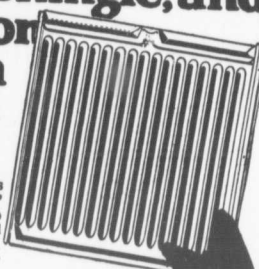
The richness of the milk remains practically constant from year to year, except that after the third milking period there is a slow gradual decline with advancing years.

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The Feeders' Corner
The Feeders' Corner is for the use of our subscribers who are interested in feed questions, or who have questions of interest. All questions will receive prompt attention.

Millet for Dairy Cows

Is millet good roughage for dairy cows? How much should be given at a feed? What other grains should be fed with it for cows milking 35 lbs. a day? Would other roughage be advisable?—E. A. Hastings Co., Ont.

The millets, which are annual grasses, consist of many races and varieties mixed in hopeless confusion. Hungarian grass is the one most common with us. In order to produce hay of fine quality the seed should be fairly thick as when thinly sown millet stems are coarse and weedlike and make hay of low quality. All forms of millet grass designed for hay should be cut just as the plant is going into blossom to avoid the formation of hard seeds which are indigestible by horses and cattle. Millet forage is much relished by dairy cows, being somewhat superior to corn fodder. In a chemical analysis it is intermediate in quality between timothy hay and red clover.

Millet hay of good quality is a good roughage of itself, but is improved by the addition of clover which brings up the protein content of the roughage, and of corn ensilage or roots which improves the palatability.

As a grain ration to be fed with millet to cows giving 25 lbs. of milk a day we would suggest a mixture of corn two parts, oatmeal two parts and bran one part by weight. Feed seven pounds of this mixture and two and one-half pounds of cotton seed meal. This will give a fairly well balanced ration.

If our subscriber is planning to seed millet this coming summer we would suggest that corn is preferable crop in that it will yield more roughage per acre and when placed in a silo is a more palatable feed. Red clover or alfalfa are both preferable to millet.

Potatoes Raw or Steamed

An experiment to test the feeding value of raw or steamed potatoes as supplementary feed with a grain ration, has been carried on by Robert Withycombe at the Eastern Oregon Experiment Station with interesting results.

The hogs in the experiment were divided into eight lots, and records of the different feed rations given each and the proportion of gain made were kept carefully. Each hog in lots 1 and 2 ate an average of 170.18 lbs. of barley and 509.53 lbs. of raw potatoes, making a gain in weight of 60.70 lbs. Those in lots 3 and 4 ate 110.30 lbs. barley and 693.75 lbs. steamed potatoes and made a gain of 70.60 lbs., while those in lots 5 and 6 ate 188.60 lbs. barley and 664.80 lbs. steamed potatoes and made a gain of 78.10 lbs. Lots 7 and 8 ate 300.10 lbs. barley without potatoes and made a gain of 69.5 lbs.

WHAT BARLEY IS WORTH
The last two lots, fed barley alone, were used as a check on the others to show more definitely the proportionate value of the potatoes. At the present market value of \$0.7 a pound the weight of the hogs fed barley made \$4.87 gain, which makes the barley feeding value \$1.62 to the hundred.

Lots 1 and 2, fed barley and raw potatoes at the rate of three pounds of potatoes to one pound of barley, made a \$4.25 gain, which gives the raw potatoes a feeding value of \$.29 a cwt. Lots 3 and 4, receiving six times as much steamed potatoes as barley made a \$4.91 gain, giving the steamed potatoes a feeding value of

\$.47 a cwt. Lots 5 and 6, fed three times as much steamed potatoes as barley, made a \$5.16 gain, making the feeding value of the potatoes \$.42 a cwt.

It is noticeable that those fed six times as much potatoes as grain did not make quite so good a gain as the others, but it required \$5.25 lbs. less barley to make this gain, so the difference in feeding value is accounted for.

It is also noteworthy that the steamed potatoes are worth \$13 more to the hundred than raw for feeding, as shown in the comparison of the gains of animals fed the three to one ration.

Far Ahead of Oats

By W. C. Palmer.
One ton of alfalfa hay has the same feeding value as 60 bushels of oats. Alfalfa can be expected to average at least two tons to the acre. This is the equivalent of 120 bushels of oats. There is no land that will average 120 bushels of oats—in fact it takes good land and good handling to average 60 bushels of oats to an acre. The alfalfa requires less work and less expense to handle than a grain crop. And the alfalfa will improve the soil while the oat crop will reduce its productive power. To get this value from alfalfa it must be fed on the farm. It needs to be kept in mind that the alfalfa is a roughage.

The securing of a stand of alfalfa requires that the condition necessary to the alfalfa be supplied. These are: Organic matter in soil, best supplied by manure; good deep compact seed bed; best furnished when land is manured; plowed deep for corn and the corn cleared cultivated. Alfalfa needs bacteria. If these are not in the soil introduce them by getting soil from a field growing alfalfa successfully. Alfalfa likes sunshine, so plant it on a nurse crop hurts it. Sow it about June late. The different strains of alfalfa differ much in hardiness. Select seeds adapted to the locality in which it is to be grown. Start with a small piece first. There is no crop that will produce so much food on an acre and it is also one of the surest if not the surest crop that can be grown after it is well established.

How Essex County Children Study Agriculture in School

(Continued from Page 5)
class being given for corn grown by the pupils themselves. So large were the entries in those classes that the Toronto Show in 1912 had to divide the classes were subdivided and it will be necessary to subdivide them again for the next show. These entries are increasing more rapidly than they are in any other class. At the Toronto Show 410 samples of corn being on exhibition in the Junior Department at the Annual Corn Show held in Windsor the past February. Prizes were also given for essays on "How to Grow Corn." The essay that made the highest cash winning at this exhibition received a valuable bronze shield to be won three times by the same school before becoming its permanent property.

The quality of the corn shown in the junior classes was equal, and in not a few cases superior, to that shown in the senior classes. A large number of boys and girls are becoming interested in the work, many of the boys continuing to exhibit in the senior classes after they reach the age of 16.

Pastures will soon be looking good to the dairy farmer. It is just as well to curb our impatience a bit and have good pastures all summer as to spell them now before the grass gets a good start.



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If you want to make the most out of your farm this year, do this: Insist that your dealer give you an 8 per cent. or 10 per cent. Potash Fertilizer. If he has not got it, and you have to buy a low-grade fertilizer, add enough Potash to raise it to 8 or 10 per cent. Our Scientific Bureau will tell you free how to do this. It is simple and easy. Or you can mix your own fertilizer at home if you wish. We will tell you how to do this, too.

If you will write, telling us what you raise, we will be glad to send you free information concerning how best to increase your crops. This information is prepared by the best Agricultural Experts in the country.

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Will Your Seed Grow?

J. F. Metcalf, B.S.A., Manitoulin Island, Ont.

Many of our farmers make the mistake of thinking that there should be a certain seed amount of all kinds of grain and clover seeds to be sown per acre, not considering that there is a big difference in the number of seeds that will grow. One sample of grain will be almost all ripe and not damaged in any way and practically all of the seeds will give a good vigorous growth. Another sample of the same kind of grain may not be well ripened or may be damaged by the weather, and grains will not all give a good vigorous growth—in fact it may be that only a small proportion of them will grow at all.

Last year the red clover did not ripen well as a rule and the consequence is that there is a large proportion of shrunken seed in most of the farmers. Then, too, a great deal of the grain—especially oats—was exposed to the bad weather for some time last fall and that grain will certainly be damaged for seed. In buying corn for seed, too, it is sometimes very disappointing to have only a small proportion of the seed good and the patch have to be seeded over again at a time when it may be difficult to secure seed or when it is too late for the crop to have a chance to ripen in the fall. The remedy for all of this trouble is to buy your seed early, test it to find out what proportion will grow and sow enough extra seed to make up for what will not grow.

TESTING A SIMPLE OPERATION

Testing seed for germination is after all a comparatively simple matter and any farmer can do it for himself in his own home. The tests may be made in the kitchen if the temperature does not fall too low at night. Best results can be kept between 50 degrees at night and 70 degrees during the day. The length of time required for germination is dependant on several factors such as moisture, temperature, vitality, etc.; six to 10 days usually being sufficient.

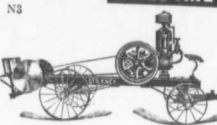
Small seeds such as clover seed may be tested by taking a plate and laying on it a fresh blotter. Then count out say 100 seeds as they come in your sample and place them on the blotter, spreading them out as well as possible. Next place another fresh blotter over the seeds, moisten well and then turn another plate over all. Moisten well (but do not soak) every day and count the number of seeds that sprout.

WELL THE OATS GROW?

In testing large seeds such as oats or corn the first consideration—as with the smaller seeds—should be to get an accurate sample and some trouble should be taken in getting the sample from different places in the bags or bin so that it will be representative of the whole lot. Have a box made say 10 x 30 inches and about three inches deep and put in about two inches of sand—preferably—sifted sand. Rule lines each way two inches apart with a margin of one inch all around. By planting a seed where the lines cross you will have 50 seeds planted. Keep in a sprinkler or place and water (with a fan or other) or other brush every day and count the number of seeds that grow before two weeks' time. Any that appear after that will be too weak to amount to much. A little trouble taken with this work now may easily make a difference of a quarter of the crop next fall.

Why not treat those seed oats with formalin and avoid smut?

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We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are carefully edited as the reading columns, and because to protect our readers, we do not accept unscrupulous advertisers. Should any advertiser herein deal dishonestly with you or not live up to our guarantee, we will make good the amount of your loss, provided such transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that we find the facts to be as stated. It is a condition of this contract that in writing to advertisers you state: "I saw your advertisement in Farm and Dairy." Readers shall not attempt to adjust their claims through the medium of these columns, but we shall not attempt to adjust friendly disputes between subscribers and honorable business men who advertise, nor pay the debts of honest bankrupts.

FARM AND DAIRY

PETERBORO, ONT.

IMPORTANCE OF EARLY SEEDING

We often wonder if the importance of early seeding of the grain crop is sufficiently appreciated by farmers generally. The most of us have an idea that the earlier we get in the grain crop the better is the yield. But how many of us have been sufficiently impressed with the importance of early seeding to make an extra effort to get our land plowed in the fall, the manure spread in the winter, and the implements all ready to rush on to the land as soon as it is ready to work? The facts brought out in the following experiments conducted at Macdonald College and the Ontario Agricultural College may give some of us a greater appreciation of the importance of rushing the spring seeding.

At Macdonald College experiments were conducted in the seeding of oats at different dates, the earliest plots being seeded April 26th and the latest,

May 27th. This difference of thirty-two days in seeding resulted in an average difference of just two weeks in the maturing of the grain. The earliest seeding yielded about seventy bushels an acre and the latest only fifty bushels. The earlier seeding showed a larger yielding of straw by about one-third, and was free from rust that the latest seeding. The grain weighed only twenty-nine pounds per measured bushel from the late seeding, and from the early thirty-three and three-quarter pounds a bushel. The results of intermediate seedings showed a gradual decline in yield from earliest to latest.

Even more convincing are the results of a series of experiments conducted at the Ontario Agricultural College over a period of five years. These seedings were made at intervals of one week. The earliest seeding of oats resulted in a yield of 75.20 bushels an acre, weighing 33.9 pounds a bushel. The second seeding, made a week later, showed a slightly higher yield, probably due to the soil being more thoroughly worked, but from then on the yield steadily declined until at the sixth sowing only 37.02 bushels were harvested and the weight a bushel was 24.16 pounds. In a similar series of experiments in barley a decline from 46.17 bushels an acre at the first seeding to 18.43 bushels at the sixth was noted, and in spring wheat the decline was from 21.89 bushels to 6.73 bushels an acre. In all cases the highest yield of straw was from the earlier seedings. The earlier seedings were also free from rust.

Surely we have here a convincing argument for early seeding. We don't wish, however, to minimize the importance of proper working of the soil. It is a combination of the two, a well worked soil and early seeding, that gives the best results; hence the importance of fall plowing and of wide working implements for the acceleration of spring work.

A PERSONAL CHAT

"Enclosed please find renewal to Farm and Dairy. You are doing much to help along agricultural interests, especially dairying. I do not agree with your opinions in all things, but your general views pertaining to general branches of farming are sound when viewed in a broad-minded manner."—R. B. McCL., Huron Co., Ont.

This is a type of letter that gives the editors of Farm and Dairy a sense of satisfaction. It shows us that Farm and Dairy is going to the kind of people that we wish to reach, men who are willing to judge a case on its merits and not from preconceived prejudices or from partisan affiliations. This reader takes us in the way in which we wish to be taken. He does not unquestionably accept all of our opinions, but he does not quarrel with us because we cannot agree on all points.

A story is told of a visit made by the great writer, Carlyle, to a very

talented and prominent public man. After the visit Carlyle was asked how he enjoyed himself. "Well," he said, "I never did appreciate talking with an echo." Unfortunately the two men had agreed on every subject brought up for discussion, and hence there was no discussion. Did we and our readers agree on every point the work of getting our Farm and Dairy might get as monotonous to the editors as the reading of it would be to our subscribers.

Conditions are changing rapidly now-a-days. Opinions on many subjects that seem to be sound one day may need to be revised the next. Hence it is impossible for us all to agree even did we wish to. In all things, however, we endeavor to uphold what we consider to be in the best interests of the farmer and as long as we all exercise the same tolerance as that expressed in R. B. McCL.'s letter, the relationship between the editors and readers of Farm and Dairy will be a pleasant one.

"SPEAKIN' OUT IN MEETIN'"

A few years ago William McKenzie and Donald Mann were railway contractors with neither fame nor fortune. Today, Sir William and Sir Donald number their wealth in millions and there are few estimates made of who are the multi-millionaires of Canada that do not credit Sir William with first place among our wealthy men. Sir Donald does not come far behind him. Their interests extend from one end of Canada to the other, and to foreign countries as well. Among their possessions are the Canadian Northern Railway, which will soon be Transcontinental, power lines, street railway franchises and immense land holdings. How has all of this wealth come into the hands of these men in such a short time? Certainly they did not create it.

The truth is a good portion of it has been gotten from the people of Canada through the influence these two gentlemen have been able to exert on the powers that be, both at Ottawa and at provincial capitals. It is gratifying to note that the Canadian people are at last awakened to the fact that their hard earned money is helping to make millionaires of such men as Sir William McKenzie and Sir Donald Mann without the public receiving adequate compensation in return. It is also gratifying to note the way in which many influential Canadian newspapers are "speakin' out in meetin'" and asking why these men can go to our politicians and secure millions in subsidies and in guarantees of bonds without undertaking to repay the advances made or offering to give the public an interest in their enterprise.

It is not many months since the Canadian Northern Railway shared to the extent of \$6,500,000 in a general handout of about \$50,000,000 from the federal funds made by the Dominion government to Canadian railways. This gift was only one of

many that the Canadian Northern has received from the federal government. The majority of Canadian provinces have treated them most liberally in gifts either of land or of money.

Ontario has given them some 2,000,000 acres of land, and now comes the rumor, often denied but persistently recurring, that the Canadian Northern is demanding a further gift of some \$30,000,000 from the federal government to help them in completing their transcontinental line. If this rumor is true the Canadian people should protest most vigorously against the continuance of such exploitation of the public. If we have to practically build these railway lines why can't we own or control them when they are finished, instead of passing them into the hands of a few already overrich beneficiaries of government extravagance? At the very least we should receive a stock interest in such companies to the amount of the assistance we give them. It is time for the people to demand their rights.

QUALITY PRICE FOR EGGS

"Pay us for quality and we will give it to you," has long been the reply of many farmer poultrymen when accused of not taking care of their eggs. Produce dealers, who have always paid much the same price for eggs irrespective of quality, have now taken us at our own word. At a largely attended meeting of produce men from Ontario and Quebec, held at Montreal recently, the following resolution was unanimously adopted:

"That the egg dealers here assembled unanimously approve of the proposal to change on June 1st, 1913, from the present system of buying eggs to a system of buying on a basis of quality only; and further, we disapprove of paying for any rotten eggs in our receipts after that date."

If the egg dealers conscientiously live up to the terms of this resolution to which they have agreed, a great change will be worked in the poultry industry. Methods of marketing must be radically changed to comply with the new regulations, but with the stimulus of a better price for a better product farmers will be quicker to change their methods than they have been in the past, when a better product was desired but not paid for.

The question comes up—How is a busy farmer to market his eggs a couple of times a week during the hot weather? Poultry at best is only a side line on Canadian farms, and a few farms are the egg receipts large enough to justify the farmer in leaving his regular farm work to attend to their marketing. How is he to secure that extra price for quality eggs and to avoid marketing rotten eggs that are not to be paid for at all?

There are two methods in which perfectly fresh eggs may be sent to market. In the first place, farmers themselves may combine into co-operative egg circles and make arrangements with one of their number to

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TAKE YOUR ABOVE, SIR! WILL APPLY TO TISHING IN FARM "A Paper Farm

AD. TALK

LXXVI.

A skilled layer of mosaics works with small fragments of stone—they fit into more places than the LARGER chunks.

The skilled advertiser works with small words—they fit into MORE minds than BIG phrases.

The simpler the language the greater the certainty that it will be understood by the LEAST INTELLIGENT READER.

Advertising must be simple. When it is tricked out with the jewelry and silks of literary expression, it looks much out of place as a BALL DRESS at the BREAKFAST TABLE. The buying public is only interested in FACTS. People read advertisements to find out WHAT YOU HAVE TO SELL.

The advertiser who can fire THE MOST FACTS in the shortest time, gets the MOST RETURNS. Blank cartridges MAKE NOISE BUT THEY DO NOT HIT—blank talk, however clever, is only wasted space.

You must not tolerate in your PRINTED SELLING TALK anything that you are not willing to countenance in PERSONAL SALESMANSHIP.

Out out clever phrases if they are inserted to the sacrifice of clear explanations—WRITE COPY AS YOU TALK. Only, be more brief. Publicity is costlier than conversation—ranging in price downward from \$10.00 a line; talk is not cheap, but the most expensive commodity in the world.

Sketch in your ad to the stenographer. Then you will be so busy "SAYING IT" you will not have time to bother about the gowags of writing. Afterwards take the typewritten manuscript and cut out every word and every line that can be erased without omitting an important detail. What REMAINS in the END is all that REALLY COUNTED in the BEGINNING.

Cultivate brevity and simplicity. "Saven Francais" may LOOK smart, but more people will UNDERSTAND "FRENCH SOAP." Sir Isaac Newton's explanation of gravitation covers SIX PAGES, but the school-boy's terse and homely "What goes up must come down" clinches the whole thing in SIX WORDS.

INDEFINITE TALK WASTES SPACE. It is not 100 per cent. productive. The copy that omits prices sacrifices half its pulling power—it has a tendency to bring LOOKERS instead of BUYERS. It often creates false impressions. Some people are bound to conceive the idea that in REALITY—other by the same token, are just as likely to infer that the prices are LOWER and go away thinking that you have exaggerated your statements.

The reader must be SEARCHED OUT by the copy. Big space is cheapest because it DOESN'T WASTE A SINGLE EYE.

Small space is expensive. Like a ONE-FLAKE SNOW-STORM, there is not enough of it to lay.

Space is a comparative matter after all. It is not a case of HOW MUCH is used, as HOW IT IS USED. The passengers on the limited express may realize that Jones has tacked a two-inch shingle on every post, but they are GOING TOO FAST to make out what the shingles say, yet the two-foot letters of Brown's big bulletin board on top of the hill leap at them before they have a chance to dodge it. And at that it doesn't cost nearly so much as the SUM TOTAL of Jones' dinky display.

—Herbert Kaufman.
TAKE YOUR HAT OFF TO THE ABOVE, SIR! THE MOST OF IT WILL APPLY TO YOUR ADVERTISING IN FARM AND DAIRY.

"A Paper Farmers Swear By"

attend to the marketing of the eggs of all; or they may arrange to take turn about in carrying the eggs to the shipping point." A second method and one that, like the first, has already been successfully tried out in Canada, is for cheese factory or creamery men to conduct an egg trade as a sideline. It is comparatively easy for milk or cream drawers to collect eggs along their routes, and these eggs could be shipped regularly as guaranteed fresh eggs and command the highest price. Local conditions will determine which of these two methods is most advisable. If the dealers live up to their agreement to pay higher prices for good quality eggs, we will do well to adopt one method or the other in every community where hens are kept.

According to statements recently submitted to the Interstate Commerce Commission of the United States, express companies have suffered a loss of approximately 25 per cent of their small package business, which amounts to about six per cent of the gross revenues of the companies, through the operations of the Parcels Post. At the same time the government expects to make a profit on the carrying of parcels once they get the system well organized.

When the express companies of the United States admit that the new Parcels Post regulations are cutting seriously into their business on small parcels, they are offering us the strongest possible evidence that Parcels Post must be working to the advantage of the people at large. And if Parcels Post is good for the people of the United States, why should we not have it in Canada? Why not write to our member at Ottawa about it? He would like to hear our opinion on the subject of carrying parcels by post.

"I work my corn land until it is so mellow and fine that you would wonder how the corn is going to stand up in it. Then I roll the land to get a good firm seed bed.

A Common But I work it well first.

Mistake That's the main point in getting a good crop."

So said one of the best corn growers in Eastern Ontario in the course of a conversation recently. We believe that did other farmers do likewise there would be less poor corn to harvest next fall. We all realize the importance of thoroughly working land intended for grain or grass. We know that we will not get another opportunity at that soil until the sod is again plowed. We look at corn differently. We feel that we will have plenty of opportunity to get that land in shape even after the crop is up and growing. We could not make a greater mistake. The experience of all good corn growers proves the value, in fact the necessity, of thoroughly working the soil before the corn is planted. Let us not place too much dependence on later cultivation at the expense of the initial working of the soil.

DE LAVAL CREAM SEPARATORS

No Excuse for any Cow Owner Being Without One

There is no reason why any cow owner who sells cream or makes butter should be without a cream separator and there is no excuse why he should not have the best separator.

Any creameryman or experienced dairyman will tell you that a good cream separator will give you a great deal more and a great deal better butter than you can make with any gravity setting system, and equally, of course, more and better cream, if you are selling cream.

The DE LAVAL is acknowledged by creamerymen and the best posted dairymen the world over to be the "World's Standard," and the one and only separator that always accomplishes the best results possible and always gives satisfaction.

You cannot make the excuse that you can't afford to buy a De Laval, because it will not only save its cost over any gravity setting in six months and any other separator in a year, but is sold either for cash or on such liberal terms that it will actually pay for itself.

A little investigation will prove to you that the truth of the matter is that you really can't afford to make cream or butter without the use of the DE LAVAL cream separator.

The nearest De Laval local agent will be glad to demonstrate this to your own satisfaction, or you may write to us direct.

DE LAVAL DAIRY SUPPLY CO., LIMITED MONTREAL PETERBORO WINNIPEG VANCOUVER

FREE STYLE BOOK FOR 1913 OF "Quality Line" VEHICLES AND HARNESS



Vehicle or Harness you require, and SAVE YOU MONEY. It describes and pictures the latest styles, giving prices, PRICED TO SELL, and fully explains our method of selling direct and saving you the Middlemen's Profit. Remember, we pay the freight in Ontario and Eastern Canada. The Catalogue is Free, for the asking. Send for it Today.

INTERNATIONAL CARRIAGE CO. Dept. "D" Brighton, Ontario



This Engine Runs on Coal Oil

Every farmer can afford an Ellis Coal Oil Engine. They give far more power from coal oil than other engines do from gasoline. They are safe, as well as cheap; no danger of explosion or fire.

The strongest and simplest farm engine made; only three moving parts; nothing to get out of repair. Anybody can run it without experience. Thousands of saw-wood, pump, thresh, run cream separators, and do men. Fill up the tanks and start it running, and do further attention is necessary; it will run till you stop it.

FREE TRIAL FOR 30 DAYS. You don't have to take our word for it. We'll send an engine anywhere in Canada on Thirty Day Free Trial. We furnish full instructions for testing on your work. If it does not suit you send it to get it back if you don't want it. Absolutely guaranteed for 18 years. Write for free catalogue and opinions of satisfied users. Special offer in new territory.

3 to 18 horse-power We pay Duty and Freight Ellis Engine Co., 90 Mullett Street DETROIT, MICH.

PROFITMAKING Dairy Equipment

Up-to-date dairy equipment brings bigger profit to users, because it saves time and insures higher grade products.

We carry a very complete line of all requisites for the creamery, cheese factory, dairy and milk dealer, all of the highest grade, because we know it does not pay the dairyman to buy equipment of any other kind.



The De Laval Line of Dairy, Creamery, and Farm Supplies



VICTOR CHURNS. The best butter with the least work can be made with the Victor Churn. Both churns the butter and works it. Years of churn building experience back of it. Large sizes for creameries and smaller sizes for farm dairies.

No dairy without a silo is fully equipped. The Ideal Green Feed Silo has been longest on the market. The best and most popular silo made in Canada. All sizes.

DE LAVAL WHEY SEPARATORS turn waste into profit. Every cheese factory should install one. Butter made from whey cream brings a good price and the butter-fat recovered from the whey will more than pay for the machine the first year.

Our line of creamery, dairy, cheese factory, milk dealer's and farm equipment is most complete. We shall be pleased to mail complete catalog if you will write advising what supplies you require.

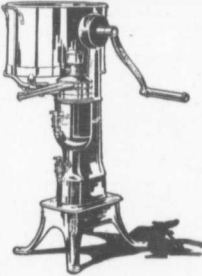
DE LAVAL DAIRY SUPPLY CO., Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA
Exclusive Canadian distributors of the "World Standard" De Laval Cream Separators
MONTREAL PETERBORO WINNIPEG VANCOUVER

Pay the Price of the Best—No More—No Less

ECONOMY in buying a cream separator does not begin nor end with the price. You may easily pay too little and just as easily pay too much.

Learn the difference between gears that work without back lash and those that have it or develop it soon. Learn the importance of a self-adjusting bowl spindle bearing, and learn to know one when you see it. Discover the difference between brass and phosphor bronze as a material for bearings. Buy a separator with an oiling system that cannot fail you even for a few minutes of a run. When you find the separator that comes up to your specifications—one that with proper care will do good work for a long time—buy it. You will find it marked



I H C Cream Separator Dairymaid or Bluebell

I H C cream separators turn easily and they are easy to run because the working parts are accurately made and the bearings are sufficiently lubricated. The shafts and spindle are the strongest used in any separator. The shaft and spindle bearings are supported by the frame, but have no contact with it. The contact is between the steel spindles and phosphor bronze bushings. The gears are spirally cut so that there is no lost motion between them. They are entirely protected from grit and milk, and at the same time are easily accessible for cleaning.

See the I H C local agent and ask him to give you a demonstration of the efficiency of the machine as a skimmer and to go over with you and explain carefully all of its good, mechanical points. You can get catalogues and full information from him, or, write the nearest branch house.

International Harvester Company of Canada, Ltd

BRANCH HOUSES
At Brandon, Calgary, Edmonton, Estevan, Hamilton, Lakeside, London, Montreal, North Battleford, Ottawa, Quebec, Regina, Saskatoon, St. John, Winnipeg, Yorkton



Creamery Department

Butter makers are invited to send contributions to this department, to ask questions on matters relating to butter making and to suggest subjects for discussion. Address letters to Creamery Department.

Creamery Calf Rearing

"Will you come to the station and see a carload of heifer calves that I have down here?" The editor of Farm and Dairy, who received the message over the phone hustled down to the Grand Trunk Railway depot and there inspected a car of 76 heifer calves all the way from three days to six weeks old, that Mr. Wm. Newman, of Victoria, Ont., was taking to his creamery at Lorneville.

"What are you going to do with them?" we asked.
"I am going to raise them on butter milk this summer and sell them in the fall," answered Mr. Newman. "I am saving some of the annual slaughter of cheese factory calves. I will feed them well this summer on butter milk, grain and pasture, and next fall I will call a sale and dispose of them."

"Is this your first experience with butter milk calves?" we asked.
"No. I tried the scheme out with 15 calves last summer," replied Mr. Newman. "They did well, so this year I am branching out a little more extensively. These calves were purchased down in Grenville county. They cost me from \$2 to \$8 each, and will average me between \$5 and \$6 when I get them to Lorneville."

Practically all of Mr. Newman's consignment of calves were from purebred Holstein or Ayrshire bulls, and with the exception of five or six rather inferior individuals, they were a fine looking bunch of youngsters. The greater number were Hicestons. Raising calves is rather an unusual side line for the creamery man and later we will endeavor to give Farm and Dairy readers information as to how Mr. Newman succeeded with his novel enterprise.

The Cooperative Laundry

Cooperation is becoming more successful in the farming communities each year. There is one phase that has not been as extensively adopted as it deserves. Reference is made to the cooperative laundry.

The time was when all the butter was made on the farm. This was the duty of the farmer's wife, a duty that she thought inevitable. Progress brought the cooperative creamery and today a great burden is lifted from the shoulder of the farmer's wife because this work is taken from the farm home and placed in the factory especially adapted to its needs. The cooperative creamery is a recognized success, in fact almost a necessity, in every dairy community. It produces a better quality of butter than can be made at home, it gives greater uniformity to the product and it has revolutionized dairying.

The next step, or at least one of the most logical things that will surely follow, is the cooperative laundry. There is no reason why this should not be just as successful as the cooperative creamery. There is as much hard work in connection with the family laundry as there used to be in butter making. It is possible to relieve the housewife of this work and it is only fair that this should be done. Farmers of to-day are anxious to make money not for the money itself, but for what it will provide and this greater convenience should be one of the things provided.

Cooperative laundries are being

tried in certain dairy sections in connection with the creameries. The power is at hand and also the steam. The former is used only part of the day and it would be possible to direct the management so that the laundry work could be done without much additional expense save for a slight change in the building and for a little extra machinery. Such an innovation would prove a blessing to many communities and it is not a wild dream to prophesy its general adoption in the near future.—Kimball's Dairy Farmer.

It is a poorly run creamery that does not add to the prosperity of the community in which it is built.

Milk is the result of chemical action in the udder of the cow. Casein and milk sugar are found in the udder and not elsewhere in the body. The conclusion is that while the blood is passing over and around the sacks of the udder the food of the blood is transformed into the form of milk.—J. G. Taggart, B. S. A., Frontenac Co., Ont.

Around the World via "Empress of Asia"

The "Empress of Asia" will leave Liverpool June 14, calling at Madeira, Cape Town, Durban, Bombay, Singapore and Hong Kong, arriving Vancouver August 30th. Vessel remains in drydock at Hong Kong. "Rate for entire cruise, \$62.12." Exclusive of maintenance between arrival in England and departure of "Empress of Asia," and stop over at Hong Kong, Particulars from Canadian Pacific Agents, or write Mr. G. Murphy, District Passenger Agent, Toronto.

W. S. ABSORBINE

Will reduce inflammation of joints and joints, Rheumatism, Soft Swellings, Cuts, Burns, Bruises, Sprains, Swellings, and all other ailments. It is a healthy, safe, and quick remedy, and it is the only one that can be used in any case. It is the only one that can be used in any case. It is the only one that can be used in any case.

W. F. YOUNG, F.O.B., 125 Lyman St., Montreal, Can.

WANTED
THIRTY CHICKENS Must be of laying strains. State price, delivered, C. P. R. Dalhousie Mills Station.

A. J. McRAE - Ontario
Bridge End

Cream Wanted We furnish cans and pay extra charges. Drop us a card. For reference—Creamery, Ridgeway.—Point Abino Creamery, Ridgeway, Ont.

CREAM WANTED
We pay the highest city prices for cream delivered sweet sour at any express office. We supply cans and permit prompt delivery, with an accurate record of each shipment. If 12 years' experience counts, drop your cream to the Toronto Creamery.

PAYE.
If interested you should write us.
Toronto Creamery Co., Ltd.
TORONTO

Highest Price for Cream
1.—We supply cans and pay express charge.
2.—Test every shipment upon arrival and send a statement for same.
3.—Pay every two weeks and cash checks at par.
It costs you nothing whatever to give our agents a trial.
Let us send you a can and enable you to try a few shipments.
For fuller particulars write

The Berlin Creamery Co.
Berlin - Ontario

Cheese

Shakers of the cheese business are questioning the wisdom of the move to the O.C.

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By So No one on cheese enough to makers have don't believe bunch of the world is because it is outside of the idea of the enable us to same has a article.
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farmer who s a rarity. The patrons don't milk house. I stable in fit most cases it the first one methods. It farmer who is dian farmer an cheesemaker who What do you s

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Cheese Department

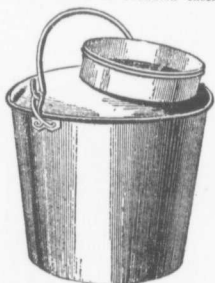
Makers are invited to send contributions to this department, to ask questions on matters relating to cheese making and to suggest subjects for discussion. Address letters to The Cheese Maker's Department.

Some of Our Problems

By "One of the Boys."

So New Zealand is beating us out on cheese quality. This in itself is enough to indicate that we cheesemakers have our own troubles. I don't believe that there is a better bunch of cheesemakers anywhere in the world than we have right here in Canada. If our cheese is defective, it is because of conditions more or less outside of our control. I will give my idea of the steps that are necessary to enable us to put our cheese on the same basis as the New Zealand article.

I do not wish to be unduly hard on our patrons, but I believe that they are responsible for fully 75 per cent. of the defects in Canadian cheese.



A Dirt and Germ Eliminator

One of the first measures to be taken by the dairymen who would improve the quality of the milk that he sends to city or factory, is the securing of suitable milk pails. Covered milk pails such as the one here illustrated keep out a wonderfully large amount of dirt and germs.

What cheesemaker can take over heated and dirty milk and make therefrom cheese that is good and will keep good? In my own section the farmer who stores ice and uses it is a rarity. The great majority of the patrons don't even provide a covered milk house. I don't believe that one stable in five is whitewashed; and in most cases it is there that the cows are milked. The careless patron is the first one who needs to change his methods. It is the New Zealand farmer who is beating out the Canadian farmer and not the New Zealand cheesemaker who is the most skilful. What do you say, boys?

DOUBLING OUR HANDICAP

And then there is the cool-curing question. In our own factory we have the cool-curing room and wonder how we ever got along without one. When we add to the carelessness of the patron, insufficient curing, and shipping green is it any wonder that we cannot hold our own? I am told that all New Zealand cheese is cool-cured and held a reasonable length of time before shipping.

There is another question I will make mention of, though it has nothing to do with our export trade. I refer to "pay by test." I regard it as robbery to pay the man who brings three per cent. milk the same price as we pay the man who brings 4 or 4.5 per cent. milk. The latter milk will make just about half as much cheese again. We like to get rich milk. It reduces cost of manufacture

and improves the quality of cheese; and yet by our illogical system of payment we actually put a premium on poor milk. Our dairy authorities are adding to the general unsatisfactory condition by refusing to agree on any one method of testing as the best. Oh, for a good fat-casein test or more harmony among the powers that be!

Progress in Granville

W. G. Gardiner, Granville Co., Ont.

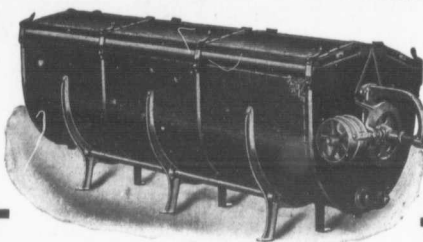
It would be delightful to say that there were no unsatisfactory condition surrounding the dairy industry in Kemptville District, in which I am an instructor. We yet have too many poor conditions, both at the factory and surrounding the home dairy; factories with poor equipment, discolored ceilings and walls, wet, slippery floors and unsanitary surroundings; home dairies with no provisions for properly curing milk, dark unsanitary stables and in some cases very poor milk utensils.

Yet there is a brighter side to the dairy instruction work. A large number of the factory managers have responded to advice and recommendations. They now have their places of business first in shape; the interior of the factories painted or nicely whitewashed, in some cases painted on the outside and adequately equipped so that their product can be properly handled without loss. The floors are dry making it possible for the men in charge to keep them clean and sweet. In a few instances cooling rooms are being installed.

RIGHT KIND OF PATRONS
Along with these conditions we have many dairymen who have made excellent arrangements to supply first class raw-material, milk, who have sanitary stables or milking yards, have done away with pig or hog pens in one side or end of their stables, and in a number of instances have nicely whitewashed the interior of stables and have provided good cooling facilities, such as, conveniently arranged cold water tanks, troughs or half barrels placed in pure surroundings. Dairymen such as these are a great factor in keeping the name of Canada famous on account of the good cheese made.

Allow me to sound a note of warning to the careless patron or factory-man who has not or who will not comply with regulations governing this grand dairy industry. I fear the Department of Agriculture will be forced to put the law in action and show the indifferent man that this industry is of great importance to the country and at least common decency is demanded of the man engaged in it. In this connection I call to mind the saying of an eminent dairymen that: "We must be alive and up-to-date or get out of the business."

Better Butter--Greater Profits



That is what the use of the "Beaver" Cream Ripener means to the butter maker.

The ripening process as carried out by the "Beaver" Ripener brings out fully the desirable qualities in the cream. It greatly improves the flavor, the aroma, and the keeping qualities.

You will obtain a much higher price for your product and it will gain popularity, meaning larger sales and more profit for yourself.

The "Beaver" Ripener is an economical machine. The cost is moderate and the operating expense is low.

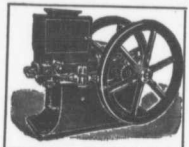
Write for Full Information

Drop us a card to-day, for full information on the "Beaver" Cream Ripener. You will be greatly interested in this machine, and its uses. Address: Dept. B.

W. A. DRUMMOND & CO., King Street, E., Toronto, Ont.
(Creamery and Dairy Supplies)

Why "MONARCHS" Are Best

Our "red circle" folder explains the wonderful "Monarch" farm engine, part by part. This engine will saw, pump, grind, run cream separator, cut silage. Move it from place to place. Every part is made by experts, and made to last. Use our folder.



Send a Post-Card to-day for the "red circle" folder and prices and terms on 1 1/2 to 3 h.p. sizes.

CANADIAN ENGINES Limited, DUNNVILLE, ONT.

Sole Selling Agents in Eastern Canada
THE FROST & WOOD CO., Limited,
Montreal, Que., St. John, N.B. MITCHELL FALLS, ONT.

KA-LOR-OID

TRADE MARK REGISTERED

(Colored RU-BER-OID, Canadian Patents Nos. 93,827 and 93,164)

KA-LOR-OID, in its beautiful, soft shades of Red and Green, is the only prepared roofing made in permanent colors. In KA-LOR-OID Roofing the colors are not integral part of the exposed surface. They last as long as the roofing itself--and that means longer than any other

prepared roofing has lasted, for KA-LOR-OID is made of the same materials, and has the same wonderful durability as RU-BER-OID Roofing in the regular Slate color.

For Samples and Booklets write

Standard Paint Co. of Canada, Limited,
Montreal--Winnipeg--Cahary--Vancouver.

ROOFING



THE best work is always done by those who have
the ability to laugh and play.—Elbert Hubbard

Rose of Old Harpeth

By MARIA THOMPSON DAVIES

"Copyright, 1912, The Bobbs-Merrill Company"
(Continued from last week)

N O, you're not—just a boy," answered Rose Mary, as she set her supper on the table before him. She had poured his coffee, stirred in the cream and sugar, and laid the spoon straight in the saucer beside the cup. For an instant Everett sat very still and looked at her, then she picked up the cup and tipped it against her lips, sipped judiciously, and set it down with a satisfied air. For just a second her eyes gleamed down at him over the edge of the cup and a tiny laugh gurgled in her throat as she swallowed her sip of his beverage.

"That was mine, anyway—he can have his chicken wings," said Everett with a laugh as he began operations on the food before him.

"It wasn't a very nice party," answered Rose Mary, as she went on with her work on the pile of china. "Stonie acted awfully. He piled up his plate with pieces of chicken, and when Aunt Viney reproved him he said he was saving it for you. And Aunt Viney said she was sure you were sick, and then Uncle Tucker wanted to go look for you, and I had to tell him before them all that you had sent me word. Then Aunt Amanda said she was afraid you were not a Prohibitionist, and Aunt Viney said she would have to talk to you in the morning. Then they all told Mr. Newsome about you, and I don't think he liked it much, because he likes to tell us things about himself. We are so fond of him, and we always want to hear him talk about where he has been and what he has done. I tried to stop them and make him talk, but I couldn't. It's strange how liking a person gets them on your mind so that even if you don't talk about them you think about them all the time, isn't it? But I oughtn't to blame them, for I was so afraid they wouldn't leave enough of things for you that I forgot to talk myself. It was glad Stonie acted that way about the chicken, for the piece he saved made three pieces of white meat for you. Oh, please let's hurry, because we will miss the speaking if we don't. Mr. Newsome makes such beautiful speeches that I want you to hear him. Is there any kind of prize in the world like that you have over your friends?"

CHAPTER VI.

THE ENEMY, THE ROD, AND THE STAFF.

And the days that followed the Senator's prohibition rally at Sweetbriar were those of carnival for jocund spring all up and down Providence Road and out over the Valley. Rugged old Harpeth began to be crowned with wreaths of tender green and pink which trailed down its sides in garlands that spread

themselves out over meadow and farm away beyond the river bend. Overnight, rows of jonquils in Mrs. Poteet's straggling little garden lifted up golden candlestick heads to be decapitated at an early hour and transported in tight little bunches in little jars to those of the neighbors whose spring flowers had

front porch hung thick with long, purple clusters which dropped continually little bouquets of single blossoms with perfect impartiality on the head of widow and maid, as the compromise of entertaining both young Bob and Mr. Crabtree at the same time was carried out by Louisa Helen. And often with the most absolute unconsciousness the demure little widow allowed herself to be instantly on her appearance dissolved into clumps of two. And if the prodigal vine showered blessings down a pair of clasped hands hid beside Louisa Helen's fluffy pink muslin skirts nobody was the wiser except her brother Mr. Crabtree.

And perched on the side of the hill the Briars found itself in a perfect avalanche of blossoms. The snowballs hung white and heavy from long branches, and gorgeous lilac boughs bent and swayed in the wind. A clump of bridal wreath by the front gate was a great white drift against the new green of a crimson-starred burning bush, while over it all trailed the perfume-laden honeysuckle which bowed the front porch, decorated trellis and trees and finally flung its blossoms down the hill to well-nigh calamity Rose Mary's milkhouse.

One balmy afternoon Everett



A Healthy and Pleasant but Uncommon Form of Recreation

Our grandmothers and great-grandmothers were past masters in the art of riding. They of today prefer the easy riding, cushioned buggy. But will our method of travel offer us as much in health and pleasure as the method of long ago, still practiced to a limited extent?

felled to open at such an early date. In spite of what seemed an open neglect, the Poteet flowers were always more prolific and advanced than the wily Mr. Crabtree into the mystic circle of three, which was than any others along the Road, much to the pride of the equally prolific and spring-blooming Mrs. Poteet. And in a spirit of nature's accord the white poet's narcissus showed stately flowers to the early sun in the greatest abundance along the side porch with his stockinged feet up on a chair and his nose tilted to an angle of ecstatic inhalation?

Down at the Plunketts the early wistaria vine that garlanded the

brushed aside a spray of the pink and white blossoms and stood in the stone doorway with his prospecting kite in his hands. Rose Mary lifted quick welcoming eyes to his and went on with her work with howl and paddle. Everett had some time since got to the point where it was well-nigh impossible for him to look directly into Rose Mary's deep eyes, quaff a draft of the tenderness that he always found offered him and keep equanimity enough to go on with the affairs in hand. What business had a woman's eyes to be so filled with a young child's innocence, a violet's shyness, a passion of fosterling's gentleness, mirth that ripples like the surface of the crystal pools, and—could it be dawning—love? Everett had been in a state of uncertainty and misery so abject that it hid itself under an unusually casual man-

ner that had for weeks kept Rose Mary from suspecting to the least degree the condition of his mind. There is a place along the way in the pilgrimage to the altar of Love, when the god takes on an awe-inspiring phase which makes a man hide his eyes in his hands with fear of the most abject. At such times with her ablaze of faith a woman goes on ahead and lights the way for both, but while Rose Mary's flame burned strongly, her unconsciousness was profound.

"I'm so glad you came," she said with the usual signal to him in her cheeks. "I've been wondering where you were and just a little uneasy about you. Mr. Newsome has been here and wants to see you. He stayed to dinner and waited for you for two hours. Stonie and Toby and all the others looked for you. I know you are hungry. Will you have a drink of milk before I go with you to get your dinner. I saw the milk." "What did the Honorable God want?" asked Everett, and there was a strange excitement in his eyes as he took his hand quickly on a small irregular bundle which he slipped out of his kit. His voice had a sharp ring in it as he asked his question.

"Oh, I think he just wanted to see you because he likes you," answered Rose Mary with one of her little glances and quick smiles. "A body can take their own liking for two other people and use it as a good strong rope just to pull them together sometimes. I'm awfully fond of Mr. Newsome—and you," she added as she came over from one of the crooks with Peter Rucker's blue cup brimming with ice-cold cream in her hand and offered it to Everett.

Instead of taking the cup from her Everett clasped his fingers around her slender wrist in the fashion of young Petie and thus with her hand raised the cup to his lips. And as his eyes looked down over its blue rim into hers the excitement in them died down, first into a very deep tenderness that changed slowly into a quiet determination which seemed to be pouring a promise and vow into her very soul. Something in the strange look made Rose Mary's hand tremble as he finished the last drop in the cup, and again her lovely, always-ready rose flushed up under her long lowered lashes. "Is it good and cold?" she asked with a little smile as she turned away with the cup.

"Yes," answered Everett quietly. "It's all to the good, and the milk to the cold." "Is that a compliment to me and the milk, too?" laughed Rose Mary over by the table as she again took up the butter-paddle. "It's nice to find things as is expected of them, women good and milk cold, isn't it?" she queried teasingly.

"Yes," answered Everett from across the table.

"And any way a woman must be a comfort to folks, just as a rose must smell sweet, because they're both born for that," continued Rose Mary as she lifted a huge pat of the butter on to a blue saucer. "Me are sometimes a comfort, too—and she," she added with a roguish glance at him over the butter flower she was making.

"No, Rose Mary, men are just thorns, cruel and slashing—but sometimes they protect the rose," answered Everett in his most cynical tone of voice, though the excitement again flamed up in his dark eyes and again his hand closed over the kit in his side. "Do you know what I think I'll do be added. I think I'll take old Gray and jog over to Boliver for a while. I'll see the Senator, and I want to get a wire through to the firm in New York if I can. (Continued next week)

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The Upward Look

The Omnipotent Father

The Lord knoweth them that are His.—II. Tim. 2:19.

How many who read these lines have ever paused when mingling with a crowd of people, to think that God is caring for each one and that He never forgets them even for a moment? Then we can enlarge on this by thinking of peoples in the countries to the north, west, south and east of us that He is always caring for and pouring out His love and sympathy toward them as well as to us. We are such self-centred creatures, being engrossed with our own hopes and ambitions and interested mainly in our limited circle of friends, that the idea of God's wonderful love and power is almost too great for us to grasp.

Then again we seem to forget that God is ever with us when we are tempted to do wrong. We are told in Genesis that Adam and Eve tried to hide themselves from God when they had eaten of the forbidden fruit. And do we not try to make the same vain attempt at times? Because we cannot see God we appear to think that He cannot see us. But He is ever by our side and knows our every thought and action.

Although we may be filled with awe

when we realize that God is aware of all our actions and thoughts, yet there is a bright side on which we should look. Our text tells us that "The Lord knoweth them that are His." He hears our every petition, no matter how simple or eloquent it may be, and although we may sometimes think He does not grant our requests, He always gives us what is best. Although we may oftentimes forget Him, He never forgets us. The only way to obtain the consciousness of His never-failing presence with us is to lift up our hearts to Him many times during the day. Our religion should be an every-day one to be worth anything. It should not only be a refuge in the time of storm, but should be a steady light along our pathway.

"The Lord knoweth them that are His." And are we not all His children? We do not belong to ourselves and we are told that we cannot bring anything into the world, nor can we take anything out. We are but the stewards of God on earth, and He expects us to make the best use possible of the talents He has given us. If our motive in life is to do what is pleasing in God's sight we are living a life that is worth while.—R. M. M.

Before using a new lamp wick, stretch and trim it; dry it thoroughly before putting it in the burner. You will get a bright light, and it will save nearly half the cost of wicks and chimneys.

The Happiest Woman in the Country

She does not live in a big house where wide lawns speak dignity and as large and ugly as his purse can buy. She lives in a cottage which in summer is a bower of beauty, in winter a cozy nest. It is a house of four or five rooms, all in use. As the mortgage which first covered it, grows less the porches about it grow larger. It was built for two and is now occupied by four.

There's Hisself and Herself, and the Girl and the Boy—"Us four and no more."

Himsself is a man, every inch of him. He is hearty, independent, energetic and steady as a clock. He has his big feet firmly planted on the lower round of the success ladder and is climbing slowly, surely, carefully. He has his eye on the 20 acres adjoining his feed lot and it will be his by and by.

He loves Herself and no other.

The boy and the girl are happy youngsters. The boy whistles and the girl sings. Herself never complains of her nerves. But, you say—"How can she be so happy as you sometimes pinch the nickles she gets for butter and eggs, be as happy as you say?"

Why, Mrs. City Bird in a Gilded Cage, that is one of the reasons why she is happy. She finds a lot of satisfaction in darning his Sunday coat for Himsself. There's a real joy in

making his trousers over for the boy and doing a good job of it. There's no envy of those who live in big houses and own a section. They have one another and they love one another. Neither Himsself nor Herself is looking for other "affinities."

And love, mind you, the genuine, old-fashioned kind, is the greatest thing in the world. And contentment is the next to the greatest.

Here's where the "law of compensation," as Emerson calls it, comes in: If Himsself must wrinkle his brow to "cut the corners" and make His payments, if Herself is sometimes worried over household economies, why that's self-sacrifice, unselfishness, and as sure as two and two are four it will bring happiness. Positively the only way that has ever been discovered by which people can make themselves happy is to make somebody else happy.

Happy little woman!

If you only knew (and that's the pathos of it all), if you only knew how much happier you are than the average woman. Enjoy your home and your nerves. The boy and the girl may grow up to bless you—or break your heart. Some day you may live in a big house and take it easy—with your heart all empty. If that time should ever come, which may Providence fend, how you will yearn for the days that Whitcomb Riley talks about when you were "so happy and so poor."—Western Farmer.



Peep again in your oven. See those loaves, those *pleasing* loaves you've made. How fat—rounded—substantial. No, they won't fall when colder. Because the *Manitoba strength* that is in FIVE ROSES will hold them up till eaten.

This sturdy elastic gluten has kept them from dropping flat in the oven. No unsightly holes 'twixt crust and crumb—never. All risen evenly—to stay risen. Never heavy—sodden—soggy—indigestible. Yours are the FIVE ROSES loaves—Crinkly and appetizing of crust. Golden brown and tender. Snowy of crumb—light as thistle-down. FIVE ROSES helps a lot. Try it soon.

Five Roses Flour

Not Bleached Not Blended



MADE BY THE MOORE MILLING COMPANY, LIMITED MONTREAL

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To Manitoba, Saskatchewan, Alberta

HOMESEEKERS SETTLERS

Low Round Trip Rates each Tuesday,
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TOURIST SLEEPING CARS
 on all excursions. Comfortable berths, fully equipped with bedding, can be secured at moderate rates through local agents.

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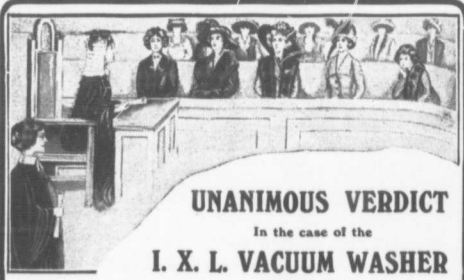
For settlers traveling with live stock and effects.

SPECIAL TRAINS
 Will leave Toronto **Each TUESDAY**
SARCH AND APEL
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COLONIAL CARE ON ALL TRAINS
 No charge for berths

Settlers and families without live stock should use

REGULAR TRAINS
 Leaving Toronto **10.20 p.m. Daily**
 Through Colonist and Tourist Sleepers



UNANIMOUS VERDICT

In the case of the

I. X. L. VACUUM WASHER

PRICE \$5.50

Before the Court of Public Opinion

That it Does Excel in Everyway all Others

Thousands of women who are using them have rendered an unqualified verdict in favor of the I. X. L. VACUUM WASHER, and these women have used every make of Washing Machine, and are fully qualified to judge merit.

THE COUPON below gives you an opportunity to test it in your own home and

SAVES YOU \$2.00

If you do, YOU WILL concur in the verdict, as it WILL demonstrate to YOU that it will wash anything and everything, from a home-blanket and overalls to the finest and most delicate laces without injury, as THERE IS NO FRICTION.

YOUR CLOTHES WILL WEAR THREE TIMES AS LONG

Washes a Full Tub of Clothes in Three Minutes—No Severe Exertion Required

It's so easy to operate, a child can do an ordinary family washing and have it ready for the line in one hour.

Sent You Under a Money-Back Guarantee

IT IS THE MOST POPULAR WASHER ON THE AMERICAN CONTINENT
 ITS POPULARITY IS THE REWARD OF MERIT
 SEND FOR ONE TO-DAY AND BLUE MONDAY WILL BE ROBBED OF ITS TERRORS FOREVER

You will never regret it. You will be delighted.

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Present or mail this Coupon and \$1.50 to Dominion Utilities Mfg. Co., Ltd., 487, Main Street, Winnipeg, Man., and you will receive one I. X. L. VACUUM WASHER FREE.

All charges prepaid anywhere in Canada on condition that your money is to be refunded if the Washer does not do all that is claimed. 4-24-13

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PROVINCE



Kitchen Time-Savers

To the busy mother doing her kitchen work "against time" every step taken, every tick of the clock, counts. Says a writer in Successful Farming: Every single minutes saved mount up. Here are a few proved aids:

If the jar of fine bread crumbs is empty, and the bread crumbs are needed in a hurry to complete a loaf of scalded meat, fish, potatoes or other vegetables, don't stop to grate fresh bread or roll crackers, but if there is in the house a box of any flaked "ready to serve" bread, either corn or wheat, crumble the flakes well between the hands before throwing over the scallop, and dot the layer well with butter, exactly as when using crumbs. This is especially delicious with salmon or other fish.

A food cutter with the largest hole plate on is a boon when one is making family salads. Cabbage for cold salad can be put through it, care being taken not to cram in too much at one time, and, while not so crisp as when cut by hand, it is yet very delicious to eat. Small bits of meat, and either green or blanched stalks and tops of celery, if put through the coarse cutter and mixed with salad dressing, seasoning as liked with finely chopped parsley or a little grated onion, and adding chopped pickles or olives, even with sliced hard-boiled eggs to make up a small quantity, will result in a most appetizing and homey dish for lunch on warm days if served on fresh, crisp lettuce.

Equal parts of meat and celery can be used for this "hash salad," and odds and ends thus carefully combined seldom fail to tempt the daintiest of appetites.

Success With Sweet Peas

Mrs. Nicholson, Lincoln Co., Ont.

Having met with some success in the growing of sweet peas, I would like to tell you how our success was obtained. In the first place we secured all the new kinds (that is Spencer's) that we could find both in the United States and England. Some 30 varieties in all were procured, no two alike. As they were not like to lose them, and as there were only 10 to 15 seeds of some kinds, we did not like to expose them. We therefore bought a book on sweet peas.

This is one of the things it taught us — to bury the packets in the ground, and cover them an inch deep for eight or 10 days. This we did, after which they were ready to be planted. We did not dig a trench this time. As the ground was heavily manured, we took out about three inches of earth, and as the seeds were nearly all sprouted, we planted them just where we wanted them to stand. With those that were not sprouted we took a knife and gently cut them. All I do not think that we lost a dozen seeds. Each kind was kept separate and all were labelled. When they were coming through the ground we took ashes from the rubbish pile and sprinkled them well on each side of the plants, so that the grubs would not disturb them.

TRELLISING

When the plants were up an inch or more we began to hill them up. As soon as they began to throw out feelers we began to string them. Every day or two we tied another string. Whoever has been only one or two we have had a big crop. We had a number that had four flowers to a stem. We have cut a bouquet eight or 10 inches across and every one with four flowers on, and such beautiful varieties as during the season.

A couple of days before our fall show we bought cotton sheeting two yards wide that covered the rows. To

stand and look under the covering was a sight too beautiful for description. You will never know what some varieties are like until you shade them from the sun, especially in the oranges, reds and pinks. They are simply gorgeous.

If you are wanting to exhibit them, covering them with cotton will protect them from the wind and rain. One Sunday we had the worst and a real storm of the season. Had we had cheese cloth instead of cotton we would not have won any prizes the following Tuesday, when the show was held. Don't forget that sweet peas like soap suds.

Contentment on the Farm

By Mrs. A. D. C.

If you will come with me to my home, I will show you some labor-saving devices for the housekeeper. One is the breadmaker. I am surprised that so many women will continue to stand at the bread board and knead "the staff of life" for a half-hour every baking day. That time and labor could so easily be saved. The breadmaker does the work in three minutes, and does it well. It mixes and kneads the dough with scientific accuracy, thoroughly and evenly mixing all the ingredients. Then I always have a food chopper. This does away with the drudgery of the chopping bowl. It chops all kinds of food, covers a fine grate, as rapidly as possible. Last spring my husband insisted on my getting a vacuum cleaner. With that the carpets and rugs can be kept free from dust all the time, and the carpets need not be taken up unless you wish to turn them or substitute new ones.

The R. F. D. saves much travel for country people. How would you like to go back to the time when you had to travel miles to mail a letter or get your weekly paper? Now you can have a daily brought to your home six times a week. Then think of the convenience of a telephone. If there is sickness in the home and a doctor is needed in the night, it is not necessary for a horse and wagon to drive through darkness and distance to get medical aid. An M. D. can be summoned quickly, and in his lighted automobile can come speedily, and perhaps save a precious life. Then you can talk with your friends over the phone and save the time spent in calling at their homes. Our phone has been lowered on the wall, so by this a stool 25 inches high I can sit and rest my feet while the doctor's stool is also just right when ironing and doing other kinds of work. Another comfort of country life is a good driving horse and a comfortable carriage for the women folks who wish to take the eggs to town and get some supplies.

Another feature of farm life is the quietude. Think of the long winter evenings at the farm fireside with good literature and music. Think of the shaded lamp, the easy chairs, the red apples and home-made candies. How much better these surroundings for the young people than the questionable amusements of the town! I was in a farm home yesterday when the daughter plays the piano, her brother has a flute and another member of the family does good work on a violin. Then how they can sing! They are devoted to the farm, and at the same time they are developing in body and mind. There is plenty of wholesome, helpful reading in that home. One of the boys was given the privilege of going to the city during the holiday season, but he was not anxious to make the trip. Why? Because he was contented at home.—The Farmer.

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April 24, 1913.

A Saneer House Cleaning

Mrs. W. R. Munro, Prince Edward Co., Ont.

Years ago, when but a child, I overheard some ladies discussing methods of housecleaning. The one lady said, "When I am mistress of my own house there will be no upheaval, no chaos, no hasty meals, etc." Everyone has heard the same remark. This lady would by thought, evolve a system in this department, or housecleaning, whereby one room at a time would be made tidy and clean and all in good time; the whole home would breathe of spring and sunshine. She also advocated this plan, the others said they preferred the all-in-a-heap method, thereby hoping to gain time, never thinking at what a cost.

I often thought of Mrs. D.'s ideas expressed so emphatically against so

much opposition. Later when I became a housekeeper or homemaker, I carried out these ideas, and I had as much time went on, seen so many untidy, nerve-racked women, so many cheerful, chaotic rooms, husbands with resting places, children fed in any style—just when everything else was taking on reawakened life. I disliked all this. Why should housecleaning be a dreaded time? Everything else re- sanded at the first signs of spring, following natural laws in the animal and vegetable kingdom. Then why should God's Masterpiece make such forays of thought? I answer, for days in which to plan, and one day for the rush.

In the great departmental stores there is the annual stock taking, rub- bish sales, cleaning up time, new things already purchased and ready to be sold, and yet we always find the courteous salesmen and salesladies, ready to cater to the wants of the individual customer and to be pleasant to the public. New things in this system in the house, but not follow when the winter garments had to be donned, would have been a splendid opportunity to take stock of the sum- mer surplus clothing, mending or dis- carding as necessary, making a list of needed supplies for next season. Of- ten in January or February these things may be obtained when the white wash and cotton sales are on. Be- siding, curtains, etc. Then we are ready and waiting for an off day. When one comes it may be advantag- eously used in clearing a clothes room of clothing, or furs. Thus, a short time suffices for cleaning, fumigating and packing away those things when the warm days come.

Now for the actual cleaning. Little by little, many small spaces are straightened in perfect order. If stoves are used, have chimneys swept, cleaned, numbered and stored in a dry attic or storeroom where no dampness allows rust to corrode, this room having been cleaned and made ready to receive them. Of course we farmer's wives will before this have had the ham smoked, decayed veg- etables removed from cellars, apples made into jelly or canned, marmalade glasses filled, and so forth. If one has no maid my advice is to go slowly, never mind who is done or nearly

done. Just keep in mind that for you and your house you will be neat, sweet and clean always and over, not just after housecleaning.

DISCARD USELESS ARTICLES

So many women hoard and handle many useless and unbeautiful things year after year. These make extra work and the idea of the up-to-date woman is to conserve her strength by every legitimate means of system or labor-saving device. Burn these too useless things and do not be slow in adopting easier ways just because your mother or grandmother did not do things that way.

We will suppose that one day you prepare as much as possible for the lunch baskets and the meals of the following day. Next morning get up early, make yourself neat and clean in a tub dress, get breakfast over know-

THERE are few people who can cultivate ten talents. The de- velopment and right employment of one is quite as much as most of us can accomplish. And, as a rule, the people who are of the most service to their generation and their highest, are not the brilliantly endowed, but those who put all their efforts, all their energy, all their enthusiasm, into making the most of a single tal- ent.—F. H. S.

ing just what there is to do towards preparing dinner and tea. A wife who do hold forth in your warfare, (not against another's property, or the opposers of the militant suffragette), but just against one of your own particular rooms' winter accumulation of dust; this is woman's right and no man opposes if you do it sanely and methodically.

Once in your room, clean every small thing, each picture, the differ- ent articles of furniture, carrying Pieces to large to move should be cleaned and carried to the outside, not need any fresh decorating, not the woodwork fresh paint, dust and clean paper with slices of bread and reno- vate paint with a woollen cloth. It will new be dinner hour and instead this may not all be done if there are many things to clean, at that time. When the hour comes remove your cap and away to a dinner quickly and appetizingly laid out as all is ready. Wash up dishes and rest for a few minutes at least, an hour if possible.

If you intend to be busy all day val- uous-clean your rug or your carpet, or better yet, go over your floor with a dust mop and wax and polish it. Let your room in all ready for the final polishing of the window glass which you may do now or next day. Of course if you do not keep a maid each piece of furniture in a different place if utility and harmony will al- low of change, for the object to be obtained is a homey, useful beauty that is soul-satisfying and restful. If you have a son or daughter ask his or her aid and advice in the work of decorating, for they like to know it is their home too.

EVEN CALLERS WELCOME

Should a stray caller or a belated traveler drop in during the house- cleaning campaign, you with a neat wash gown and tidy hair, kept so by your dusting cap, may have on your company manners and need not be "not at home," or inhospitable. Do avoid talking of housecleaning always. This talk has been already and will continue. "It is worse than the old woman and her rheumatiz," or the ob- structionists stick-to-it-ive-ness.

Next day get up at another room and so on until all are done. Don't laseech of you, leave the de-ecor-

FARM AND DAIRY

Use



Old Dutch Cleanser

On Hard Things To Clean

MANY USES AND FULL DIRECTIONS ON LARGE BIFTER-CAN 10¢



SEND \$1.00

discovery by mail 4 Shirt Wash, one of White Lawn, 16 oz. tin, and 3 of Print, light, with sky, 4¢; 4 of signals; all different; size 2¢ to 4¢; add 15¢ for postage. STANDARD GARMENT CO., LTD., LONDON, ONT.

When Drugs Fail to Cure Constipation

Thousands of sufferers from Constipation and all its attendant ills, strive along from day to day, vainly endeavoring to shake off their affliction by the use of drugs. In the end they are still sufferers from the drug habit. If only these people could learn for themselves how truly efficient Dr. Charles A. Tyrrell's J. B. L. kind they would shorten their sufferings by many days and soon know again the joy of stalwart, perfect health.

If one of those sufferers who has been personally by the Cascade could speak to you personally he would in the greatest en- thusiasm talk to you as Mr. E. Nigh- wander, of Green River, Ontario, writes: "For years I have been troubled with con- stipation, ulcers in the bowels and piles, seemed to relieve temporarily. The J. B. L. Cascade has completely cured these troubles and I feel it a duty I owe to my fellowmen to endorse the Cascade in the very highest terms. No amount of money could estimate the value it has been to me. No home should be without a Cascade."

Over 300,000 people now use the J. B. L. Cascade. Write Dr. Tyrrell to-day. He will be glad to send you his free book, "Why Man of Today is Only 50 Per Cent. Efficient," and full particulars if you will address him, Charles A. Tyrrell, M.D., Room 671-8, 286 College St., Toronto, Ont.

(21) 519

CONNOR

Ball-Bearing WASHER

HERE is a washer that is fully guar- anteed. A big manufacturing cor- poration stands behind it. And the dealers who sell it are pledged to re- fund the full purchase price if any woman who buys it says she is not completely satisfied. Under these conditions, you run absolutely no risk in trying the Connor Ball-Bearing Washer.

If it doesn't do the washing in half the usual time, if it doesn't wash the clothes spotlessly clean and without injury, you don't need to keep it. That's fair, isn't it? Write for descriptive booklet.



J. H. Connor & Son, Ltd., Ottawa, Ont.

Capable Old Country Domestic

Parties arriving about March 25th and April 7th
MAKE APPLICATIONS AT ONCE TO
The Guild, 77 Drummond St., Montreal and 47 Pembroke St., Toronto

GRAND TRUNK RAILWAY SYSTEM

HOMESEEKERS' EXCURSIONS

To MANITOBA, SASKATCHEWAN AND ALBERTA

each TUESDAY until Oct. 23 inclusive. WINNIPEG AND RETURN ... \$35.00 EDMONTON AND RETURN ... \$45.00 Proportional rate to other points. Return limit two months.

Settlers' Excursions

TO ALBERTA AND SASKATCHEWAN Every TUESDAY until April 27th in- clusive. From stations in Ontario, Port Hope, Peterboro and West, at very low rates. Through coaches and Pullman Tour- ist Sleeping cars are operated to WINNI- PEG without change, leaving Toronto 11.00 p.m., via Chicago and St. Paul on above dates. The Grand Trunk Pacific Railway is the shortest and quickest route between Winnipeg-Saskatoon-Edmonton.

Write Reservations and particulars from Grand Trunk agents.

SHOE POLISH

10¢

The Modern Shine!

Easier to Use Better for the Shoes

It is desirable to mention the name of this publication when writing to advertisers.

"Goes Like Sixty"—"Sells Like Sixty"

GILSON ENGINEERS

For all your purposes. You cannot afford to buy an engine until you have seen the latest improvement in the world. Located in Gilson Engine, which place them far in the lead for free catalogues.

GILSON MFG. CO., 41 York Street, Ganqsh, Ont.

CHALLENGE

to be the most successful Collar made. Ask for one, and you will see, and be satisfied. All orders filled on short notice.

THE ARLINGTON CO., 85 Dundas St. W., Toronto.

All "ARLINGTON COLLARS" are good, but our CHALLENGE BRAND is the best.

We are overstocked with children's print dresses in sizes 2, 3 and 4, and you will send to any address \$5 for \$1 if ordered at once. Add 15c. for postage.

Standard Garment Co., 19 Stratford Bldg., London, Ont.

THIS WASHER MUST PAY FOR ITSELF.

A MAN tried to sell me a horse once. He said it was a fine horse and had nothing but a good temper. I wanted a fine horse, but I didn't know a thing about it. I saw him in the street, and I saw the man very nice and polite.

So I told him I wanted to try the horse for a month. He said "All right, but you must pay for the horse, and I'll be with you all the time." I said "I'll pay for the horse, but I'll be with you all the time." He said "All right, but you must pay for the horse, and I'll be with you all the time." I said "I'll pay for the horse, but I'll be with you all the time."

You see I make Washing Machines—the "3000 Gravity" Washer.

I said to myself, lots of people may think about my Washing Machine as I thought about the horse, and about the man who owned it. But I'd never know, because they wouldn't write and tell me. You see I sell my Washing Machines by mail. I know how to sell them. I know how to sell them. I know how to sell them.

I know it will wash a tub full of very dirty clothes in 15 minutes. I know another machine ever invented can do that, without wearing the clothes. Our "3000 Gravity" Washer does the work easier than a child can run it, and as well as a strong woman, and it doesn't wear the clothes. It's the best I ever saw. It's the best I ever saw.

Let me send you a "3000 Gravity" Washer on a money free trial. I'll pay the freight out of my own pocket, and you won't want the machine after you've used it a month. I'll take it back and pay the freight, too, surely that is fair enough, isn't it?

Doesn't it prove that the "3000 Gravity" Washer must be all that I say? You see, I know you must be all that I say. You see, I know you must be all that I say.

And you can pay me out of what it saves for you. It will save you a great deal of money in wear and tear on the clothes. And then it will save you 75 cents a week, over that the washwoman's wages. I'll let you pay for it until it saves you. I'll let you pay for it until it saves you. I'll let you pay for it until it saves you.

Drop me a line about the "3000 Gravity" Washer. I'll send you a money free trial. I'll send you a money free trial. I'll send you a money free trial.

O. W. MORRIS, Manager, 1900 Washer Co., 37 Yonge St., Toronto, Ont.

of the boys' room till the last, lest you weary and it goes for another year and yet another. And again, do not put the things the girls and yourself get into the boys' room thinking anything is good enough, on the assumption that they are not as observing as girls. Fix up the boys' room for next week, and give voice to your care and thought may not be needed, but happy memory will recall mother's kindness and mother's love.

I find it very convenient to have several pairs of drawers, from laundered or new, ready to replace those in bedrooms and thus a day often sees a room begun and finished. If decorating, papering or painting must be done, speak early for your help and be ready before the rush.

Avoid tearing up much at once and when tired or cross stop and rest, for then O Housecleaner! you are showing more personal need of stock taking and renovating than your home or environment. The atmosphere is just as your barometer shows it and the feeling is so contagious that it infects children, husband and casual visitor alike, until mole hills are mountains and a Friedmann with a housecleaning serum must be called. But like the Yankees, give other work a hand in your home, for you think the work must be done and done by you,—not realizing that you have brought this condition of affairs on yourself by lack of method in your making-to-be-clean. Be systematically clean at all times. Keep ahead of your work. Then there will be no housecleaning as most women go to it, but just the same clean-as-you-go method.

Hints on Selecting Wall Paper

G. B. Griffin.

As spring approaches housecleaning and wall papering must be considered. Although selection of wall paper is largely a matter of personal taste, many owners of homes make mistakes, for there are certain rules which should not be overlooked. Ordinarily not enough attention is given to the selection of wall paper. The whole family should have a word on this important subject and a final vote taken on the best four or five that have been sifted down from a possible 15 patterns.

Wall paper of a novel gaudy type will spoil the effect of the furniture and should be avoided. Large figured paper should not be used in low rooms nor should small rooms have bold borders or ornate friezes. Plain colors and stripes tend to make a room look higher. Rooms occupied by an invalid should be papered with plain neutral colors. If a figured carpet pattern will set a sick person almost frantic if they have to look at it every day. Dark red tends to absorb light and therefore should not be used in dark rooms. Yellow, cream and other light colors are very cheerful for such rooms. Very substantial colors should be used in sunny rooms. Light blues and pinks make attractive and artistic rooms, but fade easily that they are very expensive. A plain background is to be desired where pictures are to be hung.

Many people foolishly select fine grades of delicate tinted paper which is very expensive and of short duration. As in everything, styles in wall paper are merely matters of business. One can usually purchase paper of a year old, less at a great reduction in price, and if such is displayed in its selection, results will be just as satisfactory as if the latest patterns were chosen.

For a young people paper a whole floor in one color. This is very good taste. It gives an effect of unity and harmony so much desired in producing an artistic and restful effect.—Successful Farming.

SPECIAL PATTERN SERVICE

We realize the great interest that all of our readers take in the new spring styles, and have arranged whereby they will be able to get many more patterns in Farm and Dairy than usual. We will be able to give many more patterns in Farm and Dairy than usual. We will be able to give many more patterns in Farm and Dairy than usual.

BOYS' NORFOLK BLOUSE SUIT, 778

Boys are sure to like this blouse suit. It is a Norfolk style, with the straight, loose trousers are pleasing for warm weather wear. The blouse, too, can be used separately or it can be made of washable material while the trousers are of serge.

For the 2 year size will be needed 47 yards of material, 47 inches wide, 5 1/2 yards 44, with 4 yards 44, with 4 yards 44, with 6 yards of braid.

The pattern is cut in sizes for boys 8, 10 and 12 years of age.

BOYS' PLAITED BLOUSE SUIT, 779

The fancy blouse that is closed at the front, which makes an important feature, is of the Norfolk style. This one is eminent in style and so simple that various alterations can be made without any difficulty. The sleeves are cut in one piece with the collar portions, and these side portions are bound to the center portions beneath the collar. The overlapping edges of the sleeves are pretty and the under sleeve is arranged under the sleeve proper and stitched into place, and the chemise is separate and closed at the back.

This pattern is cut in size 34, 36, 38 and 42 inch bust measure.

FIVE-GORED SKIRT, 778

The five-gored skirt is always a good one. It takes pretty lines and it is altogether satisfactory. This one is quite novel for the season. It has a plain panel back while the fronts are plapped over a V-shaped skirt. The latter, if will do any easy to see, could be used for the same or for a contrasting material. The finish can be either at the high or the natural waist.

For the medium size will be needed 4 1/2 yards of material, 27 inches wide, 4 1/2 yards 36, or 3 1/2 yards 44. The width at the lower edge is 2 yards.

This pattern is cut in sizes for 22, 24, 26, 28 and 32 inch waist measure.

TRUCKED HOODS FOR MISSES AND SMALL WOMEN, 780

Nothing is prettier for the home wear than the trucked lingerie blouse. This one is exceptionally dainty, for it is embroidered with the truck in the center. In place of being treated just as illustrated, the neck can be cut out to form a square and the sleeves cut off at the elbows. For a plain blouse, the embroidery can be omitted.

For the 16 year size will be needed 47 yards of material, 27 inches wide, 4 1/2 yards 36, or 3 1/2 yards 44, with 5 yards of banding.

This pattern is cut in size for misses 14, 16 and 18 years of age.

GIRL'S DRESS, 782

Girls are wearing dresses that show down the front this season, as well as their dresses, and this one is both pretty and practical. In one view the dress is shown with the truck in the center. In another view it is shown with the truck in the center. In another view it is shown with the truck in the center.

Girls are wearing dresses that show down the front this season, as well as their dresses, and this one is both pretty and practical. In one view the dress is shown with the truck in the center. In another view it is shown with the truck in the center. In another view it is shown with the truck in the center.

COSET COVER WITH STRAIGHT UPPER EDGE, 781

The garment that can be quickly and easily made and is of great use to every woman who makes her own clothes. The cover shown in the illustration is just such a design. There are only underarm seams and the finishing is made at the center front by means of a button-hole and button-hole.

For the medium size will require 1 1/2 yards of material, 36 or 42 inches wide.

This pattern is cut in sizes for a 34, 36, 38 and 42 inch bust measure.

EMPIRE NIGHT GOWN FOR MISSES AND SMALL WOMEN, 682

Every dainty girl likes pretty lingerie. This night gown is sure to appeal to them. The gown consists of front and back portions and little sleeves that are finished with bands or left loose. The front includes tucks at the shoulder that provide fullness, while the back is plain. The gown can be drawn up at the top by means of banding and ribbon or it can be left loose. The neck is cut over square outline. The gown is slipped over the head so that there are no buttons and button-holes to give. The edges of the neck and sleeves will be scalloped and button-holed as you would like, some further bit of handwork could be embroidered on the front of the gown.

This pattern is cut in size for girls 8, 10, 12 and 14 years of age.

Which Stillie?

A difference of 85 gets the right kind of stillie in the country where...

shoulders. Bathing night with water, has been killed, is for toughening the skin.

I often find the work blood becomes thick in the spring. I prefer sulphur as a food giving a tonic and sulphate of iron. Impurities of the skin matters are proved. When however, I find sulphur with dry flaking of moon scales over.

If a horse develops the shoulder, I fit a collar and cut a sore around the pressure on the tendons.

Labors' Standard

Editor, Farm and Dairy of April 10, 1913.

rs. Mr. George Robinson, I am perceptive of the cleaning device the saving contrivance I have seen the machine.

How to Treat Sore Shoulders

H. C. Blair, Pictou Co., N. S.

The rush season is now here. Our work horses are being put to heavy work and mine, at least have had a long period of rest. The colts that have been trained during the winter have now to bear their share of the farm work. Extra attention must be given by the teamster for the next few weeks to the condition of the horse's shoulders.

First of all, I see that the collar fits properly. I prefer a cloth-faced collar to one that is leather-faced, especially in hot weather. I consider it unnecessary to fill a collar with sweat pads. I plan to use collars that fit and then sweat pads are not needed.

My horses, although in good condition, will be "soft" and shedding their hair. They will perspire freely and the collars will get hard with dirt and hair. I clean them frequently. I remove the harness at noon and brush off the grime collected on the horses'

paid particular attention to its value. Think of a man cleaning out for four or five horses, 40 head of cattle, about a dozen hogs, and have it loaded in the manure spreader in four minutes, while the operator may stand with his white collar on! This is what Mr. Robinson can do!

It would be well for anyone who contemplates building to consider the value of this device. It is run by a small two horse-power gasoline engine, but a horse could be utilized to do the work with as good results. The apparatus is very simple and does the work better than anyone could with shovel and brush.

I consider the "Farm and Dairy" a very good paper. I am myself a breeder of pure bred Holsteins.—A Lanark County Farmer.

Alfalfa in Lanark

"I know from experience that alfalfa can be successfully grown in our county," remarked Mr. J. C. Glenn, of Lanark Co., Ont., recently when



Which Stallion in Your Neighborhood Are You Going To Patronize?

A difference of \$5 or even \$10 in the service fee is neither here nor there if we get the right kind of a sire for next season's crop of colts. How does the pure-bred in the country were often illustrated strike you? There would be more of this kind if owned by W. H. Mannil, Kent Co., Ont.

shoulders. Bathing the shoulders at night with water, in which oak bark has been boiled, is the best treatment for toughening the skin of which I speak.

SPRING TOXICS
I often find that after having a lay-off during the winter, the horse's blood becomes thick and when put to work in the spring, the skin erupts in pimples and boils. Many farmers feed sulphur as a preventative, but I prefer giving a tonic of nux vomica and sulphate of iron. I believe that sulphur has a tendency to expel the impurities of the blood through the skin and matters are not greatly improved. When boils do break out, however, I find sulphur a good remedy. After the boil breaks I fill it with dry flowers of sulphur and it soon scales over.

If a horse develops an open sore on the shoulder, I fit a sweat pad under the collar and cut a hole in it where the sore touches. This relieves the pressure on the tender spot.

Laborless Stable Cleaning

Editor, Farm and Dairy.—In Farm and Dairy of April 10 I saw an article by Mr. George Robinson's stable cleaner. I am personally acquainted with Mr. Robinson. I consider his cleaning device the greatest labor-saving contrivance I have yet seen. I have seen the machine in action and

discussing the value of this crop with an editor of Farm and Dairy. "Two years ago I seeded my first field of alfalfa,—one and a half acres, that first field on June 25, using a nurse crop of oats at the rate of one bushel to the acre. I sowed the oats first and ran the harrow after the hand and harrowed again. This looks like going to a lot of trouble, but as it was my first attempt I wanted to make sure of getting the seed all covered.

"Last year I got three cuttings from that small field, which aggregated nine tons.

"I have a lot of low-lying land on my farm," continued Mr. Glenn.

"But I sowed the alfalfa on the high ground, or on my heavy clay soil, that there should be exercised in pasturing alfalfa.

"If pastured too close in the fall, the crowns split during the winter, as the heavy soil heaves more readily than does a light soil."

"Have your neighbors attempted to grow alfalfa?"

"Yes, they have. Although alfalfa is not very extensively grown in Lanark county, I know of several good plots in my neighborhood. This year I am going to sow more of it."

"Don't work that colt too hard just now. Go easy."

CANADIAN NATIONAL HORSE SHOW

**TORONTO ARMORIES
April 29th to May 3rd**

Alexander Miln, 701 Traders Bank Bldg., Toronto
REDUCED RAILWAY RATES

**IMPORTANT AYRSHIRE DISPERSION
The Opportunity of a Life-Time
For Westerners**



to secure pure-bred Ayrshire stock, acclimated, and many of them qualified in the R. O. P. test.

No Need to Buy in the East

Because these cattle have the size, vigor and constitution which can only be obtained in Western Canada.

70 HEAD 70

Will be sold by public auction at Red Deer, Alta., toward the end of May. On account of extensive building operations the undersigned is obliged to dispose of his entire herd without reserve.

Herd headed by Barbecoche the Kingway. Write for catalogue.
A. H. TRIMBLE & SON
RED DEER ALBERTA

**Where Else
Can You Have
This Privilege ?**

In my stable you can see the Dam, Grand-dam, Sire and Sire's Dam of a Bull Calf I now offer for sale.

You know how important it is to see the dam of a bull you buy. You know how desirable it is to see as many of the near ancestors as possible.

Here Is Your Opportunity

One bull calf I now offer for sale (at a very low price, quality and breeding considered) is out of Marceota of Campbelltown, 23.57 lb. butter and lots of them right on her udder just like you want—big veins another just such a cow as you would want, perfect shaped udder—a show cow in fact all through—and recently made 22.54 lbs. butter in 7 days.

There is a lot more of good breeding back of this calf. Come and see him and I'll tell you all about it. His sire is my own great Prince Henry the greatest bull in the world, King of the Pontiacs,—he a son of Pontiac Korodyko, and you would pay any price to get his stock.

You know my bull now has more to his credit. He is brother to the new D13s-butter-in-7 days cow.

I price this calf at only \$150. Come quick for him or some one else will have this great buy.

I offer another Bull Calf out of Queenie L, a 5.23, butter fat cow, 26.76 lbs. butter in 7 days. Sired by same great bull as above. Priced also at only \$150.

GORDON S. GOODERHAM
The Manor Farm - Bedford Park, Ont.

MARKET REVIEW AND FORECAST

Toronto, Monday, April 22.—Warmer weather, and consequently better roads, has had its effect in improving the retail trade of the country. The usual spring revival is becoming more noticeable in trade generally although the total of that of last year.

And how about the season to come? Cattle are coming out of the stables in first-class condition. There is abundance of moisture in the soil, and with favourable weather conditions prospects look good for abundant crops. Even winter wheat is looking well, although it had practically no covering last winter. Dairy farmers are not particularly well satisfied with the outlook for cheese prices, and although the cheese season has already started in some sections, factories with both cheese and butter making facilities are manufacturing butter only, as prices for that product continue high.

There have been few changes of note in the Farmers Market. Live stock continues at high levels, although trade was somewhat slower towards the close of last

week. In grain there is a very little movement. Farmers are too busy on their of last year's crop still on their hands.

WHEAT

There is a steady, firm tone to the wheat market, and although it is estimated that the West, a good part of this is already sold. Interest is already beginning to centre on wheat proposals for this season. Some seeding has been done, but seeding generally will be a week to 10 days late. Quotations are as follow: No. 1 Northern, 97½¢; No. 2, 96½¢; No. 3, 92½¢; foot wheat, 65¢; Ontario No. 2, 94¢ to 86¢, down to 78¢.

COARSE GRAINS

The market for coarse grains is dull, farmers to leave the land. Corn is a trifle higher; otherwise quotations are the same as noted last week: O. W. No. 2, 43¢; No. 3, 40¢; No. 1 feed, 40¢; Ontario buckwheat, 53¢ to 55¢; rye, 53¢ to 60¢;

matting barley, 55¢ to 55¢; corn, 63¢ to 66¢; peas, \$1 to \$1.05.
 Montreal quotations are: Oats, C. W. No. 2, 42½¢ to 43¢; extra No. 1, 43¢ to 41½¢; corn, 64¢ to 65½¢; barley, matting, 71¢ to 74¢; feed, 51¢ to 52¢; peas, \$1.30 to \$1.35 and buckwheat, 57¢ to 58¢.

MILL FEEDS

Quotations on mill feeds are as follows: Manitoba bran, \$19; shorts, \$21 to \$21.50; Ontario bran, \$20; shorts, \$21.50. At Montreal bran is quoted at \$12.50 to \$13; shorts, \$22 and middlings, \$34 to \$35.

HAY AND STRAW

Little hay is moving but there is enough on hand to meet all demands: No. 1 baled hay, delivered here, \$12 to \$12.50; No. 2, \$9 to \$10; No. 3, \$8 to \$9; baled market for high grade hay, in a strong country districts make deliveries light. There is no demand for the lower grades. We quote: No. 1, \$14 to \$14.50; No. 2, \$10 to \$11.50; No. 3, \$9 to \$9.50.

SEEDS

Merchants are selling to farmers per cent as follows: Red clover, No. 1, \$25 to \$25.50; No. 2, \$23; alfalfa, No. 1, \$19.50 to \$20; No. 2, \$18.50; timothy, No. 1, \$17.50 to \$18; No. 2, \$6 to \$6.50.
 Eggs have dropped a trifle, but as cold storage men have already started to buy

up the surplus receipts for storage purposes, any reductions from now on will come very gradually. Wholesale dealers quote new laid eggs at 30¢ to 21¢, delivered here. Prices for all country produce around the city. Quotations at Montreal are similar.

Let us again call attention to the desirability of marketing old fowl at the season of the year. Prices are much higher now than they will be at any other time. We quote as follows: Fresh killed chickens, 15¢ to 21¢; fowl, 16¢ to 18¢; live chickens, 15¢ to 16¢; live fowl, 14¢ to 15¢ and dressed turkeys, 20¢ to 25¢.

POTATOES AND BEANS

A review of the potato market for the last five months brings out very clearly the fact that prices are no longer controlled by local conditions. Last season the Ontario crop was hardly up to average and a large percentage of the crop was spoiled through rotting. Prices, however, have not been high. This is due to the large crops that were harvested in the Maritime provinces. On the local market to-day New Brunswick potatoes bring 80¢ in car lots and 90¢ out of storage. Ontario potatoes are 70¢ to 75¢. At Montreal are available, Green Mountains, selling at 62¢ to 67½¢ a bag and Quebec varieties at 60¢.

(Continued on page 7)

April 24

Advertisement for farm and dairy products, including 'Breaders' and 'Send items'.

RECORD OF

The following Arrivals and Sales since my last

Evergreen 1
 Wells, Sardin, 1
 The fat, 372 lbs.
 Belle of Wells
 & Son, Ryckman
 milk, 51.96 lbs.
 days
 Wells, 10.25 lbs.
 cent fat in 565
 Kate Laurivier,
 Wells, Ont., 10,
 fat 4.82 per cent
 Heather Bell
 Kay, Phillipsburg,
 9.19 1/2 lbs. milk
 Little Jenn,
 9.19 1/2 lbs. milk
 cent fat in 547
 Snowdrift of
 Stansell, Tillson
 milk, 394 lbs. 3
 days.
 Four
 0ddies—2700 lbs.
 Oct. 10, 00 1/2 lbs.
 Per cent fat in
 Dentonia's Art
 Wells, 9.96 1/2 lbs.
 per cent fat in
 Harborside Jun
 Tillsonburg, Ont.
 fat, 4.79 per cent
 Crops of Lake
 gomery, Phillips
 15.58 lbs. fat, 4.7
 Harborside Lake
 Kay, Phillipsburg,
 337.62 lbs. fat, 4.3
 Three
 Springhill, WI
 A. Wells, 25.92
 4.45 per cent fat
 Violet of Hillvi
 Clappison, Ont., 7
 fat, 4.12 per cent
 Silver Maid of
 Wells, Sardin, R.
 lbs. fat, 4.52 per
 Two—
 Flossie of Can
 Pitt, Gardigan, P
 366.2 lbs. fat, 3.35
 Ardree Johnson
 Ipsburg, Que., 74
 fat, 4.52 per cent
 Lemnosack Im
 Inch, Que., 726.5
 4.37 per cent fat
 Adelia 61h—500
 the butter, 25.15
 in 346 days.

EAT YOUR MEAT AS A STEAK

GENERAL PURPOSE STEEL SECTION HARROW 595

YOUR CHOICE OF THESE PLOWS

FREIGHT PAID IN ONTARIO



Our No. 10 Plow is one of the most popular general purpose plows on the market to-day, and is guaranteed in construction and material. The mould board is made from best grade cast steel, and is especially hardened and polished wire. The handles are of selected steel, well braced and adjusted. Complete with knife coulter, extra point and wrench.

- 70-330. Price, DELIVERED TO YOUR STATION IN ONTARIO 10.90
- 70-330. Price, DELIVERED IN QUEBEC OR MARITIME PROVINCES 11.25
- Our No. 3 Farm Plow is specially built for clay or stony land, but can be used for any soil. Beam is of high grade carbon channel steel. Points are well tempered and strong. Mould board best crucible cast-steel. Handles of best selected timber.
- 70-331. Price, DELIVERED TO YOUR STATION IN ONTARIO 10.90
- 70-331. Price, DELIVERED IN QUEBEC OR MARITIME PROVINCES 11.25

Freight Paid in Ontario

DON'T MISS THIS BIG OFFER

The frame is all steel, teeth are inserted in channel steel bars, firmly bolted on top, 20 teeth to a section. A strong harrow for general use, thoroughly tested, complete with drag bar. Guaranteed in every respect, and a big money saver.

70-332. Price, two sections, as shown above, DELIVERED IN ONTARIO 9.50

70-333. Three sections, as shown above, DELIVERED IN ONTARIO 12.50

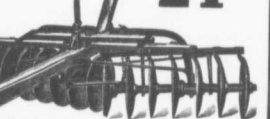
70-332. Price, two sections, as shown above, DELIVERED IN QUEBEC OR MARITIME PROVINCES 6.45

70-333. Three sections, DELIVERED IN QUEBEC OR MARITIME PROVINCES 9.95

70-334. Four sections, DELIVERED IN QUEBEC OR MARITIME PROVINCES 13.40

14-DISC HARROW 24.75

FREIGHT PAID IN ONTARIO



This Harrow is made of the best materials, and embodies all the latest improvements. The harrows are steel throughout, with ball and roller bearings. The scrapers work freely, and clean the discs properly. The patent disc cleaner, scraping levers. The hitch is well back, thus leaving little weight on the horse's necks.

- 70-336. 14 discs, 16-inch diameter, weight 425 lbs. Price, DELIVERED IN QUEBEC OR MARITIME PROVINCES 25.90
- 70-337. 12 discs, 16-inch diameter, DELIVERED IN ONTARIO 24.75
- 70-336. 14 discs, 16-inch diameter, weight 425 lbs. Price, DELIVERED IN QUEBEC OR MARITIME PROVINCES 25.90
- 70-337. 12 discs, 16-inch diameter, weight 400 lbs. Price, DELIVERED IN QUEBEC OR MARITIME PROVINCES 23.25

SATISFACTION OR YOUR MONEY REFUNDED

BINDER TWINE

MANILLA AND SISAL AVERAGING 550 FEET TO THE LB. PRICE, Per 100 Lbs. DELIVERED IN ONTARIO 1.00

PURE MANILLA AVERAGING 650 FEET TO THE LB. PRICE, Per 100 Lbs. DELIVERED IN ONTARIO 1.60

FOR DELIVERY IN QUEBEC OR MARITIME PROVINCES ADD 20¢ PER 100 LBS. TO ABOVE PRICES

CULTIVATOR AND DRILL 10.85



This machine is acknowledged to be the best of its kind on the market and has given satisfaction everywhere. For sowing sugar beets, parsnips, radishes, carrots, onions and other seeds it is unequalled. Output consists of drill complete, one cultivator frame, one pair bow, one pair small rollers, one set cultivator teeth and improved mould drill, fitted with automatic force feed, driven from rear wheel.

70-341. Price, DELIVERED IN ONTARIO 10.85

70-341. Price, DELIVERED IN QUEBEC OR MARITIME PROVINCES 10.85

PROMPT SATISFACTORY DELIVERY

THE T. EATON CO LIMITED TORONTO CANADA

AYRSHIRE NEWS

Farm and Dairy is the recognized exponent of the Dairy Interests of Canada. Breeders of Ayrshire Cattle and other members of the Canadian Ayrshire Breeders' Association are invited to send items of interest to Ayrshire breeders for publication in this column.

RECORD OF PERFORMANCE TEST TO DATE

The following are the records made by Ayrshire cows and heifers in R. O. P. Test since my last report:

Mature Class

Evergreen Marie—2777—Edwin A. Wells, Sardin, B.C., 13,012.75 lbs. milk, 494.50 lbs. fat, 372 per cent fat in 365 days.
 Belle of Wellington—1336—A. S. Turner & Son, Ryckman's Corners, Ont., 12,832 lbs. milk, 511.65 lbs. fat, 4.04 per cent fat in 346 days.

Little Queen of B. C.—2963—Edwin A. Wells, 10,235 lbs. milk, 394 lbs. fat, 3.68 per cent fat in 365 days.
 Kate Lauri—3586—Laurie Brown, Malvern, Ont., 10,209.15 lbs. milk, 396.73 lbs. fat, 3.93 per cent fat in 353 days.

Heather Bell of Glenora—1863—W. F. Kay, Phillipsburg, Que., 9,587 lbs. milk, 425.59 lbs. fat, 4.43 per cent fat in 362 days.
 Little Jean of Hickory Hill—3333—N. S. Brown, R. R. No. 2, Hamilton, Ont., 9,159.8 lbs. milk, 328.66 lbs. fat, 3.54 per cent fat in 347 days.

Snowdrop of Montic Bell—1775—J. L. Stansell, Tillsonburg, Ont., 9,032.25 lbs. milk, 394.4 lbs. fat, 4.36 per cent fat in 366 days.

Four-Year-Old Class

Oddity—2709—Woodliss Bros., Rothsay, Ont., 10,015 lbs. milk, 464.4 lbs. fat, 4.16 per cent fat in 365 days.
 Dentonia's Argyle 3rd—1246—Edwin A. Wells, 9,996.5 lbs. milk, 376.0 lbs. fat, 3.76 per cent fat in 369 days.

Barboscie Juniper—2704—J. L. Stansell, Tillsonburg, Ont., 8,471.5 lbs. milk, 405 lbs. fat, 4.79 per cent fat in 343 days.
 Clove of Lakeside—561—Geo. H. Montgomery, Phillipsburg, Que., 8,367 lbs. milk, 376.90 lbs. fat, 4.51 per cent fat in 360 days.

Barboscie Lady Margaret—2990—W. F. Kay, Phillipsburg, Que., 7,823.4 lbs. milk, 337.62 lbs. fat, 4.31 per cent fat in 369 days.

Three-Year-Old Class

Springhill White Bear—2825—Edwin A. Wells, 12,502.25 lbs. milk, 509.73 lbs. fat, 4.05 per cent fat in 364 days.
 Violet of Hillview 2nd—2688—N. Drayton, Clapton, Ont., 10,226 lbs. milk, 421.94 lbs. fat, 4.12 per cent fat in 365 days.

Silver Maid of Eden—2687—Edwin A. Wells, Sardin, B. C., 9,832.75 lbs. milk, 369.33 lbs. fat, 3.66 per cent fat in 353 days.

Two-Year-Old Class

Floesie of Cardigan—2962—Roy W. Bullpitt, Cardigan, P. E. I., 9,132.25 lbs. butter, 366.2 lbs. fat, 3.35 per cent fat in 365 days.
 Ardrue Pohnona—3656—W. F. Kay, Phillipsburg, Que., 7,673 lbs. milk, 300.79 lbs. butter, 3.98 per cent fat in 356 days.

Lesmonock Ina—3321—R. H. Ness, Howick, Que., 7,266.5 lbs. butter, 348.40 lbs. fat, 4.77 per cent fat in 362 days.
 Adalia 6th—30463—R. H. Ness, 7,119.75 lbs. butter, 353.15 lbs. fat, 3.85 per cent fat in 346 days.

One Million Dollars for Metal Roofs



THE farmers of Canada paid us over ONE MILLION DOLLARS for our roofings during the past twelve months.

They paid us that money because they know that we give them just what we advertise.

We make no claims about our roofing which we cannot back up. What is more, there is no roofing company which can give better service than we can.

We stand behind all our materials to see that they give the best satisfaction. Our fair dealings are the guarantee which every purchaser knows will back up our goods.

Let us send you our booklets describing our roofings. Fill out the coupon below to-day and the booklets will go to you immediately.

The Metal Shingle & Siding Co., Limited

ASSOCIATED WITH
THE A. B. ORMSBY CO., LIMITED

MONTREAL SASKATON TORONTO CALGARY PRESTON EDMONTON WINNIPEG

Address nearest office

USE THE COUPON

Send me your FREE booklets "Better Buildings" and "The Ideal Barn."

Name.....

Post Office.....

Name of Paper — Farm and Dairy

In-Foal Mares INSURANCE

OF ALL the losses owners are liable to, none can be less prevented or modified in any manner whatsoever than loss by foaling. Notwithstanding the best care and attention, although a mare may have foaled many times successfully, she is always a cause of worry and anxiety to the owner through the fear of **losing by death** of the often very high cash value of the **foals**, not to mention service fee, care and expenses incurred for no avail. **Why the risk such loss when a payment of a few dollars in premiums would cover you should it happen.** Reduce the amount of the **RISK** by insuring, only risking thereby the **loss of the Premium** if the mare foals alright. We issue 30 days, 6 months and 12 months policies with or without cover on foal.

Write for address of nearest agent. All kinds of live stock insurance transacted. Head Office: **THE GENERAL ANIMALS INSURANCE CO. OF CANADA, 71a St. James St., Montreal, Que.**

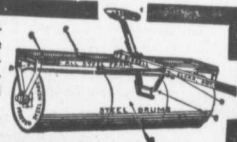
"Bissell" is a 3-drum roller

3 DRUMS make the best Land Roller. It is easy to understand how the "Bissell" Roller with 3 drums and supported by 6 heads is a **STRONGER IMPLEMENT** than any 2 drum Roller on the market. With 3 drums the centre bearing is not needed. When the "Bissell" Roller is at work, the axle turns with the drums.

It costs more to manufacture the 3 drum Roller than the 2 drum, but you pay no more for the "Bissell" 3 drum and get **BETTER VALUE FOR YOUR MONEY.** You get heavier weight in the "Bissell" drums too.

The good points cannot all be told here. Ask your dealer about the "Bissell" Roller and do not be put off

with a Roller unless the name "Bissell" is plainly stencilled thereon.



Grass Seed or Attachment furnished if required. Write Dept. for free catalogue.

T. E. BISSELL CO., LIMITED, ELORA, ONT.

MARKET REVIEW AND FORECAST

(Continued from page 2)

BEANS ARE QUOTED AT \$2.40 TO \$3.50 FOR HAND PICKS AT MONTREAL

Beans here are quoted at \$2.40 to \$3.50 for hand picks at Montreal. Three-pound pickers are worth \$1.75 to \$2.00.

DAILY PRODUCE

Dairymen here are expected to adapt themselves to market conditions. Cheese and butter prices are steady.

LIVE STOCK

Live stock quotations have on the whole been steadier this last week than in the week previous.

The general interests of the Ayrshire breed of cattle by encouraging the entry of cow and bull holders...

MORE LIBERAL TREATMENT FOR EXHIBITION

The Executive of the Canadian National Exhibition has recently secured a letter from Mr. W. G. Ellis, of Toronto...

Table with 2 columns: Breed and Price. Includes Holstein, Ayrshire, Jersey, Guernsey, and Shorthorn prices.

Table with 2 columns: Breed and Registrations. Lists registrations for various breeds like Ayrshire and Jersey.

Note—Holstein registrations closed for Short horns by 421, and also of all the rest...

Table with 2 columns: Breed and Price. Lists prices for various breeds including Holstein and Jersey.

Note—Holstein registrations closed for Short horns by \$4,564.46 and exceed all the rest combined...

Table with 2 columns: Breed and Price. Lists prices for various breeds like Holstein and Jersey.

In this we have not figure to cover all Holstein balance on hand \$14,843.53

AYRSHIRES HOLSTEINS

Burnbrae Ayrshires

Offer one 16-month-old Bull, for service His dam R. O. P. 874-old record, 5,600 lbs.

LYNDEN HERD

High Testing HOLSTEINS For Sale Bull, 814 for service, out of a son of Roodley Lady De Kol, 7738, and 3rd rank...

Lyndale Holsteins

We are now offering Bull Calves from 1 month to 7 months old. All are from official record dam and sired by some of the greatest bulls in Canada.

Brown Bros., Lvn. Ont.

RIVERVIEW HERD

9 Young Bulls, from 1 to 24 months sired by King Isabella Walker, whose sister, 5 nearest officially tested dams, a sister of his dam, and two sisters of his sire average for the eight 20.54 lbs.

Two Holstein Bulls

Fifteen months old, one from a twenty-one-pound cow Good individual.

North Star Holsteins

Bull ready for service, out of R. O. M. dam, sired by a son of Nately De Kol his dam, record of 9,242 lbs. in 7 days, 10,633 record in 30 days and nearly 90 lbs. in 70 days eight months after calving—largest record in Canada.

BULL CALF FOR SALE

Sired by INKA SYLVIA BEETS POSCH Bull calf ready for service, out of R. O. M. dam, record of 9,242 lbs. in 7 days, 10,633 record in 30 days and nearly 90 lbs. in 70 days eight months after calving—largest record in Canada.

AYRSHIRE CATTLE AND YOKESHIRE PIGS

At for service, Yorkshire Calves and Bulls, for sale, or if registered, \$6.00. All of our Canadian blood.

Burnside Ayrshires

Winners in the show ring and dairy cows. Animals of both sexes. Imported or Canadian blood.

TANGLEWYD Ayrshires

3 YOUNG BULLS (Sept. and Oct. 1912) sired by Sept. 1510, H. H. Brae, 2074 R. O. P. of dam a 5-year-old, Alfalfa, age test 4217 lbs. milk, 454.9 lbs. fat, average test 4217 lbs. milk, 300.19 lbs. fat, average test 470 lbs. milk, 389.94 lbs. fat, average test 422.

AYRSHIRE BULLS

Two calves ready for sale, from R. O. P. dams. Sired by a son of Queen's Messenger and Calves of Marie, qualifying with 2738 lbs. milk, 156 lbs. fat, average test 4217 lbs. milk, 300.19 lbs. fat, average test 470 lbs. milk, 389.94 lbs. fat, average test 422.

Ravensdale Stock Farm

Special offering of Bulls, at for service Write for breeding and prices.

MAXWELLTON FARM

Has some of the BEST JERSEY CATTLE in the land. Also BERKSHIRE PIGS. Make your waste known to the Manager.

Clydesdale Fills and Stallions

We have a choice selection, prize-winners, and stock of approved Yorkshire and other conformation and the best pedigree breeding. Write for details and prices.

Breeder's Directory

The Fender's Corner is for the use of our subscribers. Any insertion for us is invited to send questions, or questions will receive prompt answers.

YORKSHIRE PIGS, all sows, also choice Young Boars, at for service.

FOR SALE—2 Some of King Faye's Big Girls, from R. O. P. dams.

FOR TANTWORTH SWINE—Write John W. Todd, Corning, N. Y., or E. F. D. No. 1.

0133 Lils, equal to
0134, 1913.
1913, April 24, 1913
0135 Lils, equal to
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How to Run an Auto

FREE FOR EXAMINATION

Are you interested in automobiles? If so, let us send you a copy of "How to Run an Auto," a 152 page illustrated manual.

AUDELS ANSWERS ON AUTOMOBILES

It is possible to get the greatest efficiency out of your car until you know every point in running, caring for and maintaining it.

CARE RUNNING AND REPAIR

For 1913, we have prepared a book of 152 pages, containing answers to all the questions you are likely to ask.

Price \$1.50

Cut out and fill in your name and address plainly at the bottom, place it in an envelope and address it to "AUDELS ANSWERS ON AUTOMOBILES."

RURAL PUBLISHERS, Peterboro, Ont.

Kindly mail your order of Automobiles, and if found satisfactory, I will immediately remit you \$1.50, or return the book to you.

NAME _____

ADDRESS _____

HOLSTEINS

HOLSTEINS FOR SALE

INKERMAN DAIRY FARM Offers 10 HEIFERS, raising 1 yr. old...

FERNDALE STOCK FARM 2 Good, Kortholm Bulls left, also 1923 Calves, which will complete last lot...

LAKEVIEW HOLSTEINS

We are now testing some of the daughters of King Hengervold Payne De Kol, and they are running from 1925 lbs. with first calf to 20 lbs. with second calf.

Elmdale Dairy Holsteins

FOR SALE—Two choice Bull Calves, light colored, sired by Paladin Ormsby, sire of 30 C. M. daughters...

GRACELAND HOLSTEINS If the experience was as profound with me as the quantity of the cattle I have, I would compete with the best.

FOR QUICK SALE Two Registered Holstein-Friesian bull calves, 1 month old, from richly bred cows...

CAMPBELLTOWN HOLSTEINS A few sons of Kortholm Veerman Pontiac sire. Also a number of Cows and Heifers bred to him.

LYNN RIVER STOCK FARM

Offers for sale choice Holstein Cows and Heifers at reasonable prices. Address: R. J. Kelly, Cobourg, Ont.

J. ALEX WALLACE SIMCOE, ONT.

Avondale Stock Farm

HERD SIRE Prince Hengervold Payne De Kol, 238 (35,287), Sire, Pisto 2nd Woodcroft Lad, Dam, Princess Hengervold De Kol, 238 (35,287).

Senior Four-Year-Old Class

1. Maudie De Kol, 1924, at 4 yr. 10m. 241 lbs. fat 13.7 lbs. equal to 15.6 lbs. butter.

Junior Four-Year-Old Class

1. Minnie Pontiac, 1924, at 4 yr. 10m. 210 lbs. fat 13.2 lbs. equal to 14.8 lbs. butter.

Senior Three-Year-Old Class

1. Oakdale Elsie Johanna, 1927, at 3 yr. 6m. 242 lbs. fat 13.2 lbs. equal to 14.8 lbs. butter.

their right to receive a prize list as liberal as that offered to the Shorthorns. We would therefore respectfully request of you an early answer...

HOLSTEIN OFFICIAL RECORDS FROM 1912 TO 1911

For the last half of 1912, 51 official tests were received and accepted for publication in the Record of merit.

Mature Class

1. Angie DeKol, 1922, at 6 yr. 9m. 254 lbs. fat 21.3 lbs. equal to 27.4 lbs. butter.

Junior Four-Year-Old Class

1. Minnie Pontiac, 1924, at 4 yr. 10m. 210 lbs. fat 13.2 lbs. equal to 14.8 lbs. butter.

Senior Three-Year-Old Class

1. Oakdale Elsie Johanna, 1927, at 3 yr. 6m. 242 lbs. fat 13.2 lbs. equal to 14.8 lbs. butter.

Senior Two-Year-Old Class

1. Rose Labeview, 1924, at 2 yr. 10m. 241 lbs. fat 13.7 lbs. equal to 15.6 lbs. butter.

Senior One-Year-Old Class

1. Rose Labeview, 1924, at 2 yr. 10m. 241 lbs. fat 13.7 lbs. equal to 15.6 lbs. butter.

Thirty-day record, at 4 yr. 10m. 241 lbs. fat 13.7 lbs. equal to 15.6 lbs. butter.

Senior Two-Year-Old Class

1. Rose Labeview, 1924, at 2 yr. 10m. 241 lbs. fat 13.7 lbs. equal to 15.6 lbs. butter.

Senior One-Year-Old Class

1. Rose Labeview, 1924, at 2 yr. 10m. 241 lbs. fat 13.7 lbs. equal to 15.6 lbs. butter.

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Senior One-Year-Old Class

1. Rose Labeview, 1924, at 2 yr. 10m. 241 lbs. fat 13.7 lbs. equal to 15.6 lbs. butter.

cattle have been in good health, the part of food much clearer. A summary of the results for the tick test. And in Great Britain, the results are not coming out as well as we had hoped.

OUR FAIR

PRINCE KING CARLETON. King Carleton, a week cold and a few days fever, with a light cold, will help dry the lungs. Some roads are in the snow. Feed of corn is in the snow. In low in price. Butter, 25c to 30c.

COMPTON

COMPTON. A week cold and a few days fever, with a light cold, will help dry the lungs. Some roads are in the snow. Feed of corn is in the snow. In low in price. Butter, 25c to 30c.

CARETOWN

CARETOWN. A week cold and a few days fever, with a light cold, will help dry the lungs. Some roads are in the snow. Feed of corn is in the snow. In low in price. Butter, 25c to 30c.

WELLINGTON

WELLINGTON. A week cold and a few days fever, with a light cold, will help dry the lungs. Some roads are in the snow. Feed of corn is in the snow. In low in price. Butter, 25c to 30c.

LAMBTON

LAMBTON. A week cold and a few days fever, with a light cold, will help dry the lungs. Some roads are in the snow. Feed of corn is in the snow. In low in price. Butter, 25c to 30c.

WYOMING

WYOMING. A week cold and a few days fever, with a light cold, will help dry the lungs. Some roads are in the snow. Feed of corn is in the snow. In low in price. Butter, 25c to 30c.

ST. CATHARINES

ST. CATHARINES. A week cold and a few days fever, with a light cold, will help dry the lungs. Some roads are in the snow. Feed of corn is in the snow. In low in price. Butter, 25c to 30c.

HARROW

HARROW. A week cold and a few days fever, with a light cold, will help dry the lungs. Some roads are in the snow. Feed of corn is in the snow. In low in price. Butter, 25c to 30c.

ANOTHER AYRSHIRE

ANOTHER AYRSHIRE. A week cold and a few days fever, with a light cold, will help dry the lungs. Some roads are in the snow. Feed of corn is in the snow. In low in price. Butter, 25c to 30c.

1518

1518. A week cold and a few days fever, with a light cold, will help dry the lungs. Some roads are in the snow. Feed of corn is in the snow. In low in price. Butter, 25c to 30c.

HOLSTEINS

INKERMAN DAIRY FARM Offers 10 HEIFERS, raising 1 yr. old...

Elmridge Farm Offers

Richly bred Young Holstein Bull, born July 14, 1912, sired by Count Sene Walker Pieterloo, whose dam has won a record at time of test.

HOLSTEIN REGISTERED

The Great Dairy Title For Free Valuation Booklet Holstein Friesian Assoc. Inc. 148 Sandusky Ave.

YOUNG COWS AND HEIFERS

HOLSTEINS of different ages Safe in calf to a son of the great bull De Kol, the 2nd Bull of the 20th Century.

Herd Sires

'KING SEGIS PIETERLOO' (Bred by Moyer, Syracuse, N.Y.) 'FINDERIN KING MAY FATNE' (Bred by Meyers, Flintri, N.J.)

Ourville Holstein Herd

Bulls of service age 1 to 12. If you want them from here we would advise you to buy young. Only two Colanthe Sir Aylesbury and from 22 1/2 calves left.

MAPLE GROVE, CRESTMOUNT RIDGE AND WELCOMB, ST. CATHARINES

Make a special offering in a grandstand (50 for service) of the \$10,000.00 King of the Butter Kings, out of a 20 1/2 lb. 3 year-old Also Bull Calves, sired by our great King Lyons Hengervold, who is beyond dispute the Dominant, having more over 30 lbs. the richest milk and butter bred bull in the country.

MAPLE GROVE, CRESTMOUNT RIDGE AND WELCOMB, ST. CATHARINES

These calves are of the renowned Maple Grove type, and out of high testing. R. O. M. cows; also a few R. O. M. Cows of the King of the Great King.

MAPLE GROVE, CRESTMOUNT RIDGE AND WELCOMB, ST. CATHARINES

If you want the best of service, prices and quality, write for breeding and particulars. You can't think of anything else better as we cannot supply that class.

MAPLE GROVE, CRESTMOUNT RIDGE AND WELCOMB, ST. CATHARINES

H. BOLLERT, R.R. NO. 1, TAVISTOCK, ONT.

MARILTON HOUSE DAIRY FARM

The Home of Lulu Kegan, the World's Record Senior 2 Year Old Cow

WE SELL BULLS AND BULL CALVES ONLY

and offer new

A Bull Ready for Service

Write or come to see him. His Pedigree showing High Records sent on request.

THE PRICE IS RIGHT

D. B. TRACY

COBURG, ONT.

Avondale Stock Farm

A. C. HARDY, PROPRIETOR. HERD SIRE Prince Hengervold Payne De Kol, 238 (35,287), Sire, Pisto 2nd Woodcroft Lad, Dam, Princess Hengervold De Kol, 238 (35,287).

Senior Four-Year-Old Class

1. Maudie De Kol, 1924, at 4 yr. 10m. 241 lbs. fat 13.7 lbs. equal to 15.6 lbs. butter.

Junior Four-Year-Old Class

1. Minnie Pontiac, 1924, at 4 yr. 10m. 210 lbs. fat 13.2 lbs. equal to 14.8 lbs. butter.

April 24, 1913.

FARM AND DAIRY

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at 4y. 4m.
equal to 2
100 lbs. B
John C.
class.
1927; at 5y.
15 lbs. equ
to 100 lbs.
L. 1.547; at
14.69 lbs.
ner Isaac
at 5y. 9m.
equal to 2
100 lbs. B
Holland.
1913; at 5y.
11.43 lbs.
er Isaac
y. 9m. 56
equal to 2
100 lbs. B
Peuron.
class.
y. 9m. 56
equal to 2
100 lbs. B
Flatt & S.
4m. 150
equal to 2
100 lbs. B
Lawson.
6m. 150
equal to 2
100 lbs. B
Smith &
y. 9m. 56
equal to 2
100 lbs. B
101; milk
to 100 lbs.
11 lbs.
Broote.

cattle have been well cared for and are in good health. A tendency is noted on the part of feeders to market their cattle much earlier than in years gone by. Scarce but have done well, has a fair summary of the average returns regard- ing sheep. The necessity of more dipping and tick treatment. Hogs are scarce and in the great demand. Some correspond- ents complain that the price of the litters are not coming as strong as usual. Feeder supplies. The comparatively mild winter helped feeder supplies to go further than usual. Hay has been in sufficient supply, and the season for peas, all grains and roots have been hardly up to the mark in price or quality. Straw also has been scarce.

OUR FARMERS' CLUB
Correspondence invited
PRINCE EDWARD ISLAND

KING'S CO. P. E. I.
CAHDIGAN, April 14.—The weather has been cold and backward during the past week, with a light fall of snow. It has now turned warmer, with rain, which will help dry the roads. They were cut some roads are closed while putting in culverts. Feed of all kind is plentiful. Stock wintered well. Potatoes are likely to be low in price this spring. Oats, 60c; fat cattle, 50 lbs; pork, 11.50 dressed; but- ter, 25c to 30c; eggs, 18c—11 P.

QUEBEC
COMPTON CO. QUE.
COMPTON, April 11.—We are having fine weather now but very hot during the week of sugar is being made, but the yield will hardly be up to that of previous years. Beef is very high, selling for 5c for poorer ones, and 5c to 5.5c for better. Good two-year-old stock for feeding is bringing 870 to 890 a pair. Butter, 25c to 28c; eggs, 20c a dozen.—H. G. C.

ONTARIO
CARLETON CO. ONT.
BRITANNIA HEIGHTS, April 22.—The roads are in very poor shape, and the price is small markets. Hay is 153 a ton; straw, 85 a ton; oats, 40c a bushel; butter, 30c a pound; eggs, 30c a dozen; potatoes, 75c to 80c a bag; peas, 82 to 85.5 a bushel; barley, 60c a bushel.—J. D. D.

WELLINGTON CO. ONT.
PERQUÉ, April 11.—Weather has been cold and wet. The roads are muddy. The windstorm of three weeks ago was the worst ever known and did a great deal of damage to buildings and fences. Hired help is scarce and wages high. Prices for cattle and hogs will keep up, but horses are cheaper than they have been for many years.—W. A. M.

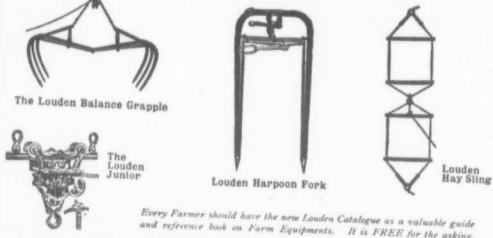
LAMBTON CO. ONT.
WYOMING, April 14.—No work yet done on the land excepting some under-drain- ing and not much of that, as there is too much water. There is quite an agitation in this county for better roads. Experts claim that the cost of a permanent road would increase the value of the farms where established more than the cost, and been young men are going West. Many good farms are for sale on account of the West, but we have few buyers. Feed is plentiful. Sheep, cattle, hogs and poultry are very high; horses dull; very lit- tle fall wheat but good. There was a tight horse in this county for years known as "Prohibition Willie." He proved stock never very spirited. He is now at the South-West Station, in Elm county, and believes the farmers in that vicinity should know about him. "W" as it will take most than ever this year, as it will take most of the summer to repair the damage done by the storm on Good Friday. This, the best county in the Dominion, is in as bad a state as any county in the Dominion. It should be in some way to account of lack of help. There is in some of our farms with stock times the population it now has.—D. N. A.

ESSEX CO. ONT.
HARROW, April 14.—The soil is drying slowly. The roads in some sections are almost impassable. Some farmers have commenced plowing and a very field is sown with oats. A carload of horses was shipped last week. Hogs are scarce, and corn is plentiful. The farms are contracting for tomatoes for the new canning factory.—W. A. B.

ANOTHER AYRSHIRE HERD ESTABLISHED.
A herd of pure bred Ayrshire cattle is being established by Mr. Frederick H. Howell, of St. George, Ont. he having recently purchased four heifer calves from Mrs. W. W. Ballantyne & Son of the Niddpath Farm, Stratford, Ont. Mr. Howell is one of the progressive farmers that entered his farm and won a prize Farm and Dairy's Prize Farms Competition three years ago. He is now in founding a herd of pure bred dairy cattle in a noteworthy one that may well be followed by many there else where.

The Louden Reason Why
—is a story of 47 years' constant practical experience and successful achievement in manufacturing Barn Equipments. The making of **easier and better** farm appliances has been Mr. William Louden's life work. Right from 1867, when he patented his first hay carrier, down to his latest Low Cow Stanchion, patented in 1912, he has been in close touch with the Farmer's needs.
Louden goods are the essence of simplicity and durability. They represent the best value money can buy.

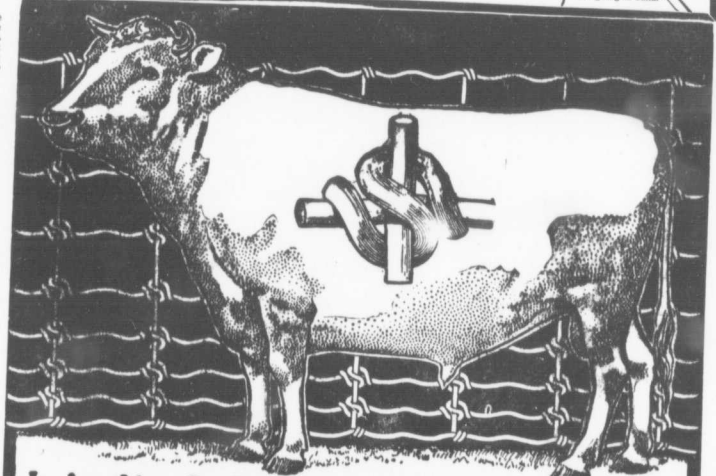
The "LOUDEN" Line of Hay Tools



Every Farmer should have the new Louden Catalogue as a valuable guide and reference book on Farm Equipments. It is FREE for the asking.

The LOUDEN MACHINERY CO. Dept. 42 GUELPH, Ont.

Write for this **FREE BOOK** "Perfect Barn Equipments"
Our Expert Barn Architects will give you advice and plans for the building of your barn **FREE** for the asking. Tell us what you are going to build.



Is Anything On Your Farm Stronger Than A Bull ?

YES! If your fences are **"IDEAL"** Woven Wire, made of large gauge No. 9 **HARD STEEL** wire, heavily galva- nized and with the verticals and horizontals clamped together with the **Ideal Lock** that **CANNOT SLIP, BULL-strong; hog-tight; horses high—A REAL FENCE.**

NO! If you have wire fences of the ordinary kind—fairly good for a few years, but with no reserve strength to stand hard usage—because poorer wire makes them, and stretching them just takes the utmost of their little strength to start with.

All Large Gauge Number 9 Hard Steel Galvanized Wire

From top to bottom **Ideal Fence** is all the same—large gauge No. 9 hard steel wire, heavily galvanized and therefore rust- proof. Note the uniform smooth curve—no sharp turns to weaken the strength of the lock and get a most positive grip—in **FIVE** different places. This is the fence that has ample springs, immense strength, and the **ONE LOCK THAT'S GOOD.** Dreg a card and get our catalog telling all about the many styles and merits of **IDEAL FENCE.** Sample lock comes with it. Write us today.

McGREGOR BANWELL FENCE COMPANY, LIMITED, WALKERVILLE, ONTARIO

Seed Corn

We have 4,000 bushels of Seed Corn—leading varieties—grown in Kent County, and cured in our own cribs, which we will sell in small quantities—on the cob or shelled.

Dent varieties \$1.40 per bushel
 Flint " " " \$1.75

Special prices on orders of 10 bushels more.

Terms cash with the order.

MONEY REFUNDED IF NOT SATISFIED

M. W. SHAW & CO.
 MERLIN, ONT.

EGGS, BUTTER and POULTRY

For best results ship your live Poultry to us, also your Dressed Poultry, Fresh Dairy Butter and New Laid Eggs. Egg cases and poultry crates supplied.

PROMPT RETURNS

Established 1854

The DAVIES Co. Ltd.
 Wm. DAVIES

Toronto, Ont.

Selected Seed Potatoes

Improved Empire State, a blight resistant strain, very heavy yield and less liable to rot than ordinary stock. \$1.50 per bag. Satisfaction, also blight resistant, and Delaware (or Green Mountain), \$1.25 per bag.

ALFRED HUTCHINSON,
 MOUNT FOREST, ONT.

SYNOPSIS OF DOMINION LAND REGULATIONS

Any person who is the sole head of a family or any male over 18 years old, may homestead a quarter section of available Dominion land in Manitoba, Saskatchewan, or Alberta. The applicant must appear in person at the Dominion Lands Agency or Sub-Agency for the district. Entry by proxy may be made at any agency, on certain conditions by father, mother, son, daughter, brother, or sister of intending homesteader.

Duties—Six months residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 80 acres so long as it is owned and occupied by him or by his father, mother, son, daughter, brother, or sister.

In certain districts a homesteader in good standing may pre-empt a quarter-section alongside his homestead. Price, \$1.00 per acre.

Duties—Must reside upon the homestead or pre-emption six months in each of six years from date of homesteaded entry (including the time required to earn homestead patent) and cultivate fifty acres extra.

A homesteader who has exhausted his homestead right and cannot obtain a pre-emption may enter for a purchased homestead in certain districts. Price, \$100 per acre. Duties—Must reside six months in each of three years, cultivate fifty acres and erect a house worth \$300.00.

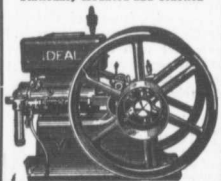
W. W. OOHY,

Deputy of the Minister of the Interior.
 N.B.—Unauthorized publication of this advertisement will not be paid for.

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1½ to 50 H.P.

Stationary Mounted and Traction



WINDMILLS

Grain Grinders, Water Pumps, Steel Saw Frames, Pumps, Tanks, Etc.

GOOLD, SHAPLEY & MUIR CO., LTD.
 Banford Winnipeg Calgary



Sell Your Milk but-- Raise Your Calves as well

Caldwell's Cream Substitute Calf-Meal

makes this possible and shows a profit of 100 per cent.

Every farmer and stockman *knows* that the sale and slaughter of practically newly born calves is a tremendous *waste*. Both would have raised or vealed up their calves long ago, but for the reason that this meant the *consuming of all the whole milk* produced. So they killed their calves and sold the milk as you have been doing for years and like you they have often wished for a substitute for whole milk. They have said so—your neighbors have said so and you have said so, too.

Hence Feed Manufacturers have been striving for years to find a substitute for whole milk as a Feed for raising and vealing up calves—

The market was as wide as the world and of course dozens of fake "Feeds" were rushed to the farmer and stockman—

But not a single one of these approached the nutritive qualities of whole milk as a feed for calves; until Caldwell's Cream Substitute Calf-Meal was placed on the market—a prepared feed so similar to whole milk that actual analysis shows it to contain **almost the same nutrient** and as such is **guaranteed to the Canadian Government**. Here's the certified analysis of the finished product:

| | |
|----------------------|------------|
| Protein | 19% to 20% |
| Fat | 7% to 8% |
| Carbo-hydrates | 56% |
| Fibre | 5% |

Caldwell's Cream Substitute Calf-Meal contains Linseed, Wheat, Oat, Corn, Locust Bean, Pea and Molasses Meal. We print the ingredients of our Calf-Meal as well as the guarantee on every tag.

Now you understand why we say—keep on selling your cream or whole milk, but raise or veal up your calves. Our Calf-Meal is sure to become as widely used and as much relied on as Caldwell's Famous Molasses Meal.

Tell your Feedman that you intend to raise your calves or veal them up. It will pay you handsomely to do so. Because it's cheaper to raise your dairy herd this way than to buy—and you might as well keep the calves you want to sell long enough to make something out of them.

With Caldwell's Cream Substitute Calf-Meal this is easy, economical and profitable.

N. B.—If your Dealer cannot supply you write to us, giving his name and address.

THE CALDWELL FEED CO., LTD., DUNDAS, ONT.